

Evaluation of a Vaping Cessation Program in Priority Groups

Clare Pekin; Hillary Rono, Hannah Brumm, Joanne Isbel

Acknowledgements: Preventive Health Team

Background

- Vaping use is common with approximately 25% of Queenslanders reporting the use of an e-cigarette in their lifetime¹.
- The number of young people exclusively vaping is increasing¹.
- Comparing trends from 2018 to 2024 across age groups, showed current vaping increased by 5.9 times among adults 18 to 29 years¹. See Figure 1.
- Studies show young people who use vapes were 3.5 times more likely to start smoking tobacco compared with those who have never used vapes².
- Vaping risks include injuries, acute nicotine toxicity, damage to lungs, and poisoning³.
- There remains a gap in evidence-based supports for people who wish to quit vaping.
- To address this service gap Quitline Queensland established a model of care to support people from priority populations who vape to access intensive quit support.

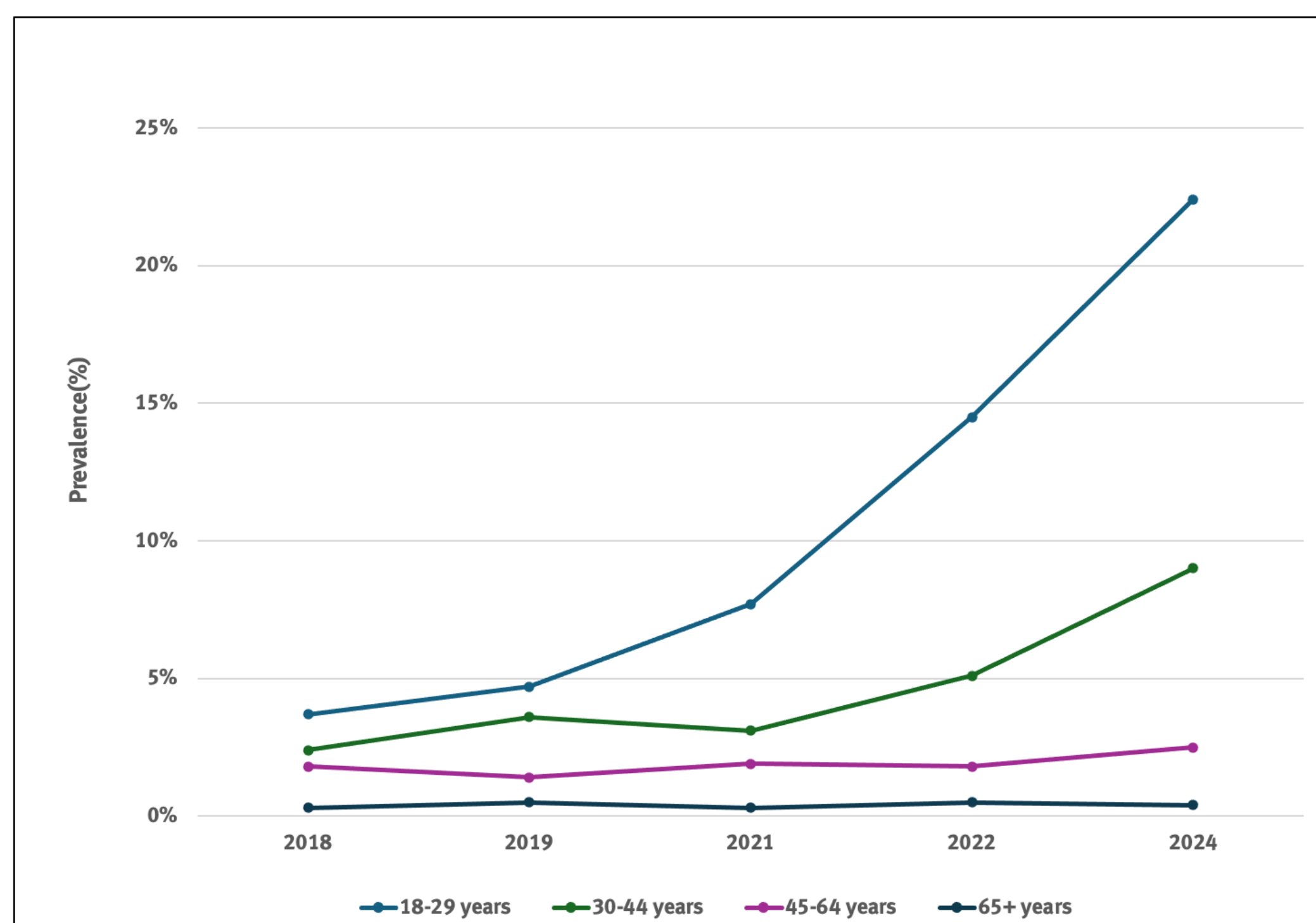


Figure 1: Current vape use, person 18+ years by age (2018-2024)

Table 1: Rates of use in clients under 30

Age group (yrs)	Vaping never smoked	Vaping history of smoking	Dual use	Total
10-14	6	3	6	15
15-17	28	27	30	85
18-24	58	125	170	353
15-29	35	129	107	271
Total	127	284	313	724

Aim

This evaluation aimed to assess the effectiveness of a vaping cessation program in young people.

