

The relationship between tobacco prices and extent of trade in illicit tobacco

The committee asked for further information on the relationship between high tobacco taxes and prices and illicit tobacco.

The attached reports discuss this issue in some detail.

See

World Bank Group, *Confronting illicit tobacco trade: a global review of country experiences*, in *World Bank*. 2019. Available from: <http://documents.worldbank.org/curated/en/677451548260528135/pdf/133959-REVISED-2-v1-WBG-Tobacco-IlicitTrade-FINAL-v3-web.pdf>.

Contributing factors to illicit trade are complex. However, contrary to tobacco industry arguments, taxes and prices have only a limited impact on the illicit cigarette market share at country level.¹⁴ Evidence indicates that the illicit cigarette market is relatively larger in countries with low taxes and prices while relatively smaller in countries with higher cigarette taxes and prices.¹⁵ Non-price factors such as governance status, weak regulatory framework, social acceptance of illicit trade, and the availability of informal distribution networks appear to be far more important determinants of the size of the illicit tobacco market.¹⁶

PAGE xix, citing

¹⁴ Patrick Petit and Janos Nagy. How to design and enforce tobacco excises? International Monetary Fund 2016.

¹⁵ National Research Council and Institute of Medicine. Understanding the U.S. Illicit Tobacco Market: Characteristics, Policy Context, and Lessons from International Experiences. Washington DC: The National Academies Press. 2015.

¹⁶ Frank J. Chaloupka, Sarah M. Edwards, Hana Ross, Megan Diaz, Marin Kurti, Xin Xu, Mike Pesko, David Merriman, Hillary DeLong. Preventing and Reducing Illicit Tobacco Trade in the United States. Centers for Disease Control and Prevention. 2015.

World Health Organization, *WHO technical manual on tobacco tax policy and administration*. 2021, WHO: Geneva. Available from: <https://www.who.int/publications/i/item/9789240019188>

- Section 4.1.3 Pages 182- 188, including this material

Figure 4.1.1 illustrates the relationship between price and illicit trade, using the price (in US\$) per pack of the most-sold brand of cigarettes and the estimated level of illicit trade for 94 countries in 2018.¹¹ There is no apparent unique association between the two variables. Running a linear regression with retail price as the explanatory variable and share of illicit trade as the dependent variable shows an inverse, but not statistically significant, relationship between price and illicit market share.¹²

Figure 4.1.1 illustrates some particular cases:

