



P.O. Box A2208
Sydney South NSW 1235
Australia
www.taxpayers.org.au
www.mychoice.org.au
(02) 8964 8651



Standing Committee on Health, Aged Care & Sport: Inquiry into the Use and Marketing of Electronic Cigarettes and Personal Vaporisers in Australia

**Joint submission of the Australian Taxpayers' Alliance
(ATA) and MyChoice (MC)**

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Introduction

1. The Australian Taxpayers' Alliance (ATA) and MyChoice (MC) thank the committee for the opportunity to submit the following comments on the Use and Marketing of Electronic Cigarettes (e-cigarettes) and Personal Vaporisers in Australia.
2. The ATA is a grassroots public advocacy group which advocates on behalf of Australia's taxpayers. The ATA stands for the principles of consumer choice, limited government, personal responsibility and rolling back ineffective, unnecessary or counterproductive regulations affecting Australian businesses and individuals. MC is an autonomous affiliate of the ATA dedicated to promoting individual freedom and personal responsibility in the community.
3. The ATA and MC believe that technologically innovative products such as Electronic Nicotine Delivery Systems (ENDS) (including e-cigarettes and personal vaporisers) provide a safer alternative for smokers to access nicotine and should be legalised and appropriately regulated in the Australian market. It is estimated that hundreds of thousands of Australians use ENDS products. The ATA and MC are deeply concerned by the current regulatory regime whereby nicotine solutions are illegal for use in ENDS products, while more harmful alternatives, such as cigarettes, remain legal and widely available. These arrangements are a potent example of regulatory settings failing to keep up with new technology.
4. We urge the committee to recommend the expedient legalisation of nicotine solutions for e-cigarettes and personal vaporisers as this will mitigate the adverse impact of tobacco smoking on our population. 15,000 Australians succumb every year to tobacco-related illnesses and the estimated yearly social/health and economic costs exceed \$31.5 billion.¹
5. Smokers are primarily attracted to cigarettes and other combustible tobacco products to access nicotine. As one study in the British Medical Journal notes, "*People smoke for the nicotine but die from the tar.*"² The harms associated with tobacco smoking have been well-recognised for many years and include cancer, cardiovascular disease and respiratory illness, as well as degraded welfare and wellbeing.³ 15,000 Australians succumb every year to tobacco-related illnesses and the estimated yearly social/health and economic costs exceed \$31.5 billion.⁴ By contrast, no study has confirmed or provided significant evidence to indicate any long-term health risk associated with nicotine vaping. The ATA and MC therefore believe the current regulatory regime deprives smokers and other consumers of the ability to make safer

¹ Australian Government, Department of Health, Tobacco Control key facts and figures, accessed 16 August 2016 <http://www.health.gov.au/internet/main/publishing.nsf/Content/tobacco-kff>

² Russell MJ. Low-tar medium nicotine cigarettes: a new approach to safer smoking. *BMJ* 1976;1:1430–3.

³ Surgeon General of the United States. The Health Consequences of Smoking—50 Years of Progress. Centers for Disease Control and Prevention (US) 2014. <https://www.ncbi.nlm.nih.gov/pubmed/24455788>

⁴ Australian Government, Department of Health, Tobacco Control key facts and figures, accessed 16 August 2016 <http://www.health.gov.au/internet/main/publishing.nsf/Content/tobacco-kff>

and healthier choices and mitigate the risk of disease and other long-term health impacts.

6. Under Australia's current regulations, legal sale of nicotine for use in vaping is limited to 'therapeutic purposes' under Schedule 4 of the *Australian Poisons Standard* despite its non-pharmaceutical status. Diluted nicotine solutions are also listed in Schedule 7 which bans its sale in all states and territories while treating these solutions in the same manner as currently illicit drugs such as marijuana, cocaine and heroin.
7. Notably, the abovementioned scheduling of nicotine dates to before 2004 when ENDS technology was first developed, allowing for the manufacture and use of nicotine solutions as a method of minimising the harms caused by smoking. Nonetheless, these classifications have remained despite the sale of smoking tobacco and cigarettes remaining legal in all Australian jurisdictions. This abrogates consumer autonomy and choice in a most perverse way from a public policy and individual health perspective.
8. It also has dire implications for public safety as consumers who are denied legal, regulated and safe access to the product are forced to engage in more dangerous and unsupervised practices such as mixing their own solutions or obtaining nicotine solutions from the global black market which sometimes contain much higher concentrations of nicotine.
9. Legalising nicotine for use in vapes and e-cigarettes will allow for smart regulation of the product to minimise these harms and deter the use of illegal or dangerous products and practices. It will also enable the implementation of public information or marketing strategies to ensure that consumers stay informed about safe use practices.
10. Maintenance of the status quo will result in substantial time, money and resource expenditure to enforce the law despite the impracticality of its enforcement and the risks that the unregulated products pose to uninformed or misinformed consumers.
11. Given the value of ENDS as a harm minimisation and tobacco cessation tool as demonstrated by multiple short and long-term peer reviewed studies, the ATA and MC recommend that the sale of safe quantities of nicotine-containing nicotine be legalised in Australia. Legal sale of these products complimented by appropriate regulations surgically targeted to minimise potential negative impacts and externalities is a preferable alternative to keeping them illegal for both moral and pragmatic reasons. It would also be in keeping with the policy of comparable nations including the UK, USA and those of the EU which have reported significant net benefits from this policy, especially with regard to reducing the harms of tobacco smoke – a leading cause of mortality and illness in Australia.

The use and marketing of E-cigarettes and personal vaporisers to assist people to quit smoking

ENDS is the ideal tobacco substitute product

12. The rate of absorption of nicotine is fastest when it is delivered via oral inhalation, compared to the progressively slower rates of absorption observed via skin, mouth, or nose and finally and least efficiently, by oral consumption and digestion. It is further noted that relative to current pharmaceutical Nicotine Replacement Therapy (NRT) options including nicotine gum, nasal spray, and patches - ENDS can mimic the effects of smoking most closely, therefore making it the ideal substitute product.⁵ This enhances its value as a tool to aid the transition away from tobacco smoking.
13. ENDS can deliver nicotine to the user more efficiently than tobacco – satiating their cravings without exposing the vaper to the tar or carcinogenic chemicals of tobacco.⁶ It is therefore an attractive product for current tobacco smokers that is a safer alternative.
14. ENDS is usually practiced with solutions that are flavoured, providing an appealing sensory experience that makes them a more attractive option for smokers than cigarettes and thus enhancing their effectiveness as a quit smoking tool. A 2016 Consumer Advocates for Smoke-Free Alternatives Association (CASAA) survey of 27,343 e-cigarette users found that 72% of respondents “*credited tasty flavours with helping them give up tobacco.*”⁷ Similarly, a 2013 internet study by the Onassis Cardiac Surgery Centre concluded that flavourings in e-cigarettes “*appear to contribute to both perceived pleasure and the effort to reduce cigarette consumption or quit smoking.*”⁸

ENDS is a more effective smoking cessation product than over-the-counter NRT products

15. A 2014 research paper from University College London’s Department of Epidemiology and Public Health found that people trying to quit smoking without professional help were approximately 60% more likely to report success if they use e-cigarettes than if they used willpower alone or over-the-counter NRT products such as gum or patches.⁹

ENDS is a more effective smoking cessation product with nicotine-containing solutions than with solutions containing no nicotine

⁵ Tobacco Advisory Group to the Royal College of Physicians (UK) 2016, ‘Nicotine without smoke: Tobacco harm reduction’, pg. 53

⁶ Ibid.

