

PAEC Inquiry into Tobacco and Vaping Control

Dr James Martin – Response to Questions on Notice

Swedish research on reduction in smoking related harms

Sweden has the lowest smoking rate in Europe and the lowest tobacco-related mortality rate of all European countries. This is largely to strong declines in smoking attributable to the use of less harmful nicotine containing products. Historically, this has been snus, a moist tobacco product consumed orally. This has been replaced in recent years by nicotine pouches which do not contain tobacco, are not associated with significant harms and have a slightly lower risk profile to legally available nicotine gums and sprays.

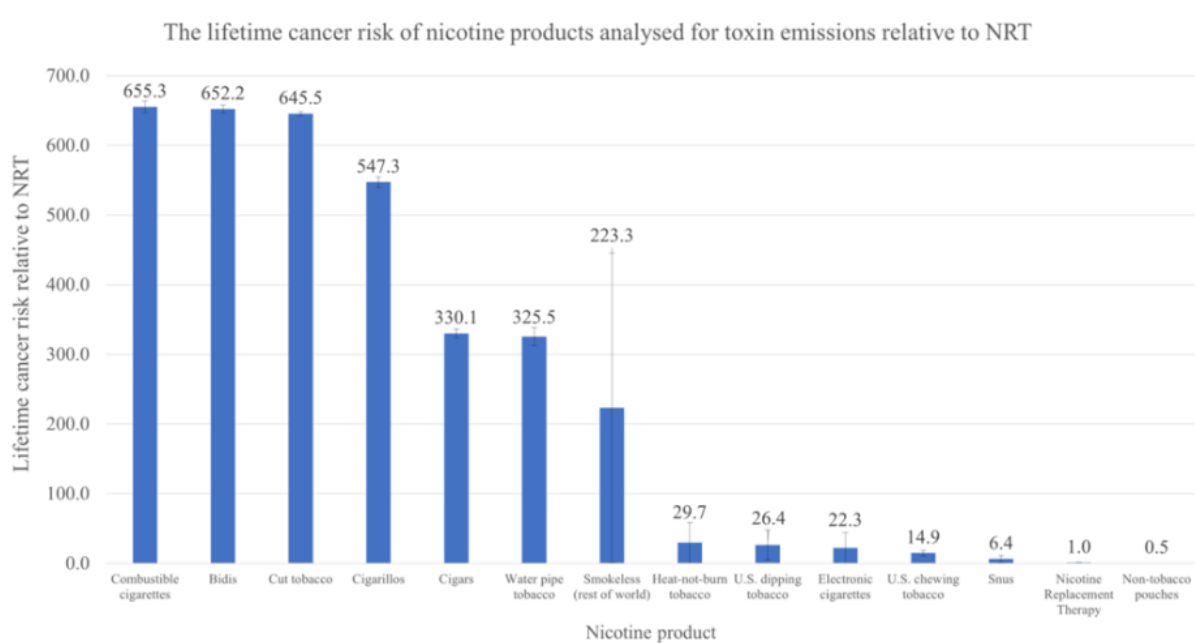


Table 1 Relative risk profile of nicotine containing products – Murkett et al. 2022

Studies supporting this evidence:

Clarke, E., Thompson, K., Weaver, S., Thompson, J., & O’Connell, G. (2019). Snus: a compelling harm reduction alternative to cigarettes. *Harm reduction journal*, 16(1), 62.

Grandolfo, E., Ogden, H., Fearon, I. M., Malt, L., Stevenson, M., Weaver, S., & Nahde, T. (2024). Tobacco-Free Nicotine Pouches and Their Potential Contribution to Tobacco Harm Reduction: A Scoping Review. *Cureus*, 16(2).

Kulhánová, I., Forman, D., Vignat, J., Espina, C., Brenner, H., Storm, H. H., ... & Soerjomataram, I. (2020). Tobacco-related cancers in Europe: The scale of the epidemic in 2018. *European Journal of Cancer*, 139, 27-36.