Method

- Quitline Queensland has provided intensive quit support from 2017 to 2025 for select priority populations. The model of care includes 12 weeks of telephone counselling using Motivational Interviewing in combination with nicotine replacement therapy (NRT).
- The eligibility for the program expanded in March 2023 to include client's vaping from select priority populations. Quitline Queensland's model of care for assessing nicotine dependency in tobacco users was adapted for vaping.
- Participants: 724 people under the age of 30 were included in the evaluation.
- Measures: Clients are considered suitable for NRT treatment if they vape within 30 minutes of waking or have a history of withdrawal symptoms.
- Nicotine remission was assessed based on DSM 5 criteria including no use of a vape and are no longer experiencing nicotine withdrawal symptoms.
- An evaluation was conducted to review the effectiveness of vaping cessation support. Data was collected from 2/3/24 to 2/3/25. Intention to treat was used where clients who were lost to follow up were included. Evaluation data was collected at 3 months post client first session and then 6- and 12-months post completion of first evaluation.

Results

An evaluation of the vaping cessation program found 12% of Quitline program clients under the age of 30 (n=724) sought vaping cessation support. Of these, 17.5% (n=127) were exclusive vapers who had never smoked, with highest numbers in the 18-24 age group (n=58). Preliminary data from under 30 clients evaluated at 3 months (n=84) shows quit rates of 45% for never-smoked vapers (n=9 out of 20), 44% for previous smokers now vaping (n=12 out of 27), and 54% for dual users (n=20 out of 37). This is significant as unsupported quit rates are estimated at 3-5%⁴.