⁷ “Large Survey Finds E-Cigarettes Do Help Smokers Quit,” *Vape Ranks* (website), January 12, 2016, <http://vaperanks.com/large-survey-finds-e-cigarettes-do-help-smokers-quit/>

⁸ Konstantinos E. Farsalinos, *et al.*, “Impact of Flavour Variability on Electronic Cigarette Use Experience: An Internet Survey,” *International Journal of Environmental Research and Public Health* 10 (December 2013): 7272–82

<http://www.mdpi.com/1660-4601/10/12/7272>

⁹ <http://au.wiley.com/WileyCDA/PressRelease/pressReleaseId-110827.html>

16. As noted in previous points, the value of e-cigarettes and personal vaporisers as a smoking cessation tool is greatly enhanced by the legalisation of nicotine-containing e-liquids. Furthermore, the Cochrane Collaboration which is an internationally recognised independent assessor of therapeutic effectiveness, noted the combined results of 2 studies involving 662 subjects which showed that using e-cigarettes containing nicotine increased the odds of long-term successful smoking cessation than using e-cigarettes which do not contain nicotine.¹⁰

ENDS is a proven smoking cessation tool and is 95% safer than legal tobacco smoking

17. Independent public health authorities worldwide, citing numerous short and long-term studies, have recognised the value of e-cigarettes as a smoking cessation tool. These findings reflect the principle of harm minimisation which favours a pragmatic approach focused on safeguarding human life and minimising the adverse impacts of smoking insofar as possible while simultaneously recognising individual autonomy and informed consumer choice.
18. Though e-cigarettes do not necessarily contain nicotine, their value as a smoking cessation tool is greatly enhanced by the use of nicotine. Nicotine itself is non-carcinogenic. It poses no significant long-term health risks when used in concentrations appropriate or commonly favoured by vapers and there are no reports of significant health risks from use of nicotine as a smoking cessation tool in the form of patches, gums or other means which have been legal in Australia and other nations for decades.
19. It is estimated that over 6 million European Union citizens had quit tobacco smoking after switching to e-cigarettes by 2014.¹¹ The UK Royal College of Physicians found that vaporised nicotine is at least **95% safer** than tobacco smoking and that millions of ENDS users have gone on to quit nicotine completely with the aid of ENDS to facilitate the transition.¹² For these reasons, Public Health England - the public health division of the UK Department of Health, not only commends legal access to nicotine vaping, but advises doctors to encourage the practice as a smoking cessation tool.¹³
20. Nicotine vaping is also recommended as a smoking cessation tool and safer alternative to smoking by other independent public health authorities including the

¹⁰ http://www.cochrane.org/CD010216/TOBACCO_can-electronic-cigarettes-help-people-stop-smoking-and-are-they-safe-use-purpose

¹¹ Farsalinos KE, Poulas K, Voudris V, Le Houezec J. Electronic cigarette use in the European Union: analysis of a representative sample of 27 460 Europeans from 28 countries. *Addiction* (Abingdon, England). 2016. <http://onlinelibrary.wiley.com/doi/10.1111/add.13506/full>

¹² Royal College of Physicians (London), Nicotine without smoke: tobacco harm reduction. 28 April 2016. <https://www.rcplondon.ac.uk/projects/outputs/nicotine-without-smoke-tobacco-harm-reduction-0>

¹³ Public Health England. E-cigarettes around 95% less harmful than tobacco estimates landmark review. E-cigarettes: an evidence update 19 August 2015. <https://www.gov.uk/government/news/e-cigarettes-around-95-less-harmful-than-tobacco-estimates-landmark-review>

UK Centre for Tobacco and Alcohol Studies¹⁴ and the University of Victoria, British Columbia Centre for Addictions Research in Canada.¹⁵

Transition from smoking to ENDS drastically lowers the build-up of carcinogens and other harmful contaminants in users' bodies

21. A recent long-term, cross-sectional study by researchers from University College and King's College (London, UK); the Rosswell Park Cancer Institute (USA) and the Centre for Disease Control and Prevention (USA) found that former tobacco smokers who had switched completely to e-cigarettes had drastically lower levels of carcinogenic chemicals in their bodies after switching.¹⁶ Another 2016 study published in *Nicotine and Tobacco Research* found that after switching from tobacco to e-cigarettes, nicotine exposure remains unchanged, while “*exposure to selected carcinogens and toxicants is substantially reduced.*”¹⁷
22. The UK Royal College of Physicians noted that millions of ENDS users go on to quit nicotine completely and thus eliminate their exposure to even nicotine itself.¹⁸

ENDS is not a gateway to smoking for adults or minors. ENDS is almost exclusively used by former smokers or smokers attempting to quit

23. Since Nicotine vaporisers were introduced, they have been taken up almost exclusively by former smokers or current smokers attempting to quit.^{19 20} Use in youths who have never smoked is at a very low level and is mostly experimental.²¹ It is also likely that any adolescents who have taken up vaping would have taken up cigarette smoking in lieu of e-cigarettes. There is no evidence that e-cigarettes provide a ‘gateway’ to smoking for youths as they enter adulthood.²² There is also no

¹⁴ Britton J, Bogdanovica I, McNeill A, Bauld L. Commentary on WHO report on electronic nicotine delivery systems and electronic non-nicotine delivery systems. UK Centre for Tobacco & Alcohol Studies. 2016.

¹⁵ O'Leary R, MacDonald M, Stockwell T, Reist D. Clearing the Air: A systematic review on the harms and benefits of e-cigarettes and vapour devices. University of Victoria, BC: Centre for Addictions Research of BC.; 2017.

¹⁶ Shahab L, Goniewicz ML, Blount BC, Brown J, McNeill A, Alwis KU, et al. Nicotine, Carcinogen, and Toxin Exposure in Long-Term E-Cigarette and Nicotine Replacement Therapy Users: A Cross-sectional Study. *Ann Intern Med*. [Epub ahead of print 7 February 2017] doi: 10.7326/M16-1107

<http://annals.org/aim/article/2599869/nicotine-carcinogen-toxin-exposure-long-term-e-cigarette-nicotine-replacement>

¹⁷ Maciej L. Goniewicz, et al. Exposure to Nicotine and Selected Toxicants in Cigarette Smokers Who Switched to Electronic Cigarettes: A Longitudinal Within-Subjects Observational Study, *Nicotine Tob Res* (2016) doi: 10.1093/ntr/ntw160 First published online: August 17, 2016

¹⁸ Royal College of Physicians. Nicotine without smoke: Tobacco harm reduction. London: RCP.

2016. <https://www.rcplondon.ac.uk/projects/outputs/nicotine-without-smoke-tobacco-harm-reduction-0>

¹⁹ McNeill A, Brose LS, Calder R, Hitchman SC, Hajek P, McRobbie H. E-cigarettes: an evidence update. A report commissioned by Public Health England. PHE publications gateway number: 2015260

2015. <https://www.gov.uk/government/publications/e-cigarettes-an-evidence-update>

²⁰ Britton J, Bogdanovica I, McNeill A, Bauld L. Commentary on WHO report on electronic nicotine delivery systems and electronic non-nicotine delivery systems. UK Centre for Tobacco & Alcohol Studies. 2016.

²¹ Bauld L, MacKintosh AM, Ford A, McNeill A. E-Cigarette Uptake Amongst UK Youth: Experimentation, but Little or No Regular Use in Nonsmokers. *Nicotine Tob Res*. England; 2015 Aug 6;18(1):102–3.

<https://academic.oup.com/ntr/article-abstract/18/1/102/2583946/E-Cigarette-Uptake-Amongst-UK-Youth>

²² O'Leary R, MacDonald M, Stockwell T, Reist D. Clearing the Air: A systematic review on the harms and benefits of e-cigarettes and vapour devices. University of Victoria, BC: Centre for Addictions Research of BC.;

evidence that the miniscule number of never-smoking youth who took up ENDS have then taken up smoking.²³ A 2014 study in the American Journal of Preventative Medicine found that the few ENDS users who were not smoking previously, used the product only 1-2 days a week, indicating that any residual harm from legalised ENDS is minimal.²⁴ These findings confirm that concerns that the technology will result in re-normalisation' of smoking by making smoking appear as an appealing activity to non-smokers – children or adults, are baseless.