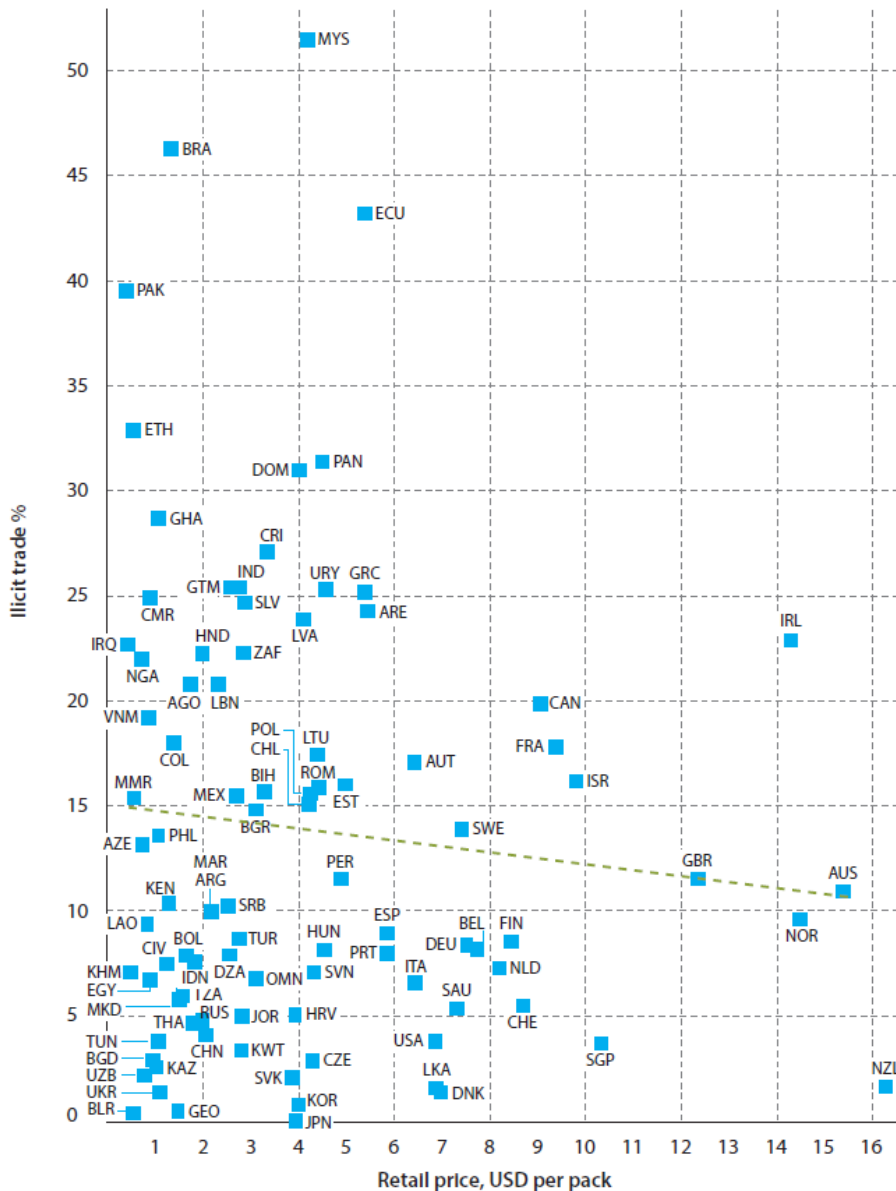
Many countries with low prices (i.e. lower than US\$ 2 per pack) have the highest levels of illicit trade in the sample, e.g. Brazil (BRA) (\$1.33 and 46.3% illicit share), Pakistan (PAK) (\$0.39 and

40%), Ethiopia (ETH) (\$0.55 and 32.9%), Ghana (GHA) (\$1.06 and 29%) and Cameroon (CMR) (\$0.89 and 25%).

In contrast, many of the countries with prices between US\$ 4 and \$8 – which could be considered high enough for financial incentives to operate – have illicit trade shares of less than 10% of total consumption. These countries include the Republic of Korea (KOR) (\$4.02 and 0.8%), Czechia (CZE) (\$4.31 and 2.9%) and Sri Lanka (LKA) (\$6.89 and 1.6%).

All countries that have very high prices – higher than US\$ 8 – except for Ireland, register illicit trade shares below 20%. These countries include France (FRA) (\$9.39 and 17.8%), Switzerland (CHE) (\$8.71 and 5.5%), Singapore (SGP) (\$10.35 and 3.7%) and Norway (NOR) (\$14.51 and 9.6%).

Fig. 4.1.1 Share of illicit trade versus retail price of the most-sold brand of cigarettes in US\$, by country, 2018



Note: The extent of illicit trade in cigarettes is measured by Euromonitor as the estimated quantity of illegal cigarettes consumed in a country divided by the estimated total consumption of cigarettes in that country. Sources: (27, 30).

Other useful international reports on tackling illicit tobacco

Marquez, P.V. and B. Moreno-Dodson, *Tobacco tax reform at the crossroads of health and development*. 2017, World Bank Group: New York. Available from: http://documents.worldbank.org/curated/en/491661505803109617/pdf/119792-REVISED-oct3-pm-v2-PUBLIC-FINALWBG_TobaccoTaxReformFullReportweb.pdf

Pages 18 19, and Chapter 9, pages 197-199

International Agency for Research on Cancer, *Chapter 8. Tax avoidance and tax evasion*, in *Effectiveness of tax and price policies for tobacco control*. 2011, IARC: Lyon, France. Available from: <http://www.iarc.fr/en/publications/list/handbooks/>.

