

Trends in, and factors associated with, dual e-cigarette and tobacco use amongst two samples of people who regularly use drugs in Australia, 2014-2025

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Introduction: The intersection of tobacco and e-cigarette use presents a complex public health challenge. This paper aims to: (1) examine trends in dual e-cigarette and tobacco use among two samples of people who regularly use drugs between 2014 and 2025; and (2) examine factors associated with dual use, compared to those who report tobacco use only and e-cigarette use only

Methods: Cross-sectional sentinel samples of people who regularly use illicit stimulants and who inject drugs were recruited from capital cities across Australia between April-June in each year between 2014 and 2025. Joinpoint regression models were used to measure changes over time, with multinomial logistic regression analyses conducted to identify correlates associated with dual use.

Results: Among samples of people who regularly use illicit stimulants, dual use (31% vs 52%) and exclusive e-cigarette use (3% vs 14%) increased significantly between 2014 and 2025, while exclusive tobacco use declined (46% vs 20%), though trends have stabilised from 2022-23 onwards. Among those who reported dual use, median days of tobacco use declined significantly over time, while remaining stable among the exclusive tobacco group. Older age was associated with higher odds of both exclusive tobacco and exclusive e-cigarette use compared to dual use. Exclusive e-cigarette users were more likely to report good health and less likely to report hazardous alcohol consumption compared to dual users. Among samples of people who inject drugs, exclusive tobacco use also declined significantly between 2014 and 2025 (75% vs 65%), exclusive e-cigarette use increased from a very low baseline (0.3% vs 4%) and dual use showed no significant change (17% vs 22%).

Discussions and Conclusions: Among sentinel samples of people who regularly use drugs, patterns of e-cigarette and tobacco use have changed markedly over the past decade. Reduced tobacco frequency among people reporting dual e-cigarette and tobacco use may indicate harm-reduction potential, however, persistent dual use raises concerns about long-term health impacts and nicotine dependence.

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