24. E-cigarette uptake increased significantly since 2010. During the same period, the number of 17-18 year old smokers in the US as a proportion of the total number of US teenagers fell at a rapid rate – 3 times that of the long-run pre-2010 average.²⁵ Though this is insufficient evidence to conclude that the trend is caused by the introduction of e-cigarettes, the trend at the very least confirms that e-cigarettes are not creating a 'gateway' to smoking for adolescents but are rather providing a 'diversion' or 'exit' away from smoking.
25. Under the status quo, e-cigarettes and personal vaporisers can be legally used with liquids which do not contain nicotine. There is no evidence that legalising solutions containing nicotine will encourage an up-take of the nicotine solutions by current e-cigarette and personal vaporiser users. In America where nicotine containing e-liquids have been legal for years, a recent study found that a vast majority of teenage e-cigarette users were not smoking nicotine-laced products.²⁶ Almost all minors who have used an e-cigarette with nicotine containing e-liquid in the US had also tried at least one cigarette.²⁷

ENDS is an effective transitional tool for those attempting to quit smoking

26. Nicotine vaping is also beneficial for dual users who resort to a combination of conventional tobacco smoking and e-cigarettes. As such, the existence of dual use should not connote a negative inference that links vaping to tobacco smoking. Dual use is most commonly found in smokers on a pathway towards exclusive vaping,

2017 <http://www.uvic.ca/home/about/campus-news/media-releases-tips/2017+e-cigarettes-carbc-macdonald-stockwell+media-release>

²³ Villanti AC, Pearson JL, Glasser AM, Johnson AL, Collins LK, Niaura RS, et al. Frequency of youth e-cigarette and tobacco use patterns in the U.S.: Measurement precision is critical to inform public health. *Nicotine Tob Res.* 2016 Dec 24;ntw388. <https://academic.oup.com/ntr/article-abstract/doi/10.1093/ntr/ntw388/2738979/Frequency-of-Youth-E-Cigarette-and-Tobacco-Use?redirectedFrom=fulltext>

²⁴ Warner, K. E. (2016). Frequency of E-Cigarette Use and Cigarette Smoking by American Students in 2014. *American journal of preventive medicine.*

²⁵ Miech RA, Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. Monitoring the Future national survey results on drug use, 1975-2016: Data tables. Table 2 - Trends in Prevalence of Use of Cigarettes in Grades 8, 10, and 12. University of Michigan; Ann Arbor: 2016.

²⁶ Richard Miech, Megan E Patrick, Patrick M O'Malley, Lloyd D Johnston. What are kids vaping? Results from a national survey of US adolescents. August 25, 2016. Downloaded from <http://tobaccocontrol.bmj.com/>

²⁷ Christopher Ingraham (25 August 2016) 'Teen vaping is not what you think it is, researchers say' *Washington Post* [[online](#)]

whereby many dual users go on to completely switch to vaping.^{28 29} These findings are further supported by a 2016 study published in the *International Journal of Public Health* which found that dual users drastically reduced the number of cigarettes they smoked over time.³⁰

27. Multiple studies have also found that dual use has direct benefits for smokers, with traces of carcinogenic chemicals in their bodies reducing significantly when a smoker switches from smoking to a combination of smoking and ENDS provided that ENDS is the predominant practice.^{31 32 33}
28. Legalisation of ENDS will allow for public information and marketing strategies and regulations which inform consumers including dual users, and urge/facilitate their transition completely out of smoking to ENDS.
29. Prolonged dual use can also commonly be explained by the tendency of those who attempt to quit smoking to 'relapse' one or more times prior to a successful attempt. This is consistent with longstanding research on quitting attempts which has found that all quit-smoking strategies including 'cold turkey' approaches, have a low success rate and are usually characterised by intermittent relapses prior to complete and permanent cessation.³⁴
30. Dual use is recommended even for those utilising other quit-smoking aids such as legal nicotine patches and gums as part of a transition away from smoking.³⁵

²⁸ Zhuang Y-L, Cummins SE, Y Sun J, Zhu S-H. Long-term e-cigarette use and smoking cessation: a longitudinal study with U.S. population. *Tob Control*. BMJ Publishing Group Ltd; 2016;25(Suppl 1):i90–5.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5099206/>

²⁹ Farsalinos KE, Poulas K, Voudris V, Le Houezec J. Electronic cigarette use in the European Union: analysis of a representative sample of 27 460 Europeans from 28 countries. *Addiction* (Abingdon, England). 2016.

<http://onlinelibrary.wiley.com/doi/10.1111/add.13506/full>

³⁰ Andler R, Guignard R, Wilquin JL, Beck F, Richard JB, Nguyen-Thanh V. Electronic cigarette use in France in 2014. *International journal of public health*. 2016;61(2):159-65.

³¹ D'Ruiz CD, Graff DW, Robinson E. Reductions in biomarkers of exposure, impacts on smoking urge and assessment of product use and tolerability in adult smokers following partial or complete substitution of cigarettes with electronic cigarettes. *BMC Public Health*. 2016 Jul 12;16(1):543.

<http://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-016-3236-1>

³² McRobbie H, Phillips A, Goniewicz ML, Smith KM, Knight-West O, Przulj D, et al. Effects of Switching to Electronic Cigarettes with and without Concurrent Smoking on Exposure to Nicotine, Carbon Monoxide, and Acrolein. *Cancer Prev Res*. 2015;8(9).

<http://cancerpreventionresearch.aacrjournals.org/content/8/9/873.long>

³³ Goniewicz ML, Gawron M, Smith DM, Peng M, Jacob P, Benowitz NL. Exposure to Nicotine and Selected Toxicants in Cigarette Smokers Who Switched to Electronic Cigarettes: A Longitudinal Within-Subjects Observational Study. *Nicotine Tob Res*. Oxford University Press; 2017 Feb;19(2):160–7.

<https://academic.oup.com/ntr/article-abstract/19/2/160/2631650/Exposure-to-Nicotine-and-Selected-Toxicants-in?redirectedFrom=fulltext>

³⁴ Hyland, Andrew, et al. "Predictors of cessation in a cohort of current and former smokers followed over 13 years." *Nicotine & Tobacco Research* 6.Suppl 3 (2004): S363-S369.

³⁵ Stead LF, Perera R, Bullen C, Mant D, Hartmann-Boyce J, Cahill K, et al. Nicotine replacement therapy for smoking cessation. *Cochrane database of systematic reviews* (Online). 2012;11:CD000146.

ENDS allows users to control and moderate their nicotine dosage at levels below cigarettes

31. A 2016 study found that experienced ENDS users were able to adjust their nicotine intake at levels far less than those which would apply to cigarettes or tobacco.³⁶ This is because the use of liquid solutions available in containers with a fixed capacity make it far easier to estimate and control intake than tobacco leaves or cigarettes. These practices which promote a lower nicotine intake, can be encouraged through regulations limiting nicotine concentration in the solutions, through marketing or public information campaigns. All these strategies are only possible if ENDS are legalised.

ENDS significantly reduces smoking-related deaths and prolongs the lives of smokers

32. A 2016 study conducted by 15 of the world's leading Tobacco Control experts through Georgetown University's Comprehensive Cancer Centre found that e-cigarettes are likely to provide public health benefits based on even conservative estimates of the likely uptake of vaping and smoking by adolescents and young adults and that "*recent claims by some scientists that e-cigarettes are likely to act as a gateway to the use of tobacco products are overstated*". The team that developed the model, which included researches from the United States, Australia, and Canada, projected a reduction of 21 percent in smoking-attributable deaths and 20 percent in life years lost as a result of use of e-cigarettes in people born in 1997 or after, compared to what would have happened if e-cigarettes were not an option.³⁷

By contrast - the status quo perpetuates smoking and puts smokers' lives and health at risk

33. The "quit or die" mantra currently guiding public health policy in respects of e-cigarettes is untenable and is depriving smokers of legal access to safer alternatives to tobacco. As noted by the UK Royal College of Physicians, "*...if this [prohibitionist] approach also makes e-cigarettes less easily accessible, less palatable or acceptable, more expensive, less consumer friendly or pharmacologically less effective, or inhibits innovation and development of new and improved products, then it causes harm by perpetuating smoking.*"³⁸

International case studies in multiple comparable jurisdictions, demonstrate ENDS' efficacy as a smoking cessation tool

34. For example, UK government statistics provide strong circumstantial evidence of the value of ENDS as a smoking cessation tool. After a period of significant smoking rate reduction, the UK adult smoking rate stalled in the late-2000s, then sharply reduced