World Health Organization, *2023 Global Progress Report on Implementation of the Protocol to Eliminate Illicit Trade in Tobacco Products*, Secretariat of the WHO Framework Convention on Tobacco Control, Editor. 2024: Geneva. Available from: <https://fctc.who.int/publications/m/item/2023-global-progress-report-on-implementation-of-the-protocol-to-eliminate-illicit-trade-in-tobacco-products>.

Best features of tobacco licensing arrangements from elsewhere in Australia

	Qld	WA	SA	Tas	ACT	NT
Dates licence schemes re-started	1 Sep 2024	31 May 07	Jan 97	Nov 99	Sep 08	1 Jan 03
Current fee (fee as at Jun 2024)	Not yet known	~\$300 (\$270)	~\$350 (\$330)	~\$1,300 (\$1,276)	~\$600 (\$595)	~\$300 (\$270)
Covers wholesalers	<u>Y</u>	<u>Y</u>	N	<u>Y</u>	N	<u>Y</u>
Capacity to refuse licenses for those who are unsuitable		factors which the CEO must have regard to when determining the suitability				
Bans online sales	N	N	<u>Y</u>	N	N	N
Requires sales data to be collected	Can	Has Must on request	No specific power	<u>Specifically requires</u>	No specific power	Has Must on request
Bans vending machines					Y	
Register of licensees publicly available	CE may publish	<u>Y</u>	<u>Y</u>	Must be kept; no requirement to make public	<u>Y</u>	<u>Y</u>

See Table 11B.1. Tobacco retail licencing schemes in Australia (as at September 2023) here <https://www.tobaccoinaustralia.org.au/chapter-11-advertising/indepth-11b-licensing-of-tobacco-sellers>

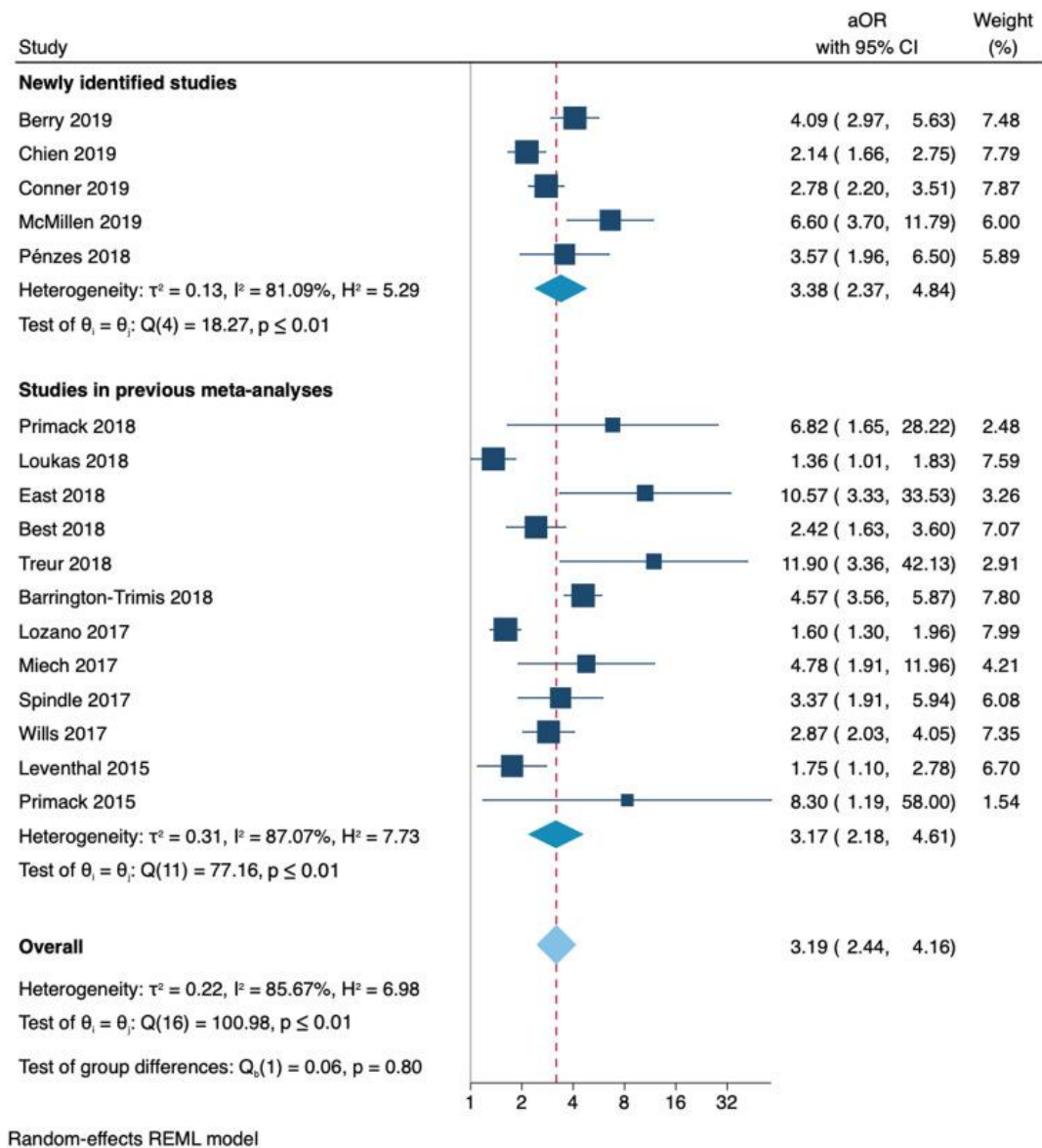
Government officials with expertise in law enforcement should very carefully review each element of licensing regulation in each state to assess which element best facilitates the following desirable features