Murkett, R., Rugh, M., & Ding, B. (2022). Nicotine products relative risk assessment: an updated systematic review and meta-analysis. *F1000Research*, 9(1225), 1225.

Ramström, L. (2018). Sweden's pathway to Europe's lowest level of tobacco-related mortality. *Tobacco Induced Diseases*, 16(1).

Yu, F., Bishop, E., Miazzi, F., Evans, R., Smart, D., Breheny, D., & Thorne, D. (2024). Multi-endpoint in vitro toxicological assessment of snus and tobacco-free nicotine pouch extracts. *Mutation Research/Genetic Toxicology and Environmental Mutagenesis*, 895, 503738.

Teen vaping stats from AIHW

Australian Institute of Health and Welfare (2024) National Drug Strategy Household Survey 2022-2023, Australian Institute of Health and Welfare, Australian Government, Canberra.

Contemporary trends in vaping are well understood with detailed data provided by the recent large-scale National Drug Strategy Household Survey 2022-23 conducted by the Australian Institute of Health and Welfare (AIHW). This report shows that far from being a ‘youth’ phenomenon, vaping is overwhelming concentrated amongst the adult population, with 93% of people who vape being over the age of 18. Daily vaping is most prevalent amongst Australians aged 18-24 (9.3%), 25-29 (6.5%), and 30-39 (4.9%).

There has been much sensationalist media reporting and public alarm around youth vaping, prompted in part by government claims of a ‘new generation of addicts’. However, alarmist government rhetoric on this issue is inconsistent with its own data. The AIHW survey shows that over 70% of teens aged 14-17 have never tried a vape, the majority who do do so infrequently consistent with casual experimentation and just 3.5% vape daily.

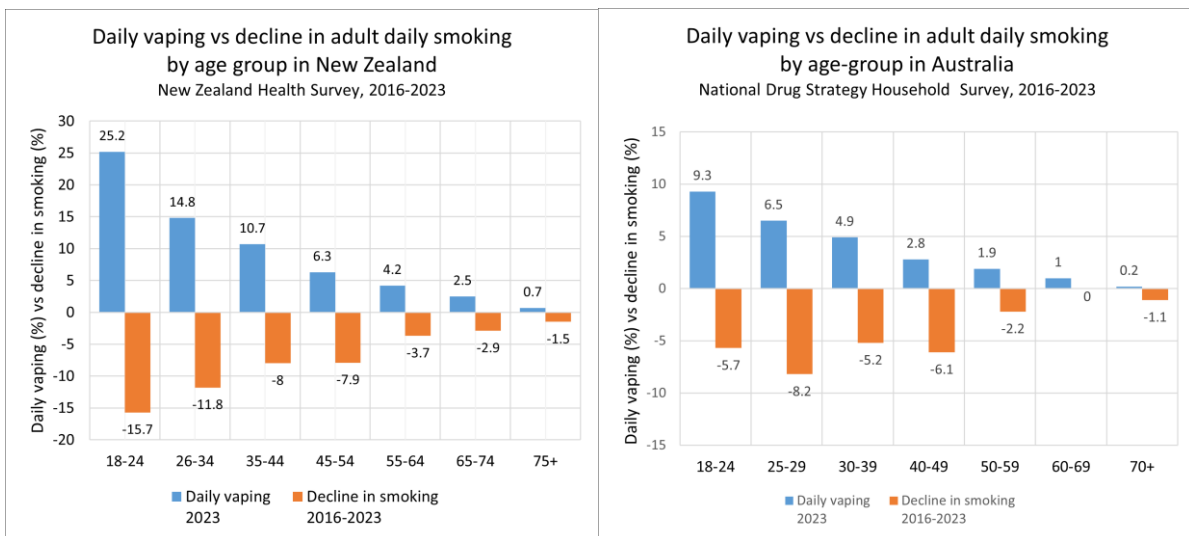


Table 2 – Reductions in smoking greatest amongst age cohorts that have taken up vaping data from and NSHS AIHW (2023)

Importance of flavours incentivising adult smokers to quit

Studies that have shown the importance of flavours in smoking cessation:

Blank, M. L., & Hoek, J. (2023). E-cigarette flavours and vaping as a social practice: implications for tobacco control. *Critical Public Health*, 33(5), 518-527.