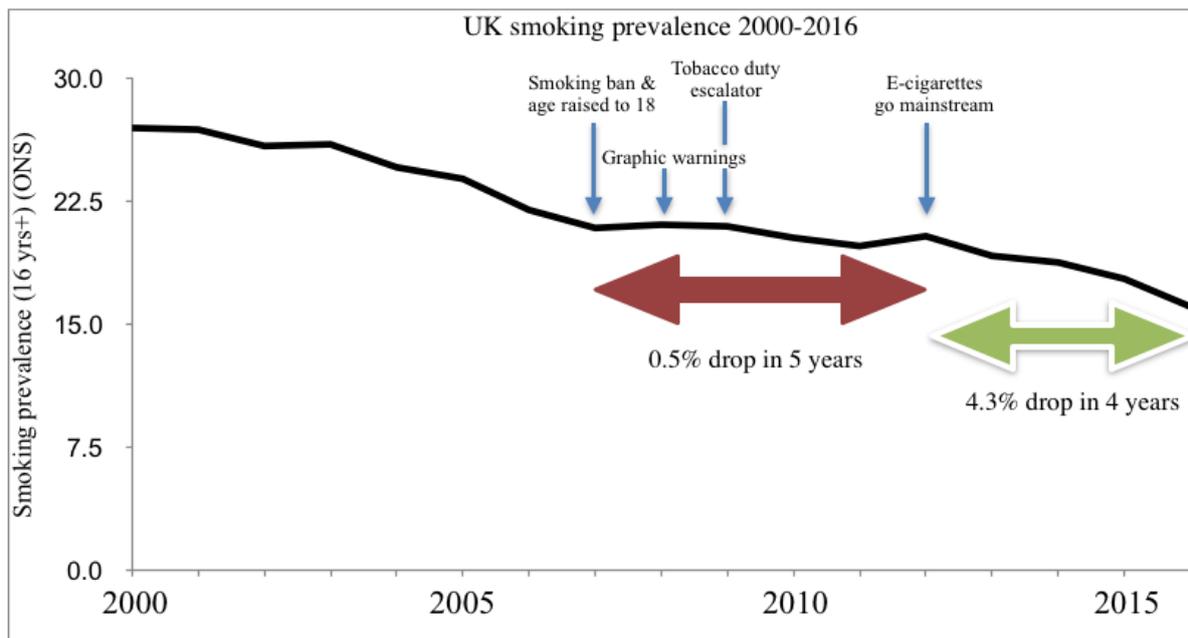
³⁶ Dawkins LE, Kimber CF, Doig M, Feyerabend C, Corcoran O. Self-titration by experienced e-cigarette users: blood nicotine delivery and subjective effects. *Psychopharmacology*. 2016.

³⁷ Levy et al, The Application of a Decision-Theoretic Model to Estimate the Public Health Impact of Vaporized Nicotine Product Initiation in the United States. *Nicotine Tob Res* (2016) doi: 10.1093/ntr/ntw158 First published online: July 14, 2016

³⁸ Royal College of Physicians (London), Nicotine without smoke: tobacco harm reduction. 28 April 2016 <https://www.rcplondon.ac.uk/projects/outputs/nicotine-without-smoke-tobacco-harm-reduction-0>

between 2011 and 2014 at which point it hit a record low of 17.4%.³⁹ Over the same time period, there has been a rapid uptake of ENDS.

35. The smoking prevalence rate dropped only 0.5% in the 5 years between 2007 and 2012 despite the institution of multiple smoking deterrence measures (see below). After e-cigarettes became mainstream and enjoyed a rapid uptake post-2011 however, the smoking rate experienced nearly 9 times the decline seen in the previous period. The only significant anti-tobacco reform during this period was a display ban which did not take effect until 2015 towards the end of the period.



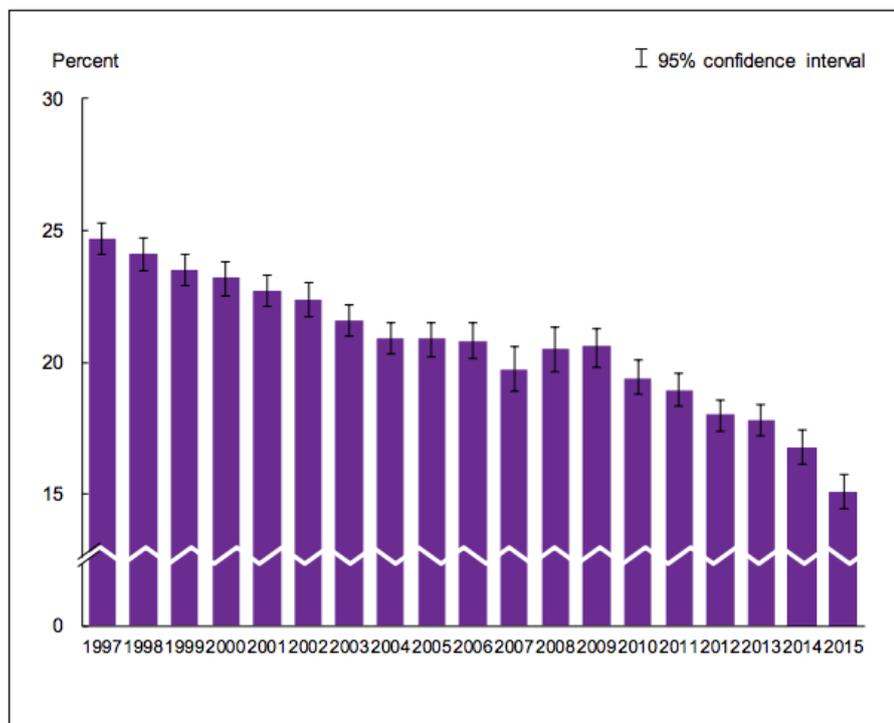
36. Similarly, in the United States of America, adult smoking rates have fallen rapidly between 2011 and 2015 – from 18.9% to a record low of 15.1% which is below Australia’s adult smoking rate. Notably, the decline between 2014 and 2015 was especially sharp: See figure below illustrating US government statistics:⁴⁰

³⁹ Office of National Statistics (UK), Adult Smoking Habits in Great Britain 1974-2014. 18 February 2016 Table 1 <http://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/drugusealcoholandsmoking/datasets/adultsmokinghabitsingreatbritain>

⁴⁰ CDC, National Health Interview Survey, 2015 https://www.cdc.gov/nchs/nhis/nhis_2015_data_release.htm

Current smoking

Figure 8.1. Prevalence of current cigarette smoking among adults aged 18 and over: United States, 1997–2015



37. A similar trend applies to US adolescent smoking rates according to US Centre for Disease Control statistics. Amongst American high school students, cigarette use fell from 15.8% in 2011 to 9.3% by 2015 and use of pipes and cigars reduced significantly as well.⁴¹ These statistics provide further circumstantial evidence that ENDS has served as an ‘exit gateway’ from smoking.
38. The experience of the UK and the US contrast sharply with Australia - where ENDS is illegal and despite tough reforms like plain packaging laws which do not exist in the UK or the US, the government’s own Institute of Health and Welfare concedes that smoking rates have not significantly declined between 2013 and 2016.⁴²

The health impacts of the use of E-cigarettes and personal vaporisers

ENDS poses no material risk to passive smokers

39. A 2015 University of Queensland study found that ENDS does not carry any material risk for the passive or second-hand smoker.⁴³ Similarly, Action on Smoking and Health, a British public health charity found that e-cigarettes offer “*little real-world*

⁴¹ Singh T, Arrazola RA, Corey CG, et al. *Tobacco Use Among Middle and High School Students — United States, 2011–2015*. MMWR Morb Mortal Wkly Rep 2016;65:361–367.

http://www.cdc.gov/mmwr/volumes/65/wr/mm6514a1.htm?s_cid=mm6514a1_w

⁴² <http://www.aihw.gov.au/alcohol-and-other-drugs/data-sources/ndshs-2016/key-findings/>

⁴³ Hall W, Gartner C, Forlini C. Ethical issues raised by a ban on the sale of electronic nicotine devices. *Addiction* 2015; **110**:1061–7 <http://onlinelibrary.wiley.com/doi/10.1111/add.12898/abstract>

evidence of harm” and should not be subject to the same smoke-free regulations as regular cigarettes for this reason.⁴⁴ A comprehensive review by Igor Burstyn of the Department of Environmental and Occupational Health at Drexel University concluded that “*Exposures of bystanders [to harmful chemicals] are likely to be orders of magnitude less [with vaping relative to smoking] and thus pose no apparent concern.*”⁴⁵ The Royal College of Physicians also concluded that “*the harm to others from vapour exposure is negligible.*”⁴⁶

Relative health impacts of nicotine delivered through tobacco smoking vs nicotine delivered through ENDS and other alternative methods