- Providing clear and appropriate grounds for refusal of licence and for suspension or cancellation of licence
- Allowing entry, inspection and confiscation of materials
- Allowing prompt and efficient prosecution of offenders and
- Prompt publicity about prosecutions for deterrence purposes.

Ideally the inspectorate would sit in an agency that performs similar regulatory functions and had strong connections to police, BorderForce and the ATO. Officers would ideally have training and experience in law enforcement. For instance the inspectorate might include staff on secondment from BorderForce or Victoria Police. Unlike Environmental Health Officers who work across a range of health issues in local councils and have no law enforcement training, staff in a 'badge and uniform' Inspectorate could appropriately support each other and seek outside help for operations involving suspected criminals.

The relationship between vaping and subsequent smoking uptake

The association between vaping and smoking uptake is a very strong and consistent one. A recent review found that ever single study examined showed increased odds of smoking among people who were never smokers but current e-cigarette users at baseline compared with never e-cigarette users at baseline.



Forest plot and random-effects meta-analysis for the adjusted odds of smoking initiation at follow-up among never smokers and current e-cigarette users at baseline compared with never e-cigarette users at baseline.

aOR, adjusted OR; REML, Restricted Maximum Likelihood

Source: Baenziger et al.

While the effect sizes are somewhat less dramatic, the studies and reviews which taken into account factors that predict smoking still find a very strong association between vaping and subsequent smoking uptake.

See the following:

Yoong, S.L., A. Hall, H. Turon, E. Stockings, A. Leonard, A. Grady, et al., Association between electronic nicotine delivery systems and electronic non-nicotine delivery systems with initiation of tobacco use in individuals aged < 20 years. A systematic review and meta-analysis. *PLoS One*, 2021. **16**(9): p. e0256044. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34495974>.

Staff, J., B.C. Kelly, J.L. Maggs and M. Vuolo, Adolescent electronic cigarette use and tobacco smoking in the Millennium Cohort Study. *Addiction*, 2022. **117**(2): p. 484-494. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34286880>.

Also of interest, see:

Gomes, M.N., J.L. Reid, V.L. Rynard, K.A. East, M.L. Goniewicz, M.E. Piper, et al., Comparison of indicators of dependence for vaping and smoking: Trends between 2017 and 2022 among youth in Canada, England and the United States. *Nicotine Tob Res*, 2024. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38531767>.