Table 2: Nicotine remission rates for clients under 30

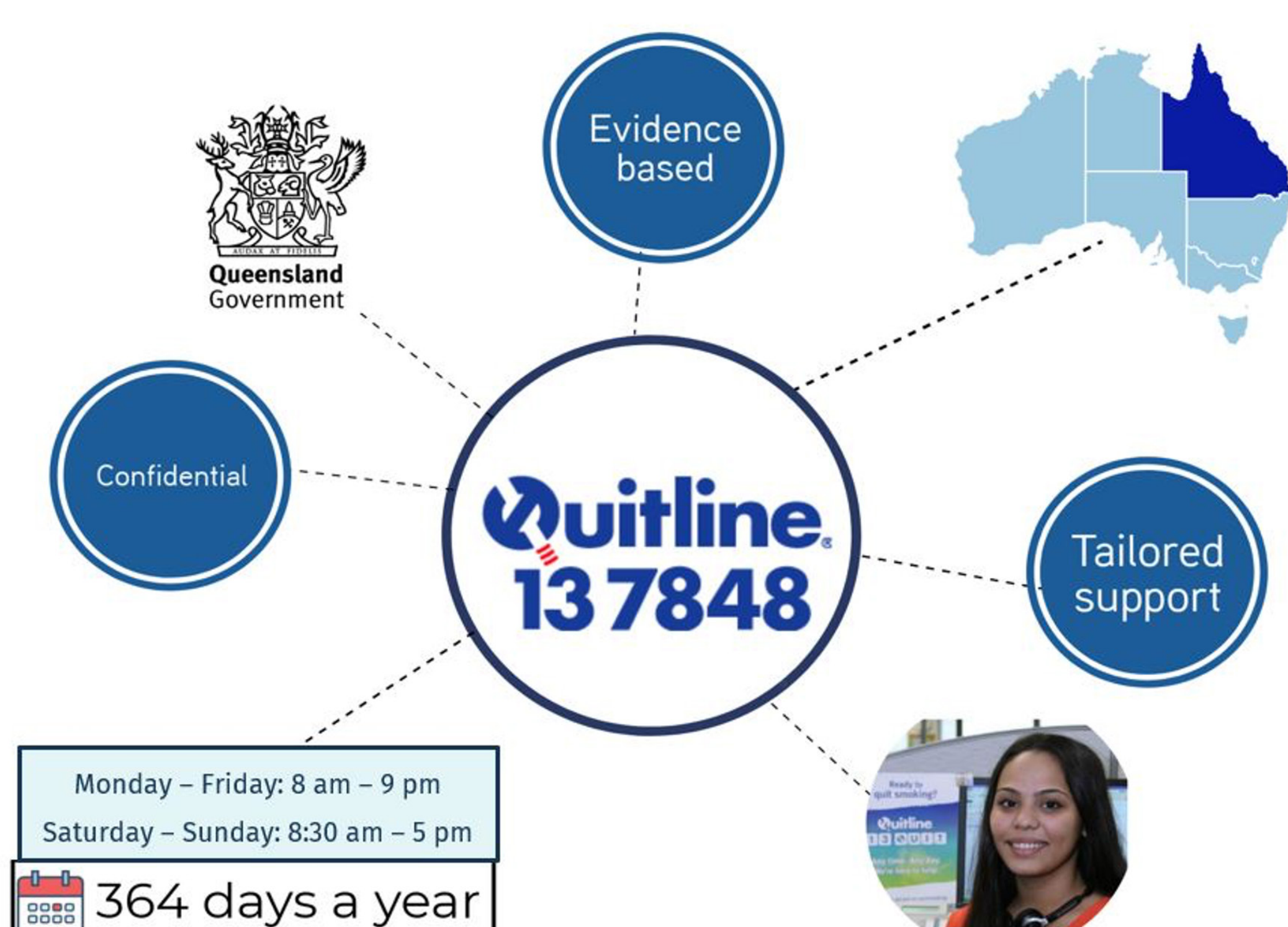
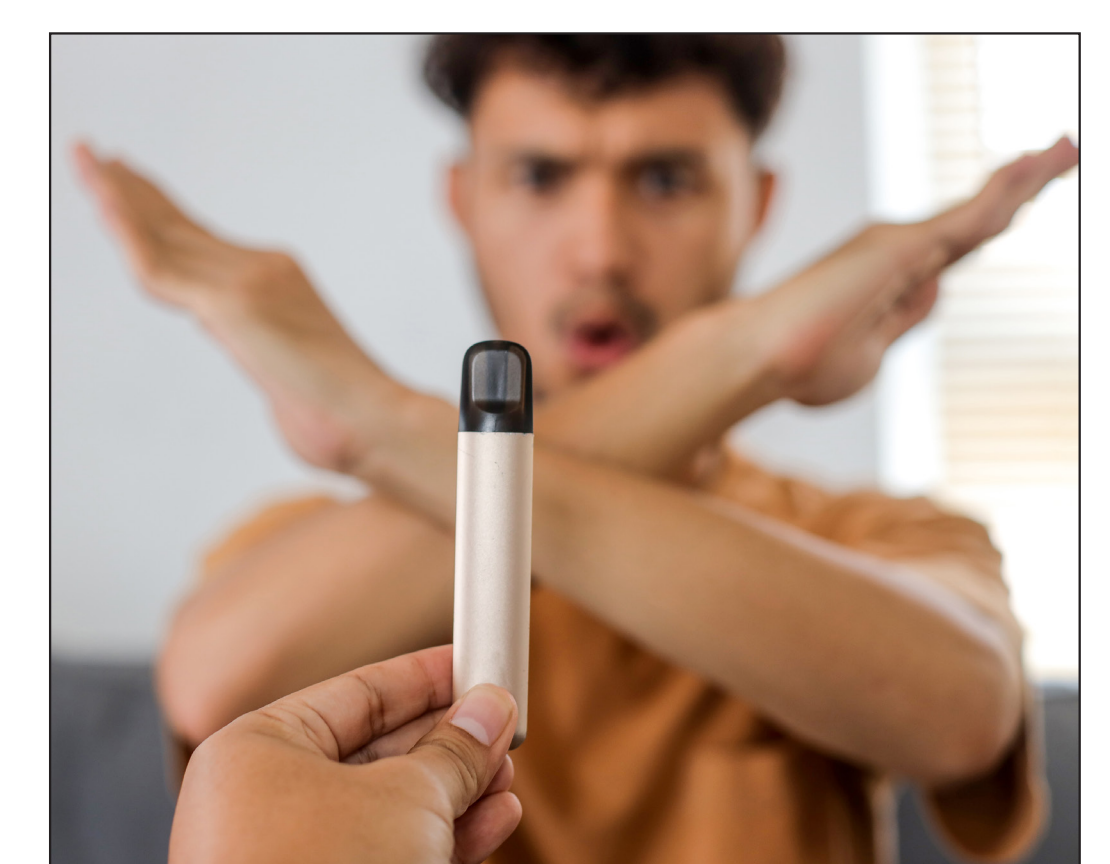
	Vaping never smoked	Vaping history of smoking	Dual use
Total	20	27	37
Quit (EV1)	9	12	20
Nicotine remission rate	45%	44%	54%

Conclusion

The preliminary results from the evaluation suggest a vaping cessation program can be effective at increasing vaping cessation rates in young people. Referring clients under 30 to a combination counselling and NRT support for vaping is recommended.

References

- Electronic cigarettes | Report of the Chief Health Officer Queensland
- Soneji S, Barrington-Trimis JL, Wills TA, et al. 2017. Association Between Initial Use of e-Cigarettes and Subsequent Cigarette Smoking Among Adolescents and Young Adults: A Systematic Review and Meta-analysis. *JAMA Pediatrics*, 171(8):788, doi:10.1001/jamapediatrics.2017.1488.
- Banks E, Yazidjoglou A, Brown S, et al. 2023. Electronic cigarettes and health outcomes: umbrella and systematic review of the global evidence. *Medical Journal of Australia*, 218(6):267-275, doi:10.5694/mja2.51890.
- Australia, H. (2019). Supporting smoking cessation.



Quitline
137848