40. The illegal status of ENDS denies consumers access to a far safer method of accessing nicotine, which is also more effective and beneficial as a smoking cessation tool compared to currently legal NRT products.
41. While nicotine itself is not entirely benign, it has been described as no more dangerous than caffeine by leading public health authorities like the UK Royal College of Physicians and studies have shown that it accounts for a miniscule portion of the harm caused by smoking. The Royal College of Physicians describes the chemical impact of Nicotine as follows: “*At low doses, nicotine is a stimulant, which in the short term increases heart rate and may improve attention, memory and fine motor skills. Although potentially lethal at very high doses, at the blood levels typically achieved by smoking nicotine does not result in clinically significant short- or long-term harms.*”⁴⁷
42. Moreover, the comparative health effects of smoking when compared to other longstanding nicotine delivery methods such as NRT (gums, patches etc.) and ‘smokeless’ tobacco, have enabled the isolation of the health effects of nicotine itself from the health effects of smoking. “*As use of nicotine alone in the doses used by smokers represents little if any hazard to the user, complete substitution of smoking with conventional NRT products is, for practical purposes, the equivalent of complete cessation in almost all areas of harm to the user.*”⁴⁸ Long-term studies of NRT have found no significant correlation or causation to any disease.⁴⁹
43. Speculation that Nicotine may cause brain development issues in users is also baseless. The only evidence linking nicotine to brain development issues are animal

⁴⁴ Brad Rodu, “Truthful ‘Action’ on E-Cigarettes in the United Kingdom,” *Tobacco Truth* (blog), March 2013, <http://rodutobaccotruth.blogspot.com/2013/03/truthful-action-on-e-cigarettes-in.html>

⁴⁵ Igor Burstyn, “Peering Through the Mist: Systematic Review of What the Chemistry of Contaminants in Electronic Cigarettes Tells Us About Health Risks,” *BMC Public Health* 14 (January 2014), <http://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-14-18>

⁴⁶ Royal College of Physicians, *Nicotine without Smoke: Tobacco Harm Reduction*, April 2016, <https://www.rcplondon.ac.uk/projects/outputs/nicotinewithout-smoke-tobacco-harm-reduction-0>

⁴⁷Tobacco Advisory Group to the Royal College of Physicians (UK) 2016, ‘Nicotine without smoke: Tobacco harm reduction’ pg. 184

⁴⁸ Ibid, pg. 125

⁴⁹ Lee PN, Fariss MW. A systematic review of possible serious adverse health effects of nicotine replacement therapy. *Arch Toxicol*. Springer Berlin Heidelberg; 2016 Oct 3;1–30.

studies which do not provide a reliable or accurate comparison⁵⁰ and furthermore, these studies also usually feature chronic or extreme doses of nicotine,⁵¹ which fall far outside typical use in vaporisers or e-cigarettes.

44. There has been no evidence linking nicotine and brain development issues in humans despite large populations which have been exposed to more than two centuries of nicotine use through tobacco and more recently introduced NRT products. NRT products have existed and been approved for smokers as young as 12 years old for 30 years, yet no evidence of adverse effects on adolescent brain development have emerged.⁵²
45. As outlined in points 12 to 16 of this submission, ENDS carries a number of benefits relative to other legal NRT options such as patches and gums which enhance their value as a smoking cessation and harm reduction tool.
46. As Nicotine itself has not been found to carry any significant long-term health risks when consumed in safe/regulated doses, the capacity of ENDS to deliver nicotine to smokers more efficiently than other NRT products does not make it any more harmful than these legal products.
47. By contrast, Nicotine delivered through tobacco smoking exposes the smoker to proven carcinogens and other contaminants with severely adverse health impacts as discussed at points 5 and 21 of this submission. A 2014 European study found that where cigarettes were assigned a 100% rating for 'maximum relative harm' (MRH), e-cigarettes were only given a 4% rating of MRH.⁵³ Transition to ENDS from smoking has also been found to drastically lower the build-up of these chemicals in the bodies of both former smokers and current dual users – as outlined in points 21 and 27 of this submission.
48. The status quo whereby ENDS is illegal, hence effectively denies consumers access to a far safer method of accessing nicotine which is also effective and beneficial as a smoking cessation tool compared to currently legal NRT products. This cannot be justified on any moral or pragmatic basis.

Legal ENDS will discourage nicotine overdose and other dangerous practices

49. Intake of nicotine at levels ordinarily associated with the consumption of ENDS or combustion of tobacco does not incur any serious health impacts. In overdose, however, in overdose, nicotine can cause nausea, vomiting, convulsions, bronchorrhoea, high blood pressure, ataxia, tachycardia, headache, dizziness,

⁵⁰ Naiura R. Re-thinking nicotine and its effects, Schroeder Institute, Truth Initiative, United States. 2 December 2016.

⁵¹ Yuan M, Cross SJ, Loughlin SE, Leslie FM. Nicotine and the adolescent brain. *The Journal of physiology*. 2015;593(16):3397-412.

⁵² Lee PN, Fariss MW. A systematic review of possible serious adverse health effects of nicotine replacement therapy. *Archives of toxicology*. 2016.

⁵³ David J. Nutt, *et al.*, "Estimating the Harms of Nicotine-Containing Products Using the MCDA Approach," *European Addiction Research* **20** (April 2014): 218–25, <https://www.karger.com/Article/Pdf/360220>

confusion, agitation, restlessness, neuromuscular blockade, respiratory failure and/or death. However, even legal stimulants such as caffeine also cause death in overdose. Distilled alcoholic spirits are widely available, sold without prescription for personal use and do not include warning labels beyond small-print urging consumers to ‘drink responsibly’ as excessive use can cause alcohol poisoning leading to serious consequences including death. Public health authorities place trust in reasonable adults to exercise the basic cognitive function required to ascertain that such behaviour might not be advisable. The committee should therefore place weight on the typical quantity of nicotine consumed by ENDS users, in the same way that weight is placed on the typical consumer’s dosage of caffeine, alcohol or any other product when regulation of these products is contemplated.

50. The extreme levels of nicotine required to overdose, far exceed the amounts consumed under ENDS even where heavy use is assumed. Moreover, vapers are likely to cease vaping due to the natural inclination that they have vaped too much well before the overdose level required for most of these risks eventuates.⁵⁴
51. Legalised trade of nicotine liquids without a prescription has been proposed at concentrations under 3.6% which represent no significant risk warranting exceptional or unusual precaution.
52. ENDS including e-cigarettes and personal vaporisers, actually discourage overdose provided that the solutions have a safe/regulated nicotine concentration such as 3.6%. This regulation is only possible if ENDS is legalised, whereby the status quo has led to consumers who are denied access self-mixing nicotine solutions in an unsupervised manner based on no research or potentially unreliable online sources.
53. Even more concerning are black market products available from overseas such as 99% nicotine concentrates that can be imported from China under the status quo.⁵⁵ Legal access to ENDS would discourage the use or procurement of these unsafe products – both by providing safer, legal options with facilitated availability as well as by allowing for public information and/or marketing strategies which can inform consumers about the risk of self-mixed solutions, black market products or high-concentration solutions. The prohibitionist approach under the status quo instead, puts consumers’ lives at serious risk by failing to prevent or deter these practices.