Jackson, S.E., J. Brown, C. Notley, L. Shahab and S. Cox, Characterising smoking and nicotine use behaviours among women of reproductive age: a 10-year population study in England. *BMC Med*, 2024. **22**(1): p. 99. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38632570>.

It seems that e-cigarettes increase the risk of uptake particularly among those who would otherwise be at low risk of smoking uptake. Factors such as more frequent vaping,¹ higher nicotine content,² device type,³ mental health symptoms,^{4, 5} White race (compared with Black),^{6, 7} and middle socioeconomic status (compared to low),⁶ increase the likelihood of transitioning from e-cigarette use to cigarette/dual use. Use of e-cigarettes among youth and young adults may increase consumption of conventional cigarettes and duration of smoking.⁸⁻¹⁰ E-cigarette susceptibility and use may also predict uptake of other types of tobacco products,¹¹⁻¹³ as well as marijuana, alcohol, and other drug use over time.¹⁴⁻²³

Part of the effect of vaping on subsequent cigarette smoking probably results from their role in nicotine being used much earlier in adolescence.

Pierce, J.P., R. Chen, E.C. Leas, M.M. White, S. Kealey, M.D. Stone, et al., Use of E-cigarettes and Other Tobacco Products and Progression to Daily Cigarette Smoking. *Pediatrics*, 2021. **147**(2). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33431589>.

References

1. Aleyan S, Hitchman SC, Ferro MA, and Leatherdale ST. Trends and predictors of exclusive e-cigarette use, exclusive smoking and dual use among youth in Canada. *Addictive Behaviors*, 2020; 109:106481. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32505981>
2. Byrne S, Brindal E, Williams G, Anastasiou K, Tonkin A, et al. E-cigarettes, smoking and health. A Literature Review Update. CSIRO, Australia, 2018. Available from:

- <https://researchnow.flinders.edu.au/en/publications/e-cigarettes-smoking-and-health-a-literature-review-update>.
3. Kong G, Chaffee BW, Wu R, Krishnan-Sarin S, Liu F, et al. E-cigarette device type and combustible tobacco use: Results from a pooled analysis of 10,482 youth. *Drug and Alcohol Dependence*, 2022; 232:109279. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35063841>
 4. Buckner JD, Abarino CN, Zvolensky MJ, Morris PE, Walukevich-Dienst K, et al. E-cigarettes use prior to smoking combustible cigarettes among dual users: The roles of social anxiety and E-cigarette outcome expectancies. *Addictive Behaviors*, 2021; 117:106854. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33601094>
 5. Harlow AF, Han DH, Eckel SP, McConnell R, Leventhal AM, et al. The interaction of e-cigarette use and mental health symptoms on risk of cigarette smoking initiation among young adults in the United States. *Addiction*, 2023; 118(12):2317-2326. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37620973>
 6. Grobman B, Wu R, Jackson A, Bold KW, Morean ME, et al. First tobacco product tried among adolescents based on race/ethnicity and socioeconomic status. *Addictive Behaviors*, 2021; 113:106666. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33130462>
 7. Stokes AC, Wilson AE, Lundberg DJ, Xie W, Berry KM, et al. Racial/Ethnic Differences in Associations of Non-cigarette Tobacco Product Use With Subsequent Initiation of Cigarettes in US Youths. *Nicotine & Tobacco Research*, 2021; 23(6):900-908. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32948872>
 8. National Academies of Sciences Engineering and Medicine. Public health consequences of e-cigarettes. The National Academies Press, Washington, DC 2018. Available from: <http://nationalacademies.org/hmd/Reports/2018/public-health-consequences-of-e-cigarettes.aspx>.
 9. Barrington-Trimis JL, Yang Z, Schiff S, Unger J, Cruz TB, et al. E-cigarette Product Characteristics and Subsequent Frequency of Cigarette Smoking. *Pediatrics*, 2020; 145(5). Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32253264>
 10. Kelly BC, Vuolo M, Maggs J, and Staff J. E-cigarette use among early adolescent tobacco cigarette smokers: testing the disruption and entrenchment hypotheses in two longitudinal cohorts. *Tobacco Control*, 2024; 33(4):497-502. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/37072167>
 11. Hair EC, Kreslake JM, Mowery P, Pitzer L, Schillo B, et al. A longitudinal analysis of e-cigarette use and cigar, little cigar or cigarillo initiation among youth and youth adults: 2017-2019. *Drug and Alcohol Dependence*, 2021; 226:108821. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/34218009>
 12. Keller-Hamilton B, Lu B, Roberts ME, Berman ML, Root ED, et al. Electronic cigarette use and risk of cigarette and smokeless tobacco initiation among adolescent boys: A propensity score matched analysis. *Addictive Behaviors*, 2021; 114:106770. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/33316588>
 13. Mohammad MS, Aburezq M, AlSaeed N, Abdullah Z, Fayrouz S, et al. Electronic nicotine delivery system use and its relation to waterpipe smoking among youth in seven Arab countries. *Preventive Medicine*, 2024; 182:107945. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38574972>
 14. Nicksic NE and Barnes AJ. Is susceptibility to E-cigarettes among youth associated with tobacco and other substance use behaviors one year later? Results from the PATH