Gendall, P., & Hoek, J. (2021). Role of flavours in vaping uptake and cessation among New Zealand smokers and non-smokers: a cross-sectional study. *Tobacco Control*, 30(1), 108-110.

Khouja, J. N., Dyer, M. L., Havill, M. A., Dockrell, M. J., Munafò, M. R., & Attwood, A. S. (2024). Exploring the opinions and potential impact of unflavoured e-liquid on smoking cessation among people who smoke and smoking relapse among people who previously smoked and now use e-cigarettes: findings from a UK-based mixed methods study. *Harm Reduction Journal*, 21(1), 90.

Li, L., Borland, R., Cummings, K. M., Fong, G. T., Gravely, S., Smith, D. M., ... & McNeill, A. (2021). How does the use of flavored nicotine vaping products relate to progression toward quitting smoking? Findings from the 2016 and 2018 ITC 4CV surveys. *Nicotine and Tobacco Research*, 23(9), 1490-1497.

Studies that have shown flavour bans resulting in increased smoking:

Cotti, C. D., Courtemanche, C. J., Liang, Y., Maclean, J. C., Nesson, E. T., & Sabia, J. J. (2024). *The Effect of E-Cigarette Flavor Bans on Tobacco Use* (No. w32535). National Bureau of Economic Research.

Hrywna, M., Teotia, A., Miller Lo, E., Giovenco, D. P., & Delnevo, C. D. (2024). The Impact of New Jersey's 2020 E-Cigarette Flavor Ban on E-Cigarette, Cigarette, and Cigar Sales in NJ. *Nicotine and Tobacco Research*, ntae151.

Saffer, H., Ozdogan, S., Grossman, M., Dench, D. L., & Dave, D. M. (2024). *Comprehensive E-cigarette Flavor Bans and Tobacco Use among Youth and Adults* (No. w32534). National Bureau of Economic Research.

Are we seeing increased use of nicotine in jurisdiction that have legalised vaping?

There are mixed results regarding the prevalence of nicotine use amongst populations that have legalised and regulated vaping products. For example, in the UK, where the use of vaping products have been prevalent the longest, we see overall declines in

nicotine usage for both adults and children. Again, one should stress that nicotine use that is not associated with tobacco smoking is far less harmful than cigarette smoking. Increased rates of nicotine usage that are witnessed in some jurisdictions are therefore not reflective of increased public health harms given widespread decreases in smoking, a trend which has been driven in large part by vaping products substituting cigarettes.

UK

Vaping products arrived around 2007

Adult. Annual Population Survey (via ASH)

	Adult current smoking	Adult current vaping	Total
2006	22%	0	22%
2012	19%	1.7%	20.7%
2015	17.2%	5.4%	22.6%
2022	12.9%	8.3%	21.2%

Youth. Smoking, Drinking and Drug Use among Young People in England, 2021 (11-15y)

	Youth regular smoking	Youth regular vaping	Total
2006	9%	0	9%
2021	1%	4.5%	5.5%

Regular = at least one cigarette per week

New Zealand Health Survey data

Vaping products arrived around 2014-15

	Adult daily smoking	Adult daily vaping	Total
2012	16.4%	0	16.4%
2023	6.8%	9.7%	17.5%

	Youth daily smoking	Youth daily vaping	Total
2010	5.5%	0	5.5%
2023	1.2%	10%	11.2%

USA. NIHS data

Vaping products arrived around 2007

	Adult current smoking	Adult current vaping	Total
1997	24.7%	0	24.7%
2014	16.8%	0	16.8%
2023	6.5%	10.8%	17.3%

USA. National Youth Tobacco Survey

	Youth current smoking	Youth current vaping	Total
2004	28%	0	28%
2012	26.6% High school y 9-12	1.8% High school y 9-12	28.4% High school y 9-12
2022	3.4%	7.7%	11.1%