Fears about accidental nicotine poisoning are exaggerated per international experience

54. The ATA and MC note the following claim made by the Therapeutic Goods Administration (TGA) as a justification for their decision to maintain the scheduling of nicotine in the Australian Poison Standard: “*In the USA, accidental poisonings associated with e-cigarettes have increased from one per month in 2010 to 215 per month in 2014 including one death.*”

⁵⁴ Dawkins LE, Kimber CF, Doig M, Feyerabend C, Corcoran O. Self-titration by experienced e-cigarette users: blood nicotine delivery and subjective effects. *Psychopharmacology (Berl)*. 2016 May;

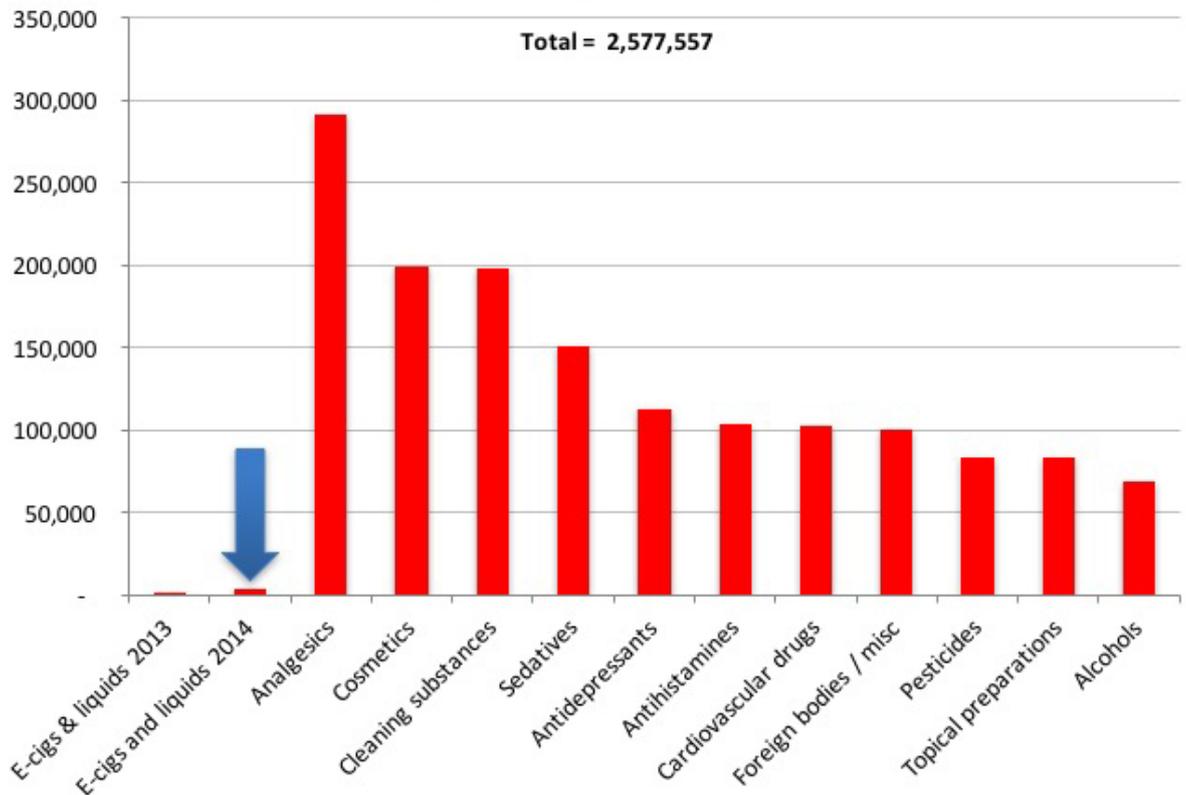
55. This statement, while asserted with little acknowledgement of context, is misleading and deceptive given that e-cigarettes were barely used in 2010 and the introduction of any new product is likely to result in some increase in accidental use above the 0 starting point whereby the rapid uptake of e-cigarettes between 2010 and 2014 is a materially important contextual circumstance which the TGA has failed to consider in its appraisal of the increased rate of accidental use.
56. The TGA's cited data,⁵⁶ contrary to its inference, does not actually attest to the abovementioned accidental poisoning rate. Rather the figure cited refers to the incidence of 'exposures' to the product which includes people coming into contact with it in some different way to its usual intended use such as ingested, inhalation, absorption through the skin or eyes etc. Many of these are likely to have been minor or trivial exposures which do not qualify as ' poisonings'. The TGA has ignored the explicit qualification in its own source that the death in question was the result of deliberate intravenous injection of nicotine and was hence not accidental.
57. The ATA and MyChoice further note that the stated finding of 215 reported exposures in 2014 is a small fraction of the 4000+ exposure calls, most of them dealing with common household items, to US poison centres.⁵⁷ The following graph from the American Association of Poison Control Annual report from 2014 further illustrates that accidental nicotine exposures are rare compared to other household risks.⁵⁸

⁵⁶ CDC MMWR. Notes from the Field: Calls to Poison Centers for Exposures to Electronic Cigarettes — United States, September 2010–February 2014 April 4, 2014 / 63(13);292-293

⁵⁷ James B. Mowry PharmD, Daniel A. Spyker PhD, MD, Daniel E. Brooks MD, Naya McMillan DrPH, MS & Jay L. Schauben PharmD (2015) 2014 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 32nd Annual Report, *Clinical Toxicology*, 53:10, 962-1147.

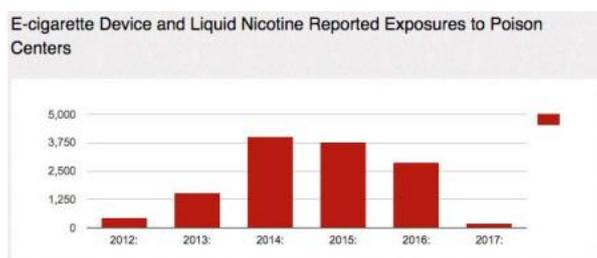
⁵⁸ Mowry JB, Spyker DA, Brooks DE, *et al.* 2014 Annual Report of the American Association of Poison Control Centers' National Poison Data System (NPDS): 32nd Annual Report. *Clin Toxicol* 2015;**53**:962–1147.(Table 17A) <http://www.aapcc.org/annual-reports/>

Exposure reports (US 2014)



2014 Annual Report of the American Association of Poison Control Centers' National Poison Data System (Table 17A)

58. The TGA has also failed to acknowledge that the exposure call rate for nicotine has reduced significantly between 2014 and the present year.⁵⁹ The ATA and MyChoice believe that this figure, taken in tandem with rapidly increasing uptake of the product, attests to the benefits of its legalisation and the dissemination of knowledge about safety and precautions which is possible with wide availability of the product. This is likely to be the case should ENDS be legalised in Australia as well.



59. By contrast - the status quo in Australia, whereby consumers must rely on black market products that often do not come with clear or reliable instructions or warnings about safe use, is likely to increase the potential for accidents and unsafe use.

⁵⁹ Bates C. Regulators and the compliance fallacy - buying 99% nicotine e-liquid from China, Counterfactual 4 May 2016.

UK case study: nicotine toxicity

60. Public Health England held an expert review into the toxicity risks of nicotine solutions used in e-cigarettes and personal vaporisers. The review found that fatal nicotine poisoning was extremely rare, that previously held assumptions about the dosage required for an adult to overdose on nicotine were an overestimate and that even people who had deliberately attempting suicide by nicotine overdose had survived very high doses. Notably, the review found that nicotine was an ‘emetic’ in that it induces vomiting at very high doses and this acts as a mechanism which prevents overdose.⁶⁰
61. Similarly, the UK Royal College of Physicians came to the following conclusion regarding nicotine toxicity and lethal dosage: “*Although nicotine is a toxic compound, overdosing on nicotine products used as directed is almost impossible, given the individual ability to titrate dose and the short half-life of nicotine ... However, ingestion of high doses (purposeful or accidental) can be fatal. Historically, the lethal dose of nicotine for a human adult has consistently been stated to be about 60 mg, corresponding to an oral median lethal dose (LD50) of approximately 0.8 mg/kg. However, this figure has recently been disputed in the light of reports of non-fatal suicide attempts or accidents involving nicotine ingestion, leading to an estimate that the lower dose limit for fatal outcomes is likely to be 500–1,000 mg ingested nicotine, equivalent to an oral LD50 of 6.5–13 mg/kg.*”⁶¹
62. It is therefore impossible to overdose on legal ENDS solutions with a 3.6% concentration, which is typical for e-liquids.
63. Notably, the Royal Society for Public Health has advised that nicotine is “*no more harmful to public health than caffeine.*”⁶²

ENDS is less dependence-forming than tobacco smoking

64. Pharmacological dependence on smoking is partly driven by non-nicotine agents present in tobacco, such as monoamine oxidase inhibitors.⁶³ These are not present in nicotine-loaded e-liquids. It is hence likely that ENDS has less physiological dependency-forming impacts than tobacco and this further enhances the value of ENDS as a safer substitute for smoking that reduces its harms.