- study. Preventive Medicine, 2019; 121:109-114. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/30776386>
15. Park E, Livingston JA, Wang W, Kwon M, Eiden RD, et al. Adolescent E-cigarette use trajectories and subsequent alcohol and marijuana use. Addictive Behaviors, 2020; 103:106213. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31862618>
 16. Wong SW, Lohrmann DK, Middlestadt SE, and Lin HC. Is E-cigarette use a gateway to marijuana use? Longitudinal examinations of initiation, reinitiation, and persistence of e-cigarette and marijuana use. Drug and Alcohol Dependence, 2020; 208:107868. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31981994>
 17. Evans-Polce RJ, Patrick ME, McCabe SE, and Miech RA. Prospective associations of e-cigarette use with cigarette, alcohol, marijuana, and nonmedical prescription drug use among US adolescents. Drug and Alcohol Dependence, 2020; 216:108303. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32987363>
 18. Staff J, Vuolo M, Kelly BC, Maggs JL, and Silva CP. Electronic cigarette use in adolescence is associated with later cannabis use. Drug and Alcohol Dependence, 2022; 232:109302. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35038607>
 19. Wang Y, Duan Z, Self-Brown SR, Weaver SR, Spears CA, et al. Longitudinal associations between e-cigarette use and onset of multiple modes of cannabis use among US adolescents. Addictive Behaviors, 2022; 131:107316. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35364398>
 20. Westling E, Rusby JC, Crowley R, and Light JM. A Longitudinal Study of E-Cigarette, Cigarette, and Marijuana Use Sequence in Youth. Tob Use Insights, 2022; 15:1179173X221101813. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35592029>
 21. Temourian AA, Halliday DM, Yan Y, Chan-Golston AM, and Song AV. Marijuana and E-cigarette Initiation Among Adolescents: A Survival Analysis. The Journal of Adolescent Health, 2024; 74(4):747-754. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/38085208>
 22. Sun R, Mendez D, and Warner KE. Use of Electronic Cigarettes Among Cannabis-Naive Adolescents and Its Association With Future Cannabis Use. JAMA Netw Open, 2022; 5(7):e2223277. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/35867059>
 23. Silva CP, Maggs JL, Kelly BC, Vuolo M, and Staff J. Associations Between E-cigarettes and Subsequent Cocaine Use in Adolescence: An Analysis of the UK Millennium Cohort Study. Nicotine & Tobacco Research, 2023; 25(3):514-523. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/36125041>

Referrals to the Victorian Quitline

The Quitline is a multi-session telephone counselling service. Quitline's professional counsellors are experts in behaviour change who offer non-judgemental support to help people throughout their journey to quit smoking and/or vaping.

The following data are current as of 19 July 2024.

- In the first instance, prospective clients either:
 - a) **self-refer** – that is, they contact the Quitline themselves, or
 - b) they are referred by a **health professional**
- Over the period July 2023 to June 2024, on average:
 - o 66% of referrals were self-referrals, and
 - o 34% of referrals were health professional referrals.