⁶⁰ McNeill A, Brose LS, Calder R, *et al.* E-cigarettes: An Evidence Update. A Report Commissioned by Public Health England. London: 2015 Section 9 page 63-67
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/457102/E-cigarettes_an_evidence_update_A_report_commissioned_by_Public_Health_England_FINAL.pdf

⁶¹ Tobacco Advisory Group to the Royal College of Physicians (UK) 2016, ‘Nicotine without smoke: Tobacco harm reduction’, page 57

⁶² Royal Society for Public Health, 13 August 2015, ‘Nicotine “no more harmful to health than caffeine”’ Press release <https://www.rsph.org.uk/about-us/news/nicotine--no-more-harmful-to-health-than-caffeine-.html>

⁶³ Benowitz, N. L. (2010). Nicotine addiction. *New England Journal of Medicine*, 362(24), 2295-2303.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2928221/?wptouch_preview_theme=enabled

Non-nicotine chemicals in nicotine solutions do not carry significant health risks

65. A study which tested e-cigarette vapour for more than 50 key cigarette smoke toxicants found none with the exception of a trace quantity in the vapour of a single e-cigarette brand.⁶⁴ Another study which tested 12 e-cigarette brands, found that even though e-cigarette vapour contained some level of toxicants, the levels were 9-450 times lower than levels of those toxicants found in cigarette smoke.⁶⁵ A 2013 report on the results of numerous studies concluded e-cigarettes and vaping devices “*appear to be much safer than tobacco cigarettes and comparable in toxicity to conventional nicotine replacement products.*”⁶⁶
66. **Formaldehyde:** The claim that e-cigarettes or e-cigarette vapour contains formaldehyde is baseless. A single study produced formaldehyde from an e-cigarette by deliberately overheating it, thus engaging in abusive or unsafe use.⁶⁷ Such use is encouraged under Australia’s status quo of banning ENDS, thereby preventing the issuance of warnings or safety information. Moreover, formaldehyde is also present in air, with the average daily exposure to a human being 500-1100 micrograms. For comparison’s sake, a smoker who smokes 20 cigarettes a day is exposed to 1000-2000 micrograms as a result. Tests performed on cigarettes found that six deep puffs produced 86 micrograms of formaldehyde per cubic metre. By contrast, the same tests performed on e-cigarettes found a concentration of 12 micrograms per cubic metre – the same level of formaldehyde as was found in an empty test chamber.⁶⁸ This indicates that the trace amount of formaldehyde was not produced by the e-cigarette but was present in the air.
67. **Flavouring chemicals:** Flavouring agents in some e-cigarette solutions have been found to contain trace amounts of diacetyl, acetyl, propionyl, and acetoin.⁶⁹ Some of these chemicals have been linked to the medical condition ‘popcorn lung’ which is commonly experienced by workers in popcorn factories who inhale large amounts of these chemicals over years of work.⁷⁰ Contrastingly, no link has ever been established

⁶⁴ Murray Laugesen, “Ruyan E-cigarette Bench-top tests” (poster), Society for Research on Nicotine and Tobacco, April 30, 2009 <http://www.healthnz.co.nz/DublinEcigBenchtopHandout.pdf>

⁶⁵ M.L. Goniewicz, *et al.*, “Levels of Selected Carcinogens and Toxicants in Vapour from Electronic Cigarettes,” *Tobacco Control* **23** (March 2014): 123–9, <https://www.ncbi.nlm.nih.gov/pubmed/23467656/>

⁶⁶ Riccardo Polosa, *et al.*, “A Fresh Look at Tobacco Harm Reduction: The Case for the Electronic Cigarette,” *Harm Reduction Journal* **10** (October 2013), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3850892/>

⁶⁷ R. Paul Jensen, *et al.*, “Hidden Formaldehyde in E-Cigarette Aerosols,” *New England Journal of Medicine* **394** (January 2015): 392–4, doi: 10.1056/NEJMc1413069, <http://www.nejm.org/doi/full/10.1056/NEJMc1413069>

⁶⁸ T. Schripp, D. Markewitz, E. Uhde, and T. Salthammer, “Does E-cigarette Consumption Cause Passive Vaping,” *Indoor Air* **23** (February 2013): 25– 31, doi: 10.1111/j.1600-0668.2012.00792.x, <https://www.ncbi.nlm.nih.gov/pubmed/22672560>

⁶⁹ Joseph G. Allen, *et al.*, “Flavoring Chemicals in E-Cigarettes: Diacetyl, 2,3-Pentanedione, and Acetoin in a Sample of 51 Products, Including Fruit-, Candy-, and Cocktail-Flavored E-Cigarettes,” *Environmental Health Perspectives* **124** (June 2016): 733–9, <http://ehp.niehs.nih.gov/15-10185>

⁷⁰ Brent D. Kerger and M. Joseph Fedoruk, “Pathology, Toxicology, and Latency of Irritant Gases Known to Cause Bronchiolitis Obliterans Disease: Does Diacetyl Fit the Pattern?” *Toxicology Reports* **2** (2015): 1463–1472, <http://www.sciencedirect.com/science/article/pii/S2214750015300767>

between the condition and such insignificant quantities of these chemicals as those found in some ENDS solutions.

International approaches to legislating and regulating the use of E-cigarettes and personal vaporisers

68. Numerous international jurisdictions have recognised the value of ENDS products in helping people quit smoking tobacco and have introduced sensible regulation governing their distribution and use. Australia risks falling behind its international peers and ensuring regulation keeps up with important technological innovations such as ENDS.
69. Nicotine-loaded e-liquids for the purpose of ENDS are legal for use and sale in the European Union, UK and USA. They were recently (or are in the process of being) legalised in Canada and New Zealand.
70. A regulatory code for ENDS advertising and marketing has been instituted in the UK to ensure socially responsible advertising.⁷¹ Regulations preclude ENDS advertising which appeals to minors or targets non-smokers. For example, ENDS advertisements cannot feature anyone who appears to be under the age of 25. Similar regulations could be incorporated into Australian consumer law or advertising standards.
71. In New Zealand, the following rules apply to ENDS products: they can only be sold to adults, users cannot vape in indoor workplaces and other areas where smoking is otherwise banned and advertising cannot appeal to non-smokers, especially children and young people.⁷² The same rules could be incorporated here when ENDS is legalised.

Other related matters

Consumer perceptions

72. A 2015 survey of Australian smokers revealed the following:
- 84% of adult smokers agree that tax/regulatory strategy should be used to encourage healthier alternatives tobacco smoking for adults and should eliminate non-adult smoking entirely:
 - 82% agree that *“It would be wrong for the government to prevent or delay the introduction of less harmful alternatives to regular cigarettes for adult smokers.”*

⁷¹ UK Advertising Code. UK Code of Non-Broadcast Advertising.; 2016. Available at: <https://www.cap.org.uk/Advertising-Codes/Non-Broadcast/Codeltem.aspx?cscid=%7B49028fdc-fc22-4d8a-ba5b-ba7ccc3df99a%7D#.V83uWDU6x0x>

⁷² <http://www.stuff.co.nz/national/politics/90962129/Government-legalises-e-cigarettes-in-effort-to-make-New-Zealand-smokefree-by-2025>

- 93% agree that “*if a new product is scientifically proven to have the potential to reduce the risk of smoking as compared to conventional cigarettes, adult smokers should have the right to access this information.*”
- 75% agreed that e-cigarettes were a ‘positive alternative’ to tobacco smoking and;
- 65% affirmed that they would consider switching to vaping if e-liquids were legal, met quality/safety standards and were conveniently available.⁷³

73. This survey indicates that there is strong demand for access to safer alternatives to cigarettes. ATA and MC submit that it is important to take these perceptions into account when determining matters of consumer choice and autonomy such as ENDS legalisation.

Tobacco Black Market

74. In recent years, the international black market trade in tobacco products has grown significantly. This trade often funds other illegal enterprises. The ATA and MC note that the committee should consider the impact that legalised ENDS will have in undermining this illicit trade by providing a safer, more appealing alternative for smokers. Notably, given that the nicotine used in ENDS is ultimately extracted from tobacco, there is further imperative to legalise ENDS in order to prevent black market traders from benefitting due to consumer demand for ENDS solutions which they cannot access legally.

75. International consulting firm KPMG reports that in Australia, the black market for tobacco rose from 11.8% of total tobacco consumption in 2012 to 14.3% in the half year to 2015, after plain packaging was introduced. A peak in illicit tobacco consumption as a proportion of total tobacco consumption occurred in the full year 2014, making up 14.5% of total tobacco consumed in Australia. This equates to \$1.4 billion dollars in tax revenue foregone by the Australian government.⁷⁴

76. According to the World Health Organization Framework Convention on Tobacco Control, there are an estimated 600 *billion* counterfeited and smuggled cigarettes crossing national borders each year (over 10% of all cigarettes consumed).⁷⁵

77. The global movement of illicit tobacco is also lucrative source of funding for terrorism.^{76 77} A 2003 report by the non-partisan Cato Institute concludes that “*a wide range of terrorist groups are known to use the proceeds from cigarette smuggling to fund their operation. For example, counterfeit cigarette tax stamps were found in an apartment used by members of the Egyptian Jihad cell that carried out the 1993*

⁷³ Factasia Asian Nations Smokers Survey 2015 – Australia <http://factasia.org/wp-content/uploads/2015/11/Australia-Adult-Smoker-Survey.pdf>

⁷⁴ <https://home.kpmg.com/content/dam/kpmg/pdf/2016/04/australia-illicit-tobacco-2015.pdf>

⁷⁵ http://www.science20.com/news_articles/cigarettes_dont_kill_much_counterfeit_cigarettes_do

⁷⁶ <http://www.abc.net.au/news/2016-12-05/illegal-tobacco-trade-fuelling-drug-trafficking-and-terrorism/8075174>

⁷⁷ <http://www.politifact.com/pennsylvania/statements/2016/jul/18/rick-saccone/curious-connection-between-illicit-cigarette-sales/>

bombing of the World Trade Center".⁷⁸ In 2002, 26 Hezbollah terrorist cell agents in North Carolina were convicted for selling \$7 million worth of bootleg tobacco, planning to use the funds to buy advanced aircraft analysis and design software, blasting equipment, ultrasonic dog repellents, munitions and other military hardware. At least \$1.5 million dollars in tobacco smuggling proceeds was directly forwarded to Hezbollah by Mohamad Hammoud, along with laptops, night-vision goggles, stun guns, blasting equipment, and more.⁷⁹

78. Recently, Australian Federal Police assistant Commissioner Wayne Buchorn has noted that illegal tobacco in Australia alone is potentially a billion dollar industry and raised "*significant*" concerns that some of the proceeds of the booming illicit tobacco smuggling trade into Australia were flowing to extremist groups overseas. "*It is used to fund drug importations. There is also evidence it is utilised in other serious organised crime type activities,*" Mr Buchhorn said. "*I would consider it [a **national security threat**] because [of] the potential for organised crime groups to attack the institutions of state, whether through corruption or through their infiltration of legitimate supply chains. That has the potential to cause corruption within government agencies and more broadly. So the potential for that to be a national security risk for me is very real.*"⁸⁰

79. The US State Department has described international tobacco smuggling as a "*threat to national security*", while the United Nations and OECD have also recently raised serious concerns about the impact of the illicit trade.⁸¹

80. Illicit tobacco's links to terrorism should be especially concerning for Australian policy makers given the rising threat of terrorism both in our region and in Western countries more generally which are being targeted by groups such as ISIS and their affiliates. Recently, ISIS militants laid siege to parts of the Philippines which is within our broader Asia-Pacific region. Illicit tobacco should also be concerning as organised crime and criminal enterprises remain an ongoing concern in Australia's major cities including Sydney and Melbourne. Undermining the trade would cut a significant revenue source or potential revenue source for these criminals and terror groups.

81. The status quo of prohibiting ENDS contributes to the illicit tobacco trade by creating a new black market for ENDS nicotine solutions. It also contributes to the problem by denying consumers legal access to a smoking cessation tool when black market tobacco products already appear attractive enough to consumers given the substantial taxes levied on legal tobacco products.

⁷⁸ <http://www.cato.org/pubs/pas/html/pa468/pa468index.html>

⁷⁹ <http://no-smoking.org/sept02/09-25-02-2.html>

⁸⁰ <http://www.abc.net.au/news/2016-12-05/illegal-tobacco-trade-fuelling-drug-trafficking-and-terrorism/8075174>

⁸¹ <http://www.abc.net.au/news/2016-12-05/illegal-tobacco-trade-fuelling-drug-trafficking-and-terrorism/8075174>

Smoking-related harms and taxes disproportionately hurt poor Australians

82. Studies have found that taxes on tobacco can be regressive in nature as they do not encourage smokers to quit given the price inelasticity of tobacco and hence disproportionately detract from the financial resources of poorer individuals.⁸²
83. Australian Bureau of Statistics data confirms that tobacco excise is likely to disproportionately hurt the poor. In 2014-15, 21.4% of people living in areas of most disadvantage (first quintile) smoked daily, compared with 8.0% of people living in areas of the least disadvantage (fifth quintile).⁸³
84. Poor smokers are heavier smokers (relative to their wealthier counterparts), are more frequently tobacco-dependent, and are more prone to smoke automatically or to reduce “*negative feelings*”.⁸⁴
85. Most single individuals who depend upon the NewStart payment receive \$535.60 every two weeks. A pack-a-day smoker is likely to spend \$350 every two weeks (\$175/week) on cigarettes alone. Statistics which attest to smoking rates among the poor indicate that the current tax regime, in failing to stop the poor from giving up smoking, is likely to have led to many losing a substantial chunk of already low income by giving up healthy food and other necessities in order to obtain cigarettes.
86. Given the disproportionate impact that smoking has on the poor, it is therefore important to legalise ENDS as a safer alternative and quit-smoking tool which does not attract the tax on tobacco cigarettes and will not need to be taxed at nearly the same rate as ENDS solutions are non-carcinogenic and do not present any other long-term health risks.
87. ENDS is also likely to have a net beneficial impact for the public healthcare system given its value as a smoking cessation tool and safer alternative. As such, the tax regime on legalised ENDS ought to be minimal in order to encourage smokers to switch to the technology.
88. As a side-note, the government can still benefit from revenue accrued through GST on sales of ENDS products.

⁸² Remler, Dahlia K. "Poor smokers, poor quitters, and cigarette tax regressivity." *American Journal of Public Health* 94.2 (2004): 225-229. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448232/>

⁸³ Australian Bureau of Statistics Health Survey 2014-15
<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.001~2014-15~Main%20Features~Smoking~24>

⁸⁴ Peretti-Watel, Patrick, and Jean Constance. "“It’s all we got left”. Why poor smokers are less sensitive to cigarette price increases." *International journal of environmental research and public health* 6.2 (2009): 608-621. <http://www.mdpi.com/1660-4601/6/2/608/htm>

Mitigating fire risk and damage

89. Collins & Lapsley estimated that tobacco costs the Australian government \$65 million annually (or \$85 million annually, adjusted for inflation) due to fires.⁸⁵ ENDS does not carry this fire risk. Legalised ENDS is therefore likely to minimise tobacco-related fire damage as ENDS is taken up by tobacco smokers.

The appropriate regulatory framework for E-cigarettes and personal vaporisers in Australia – Recommendations

Recommendations

90. Based on the abovementioned evidence and international case studies, the ATA and MC recommend that Nicotine be exempt from Schedule 7 of the Australian Poisons Standard at concentrations of 3.6 per cent or less of nicotine for self-administration with an electronic nicotine delivery system ('personal vaporiser' or 'electronic cigarette') for the purpose of tobacco harm reduction.
91. That e-cigarettes and personal vaporisers are not subject to the same smoke-free regulations as those imposed on cigarettes since they do not carry any significant health risk for passive smokers.
92. That regulations are subsequently put in place to ensure socially responsible advertising of ENDS in line with the UK model outlined at point 70 of this submission.
93. That regulations concerning the marketing and advertisement of ENDS do not preclude communications which promote safe use. Using ENDS is significantly more complex than smoking a cigarette and it is vital that information is available to ensure public safety and to maximise the harm reduction potential of ENDS as users without information might use the product in a wrong way and/or give up and revert to cigarettes.
94. That a public advisory is released to provide information on safe ENDS use as well as a realistic appraisal of any associated risks including the dangers of black market products in order to encourage safe, effective use.



Satyajeet Marar
Director - MyChoice Australia



Tim Andrews
Executive Director - Australian Taxpayers' Alliance

⁸⁵ Collins, David John, and Helen M. Lapsley. *The costs of tobacco, alcohol and illicit drug abuse to Australian society in 2004/05*. Canberra: Department of Health and Ageing, 2008.
http://nadk.flinders.edu.au/files/3013/8551/1279/Collins_Lapsley_Report.pdf