Self-referrals

There are many channels through which prospective clients can contact the Quitline. These are:

- **Phone:** This is the traditional channel. Prospective clients call 13 7848.
- **Digital:**
 - o *Request a callback* – prospective clients submit their contact details via a form on quit.org.au so that a Quitline counsellor can give them a call.
 - o *Webchat* – prospective clients can access Quitline using webchat which is accessed via quit.org.au.
 - o *Facebook* – prospective clients can access Quitline through Facebook messenger @quitvic.
 - o *WhatsApp* – prospective clients can access Quitline through WhatsApp on +61 385 832 920.
 - o *SMS* – prospective clients can access Quitline by sending a text message to 0482 090 634.
- Over the period July 2023 to June 2024, on average: of all self-referrals:
 - o 54% were received via the phone channel, and
 - o 46% came via a digital channel.

Self-referral – digital channels

Apart from *Request a callback*, all other digital channels were introduced relatively recently. *Webchat* became operational at the end of 2020. *WhatsApp* and *SMS* became operational in February 2023, and *Facebook Messenger* from January 2024. It is important to note that there has been little active promotion of these channels to the community. This is important context when considering the data in the figure below (see Figure 1).

Figure 1 shows that, over the period July 2023 to June 2024, the primary digital access channel to Quitline has been *Request a callback*, with about 8 in 10 digital self-referrals involving a *Request a callback*.

Recent user experience research identified opportunities to raise awareness of these channels among people who smoke and/or vape. These opportunities are being considered further for their feasibility.

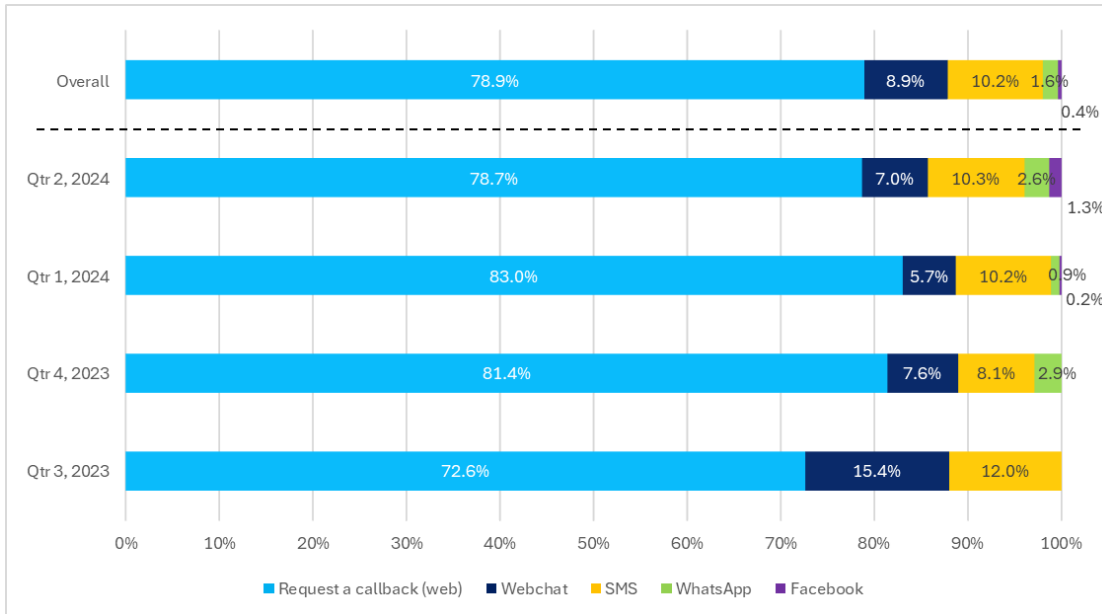


Figure 1. Percentage of self-referrals to the Victorian Quitline by digital access channel - Quarter 3, 2023 to Quarter 2, 2024 and overall

Further opportunities in relation to use of digital technologies for smoking and vaping cessation are being explored as part of the national cessation platform initiative, which is adopting a user-centred design approach.