Current vaping and current smoking in the Australian population aged 14+ years: 2018 – 2024

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Summary

This report used monthly data from Roy Morgan Research's "Single Source" omnibus survey of Australians aged 14+ years to investigate the prevalence of current vaping (used e-cigarettes in the past month), current smoking (smokes factory-made cigarettes or smoked roll-your-own cigarettes in the past month), and current vaping and/or smoking (as an approximate indicator of overall nicotine use[i]) from February 2018 to December 2024.

The marked increase in the prevalence of *current vaping* for the **overall Australian population aged 14+ years** that began in late 2020 peaked in 2023 (9.1%), significantly declining for the first time in 2024 (8.2%) (Figure 1). *Current smoking* for the overall population aged 14+ years has been relatively stable over time, though has trended downwards in recent years, with a significant decline in 2024 (10.5%) compared to 2022 (11.7%) (Figure 2). Also, the prevalence of *current vaping and/or smoking*, an indicator of overall nicotine use, peaked in 2023 (17.0%) and significantly declined for the first time since the start of the data series in 2024 (15.7%) among the overall population aged 14+ years (Figure 3). Similar patterns for current vaping, current smoking and current vaping and/or smoking prevalence over time were noted among the adult overall population aged 18+ years (Appendix B).

The youngest age group (**14 – 24 years**) was aggregated for the first time to combine 14 – 17 years and 18 – 24 years to provide more stable estimates. More than three-quarters (79%) of all those who *currently vape and/or smoke* (referred to from here on as 'nicotine users') aged 14 – 24 years currently vape. The prevalence of *current vaping* among this age group increased over time, reaching its highest prevalence in 2023. Between 2022 to 2024, the prevalence of *current smoking* remained stable, while *current vaping and/or smoking* trended downward among this age group (Figure 4).

About two-thirds of all nicotine users aged **25 – 34 years** currently vape (66%). The prevalence of *current vaping* declined for the first time in 2024 (14.2%), a significant drop from a peak in 2023 (17.3%). *Current smoking* for this age group was stable between 2018 and 2022 and then declined in 2023; this decline was maintained in 2024. The prevalence of *current vaping and/or smoking* was highest in 2022 and 2023 and declined significantly in 2024 among this age group (Figure 4).

About three-quarters of all nicotine users aged **35 – 49 years** currently smoke (71%). The significant decline in *current smoking* in 2024 (10.9%) compared to 2023 (12.5%) and 2022 (12.8%) among this age group is therefore noteworthy. The prevalence of *current vaping* among this age group peaked in 2023 and remained similar in 2024, representing a significant increase between 2022 and 2024. Overall, *current vaping and/or smoking* declined between 2023 and 2024 (Figure 4).

Among those aged **50+ years**, the vast majority (89%) of all nicotine users were current smokers. The prevalence of *current smoking* has been relatively stable across the data series. *Current vaping* has been consistently low and stable over time, though significantly declined in 2024 (1.7%) compared to the previous year (2.2%) (Figure 4).

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[i] *Current vaping and/or smoking* approximates overall nicotine use, given e-cigarette use question does not specify 'nicotine-containing e-cigarettes' and the measures do not encompass other nicotine products such as nicotine pouches.

In 2024, among the overall population of smokers and/or vapers aged 14+ years (more than 3.5 million people[ii]), *current smoking* is still more common (10.5%) than *current vaping* (8.2%) (Figures 1 and 2). Overall, about half of smokers and/or vapers *exclusively smoked,* one-third *exclusively vaped*, and about one-fifth both *smoked and vaped* (Figure 5).

In 2024, among smokers and/or vapers, *exclusive vaping* was more common than *exclusive smoking* for those under 35 years (14 – 24 years: 49% cf. 21% and 25 – 34 years: 42% cf. 34%), while *exclusive smoking* was more common than *exclusive vaping* for those 35 years or older (35 – 49 years: 54% cf. 29% and 50+ years: 83% cf. 11%). *Dual use* decreased with age*;* 14 – 24 years (30%), 25 – 34 years (24%), 35 – 49 years (17%) and 50+ years (6%) (Figure 6). Finally, we investigated the age distributions of current vapers and current smokers in Australia. In 2024, more than two-thirds of current vapers (70%) were aged under 35 years, compared to less than half of current smokers (41%) (Figure 7).

[ii] This figure is derived from the Australian Bureau of Statistics' Estimated Resident Population at June 2024 (1) multiplied by the proportion of people aged 14+ years who reported vaping and/or smoking using 2024 Roy Morgan data.

Introduction

Vaping prevalence has substantially increased over the past five years in Australia, particularly among young people (2). This rapid rise in vaping is a cause for concern given e-cigarettes contain chemicals and toxins with the potential to harm health (3, 4) and the compelling evidence that vaping in young people increases the likelihood of smoking uptake (5).

While some people who smoke may have used e-cigarettes to help them quit smoking, many continue to use both tobacco and e-cigarettes, which does not appreciably reduce the serious harms of smoking, as even low-rate smoking substantially increases health risks (6, 7). Further, use of e-cigarettes has the potential to introduce independent or additive health risks (8).

Following these rapid increases in youth vaping from 2020, education and campaign activities surged from late 2022 to late 2023 across Australian states. In May 2023, the Australian Government announced plans for a range of reforms, including restricting vape sales. New laws to regulate vaping products were introduced in 2024 and aimed to protect Australians, particularly youth, from the harms of vaping (9). A detailed description of all the legislative changes is provided elsewhere (9). Briefly, key changes include importation bans on single-use disposable vapes (from 1 January 2024) and all non-therapeutic vapes (from 1 March 2024), regardless of nicotine content (9). Further reforms, implemented through the *Therapeutic Goods and Other Legislation Amendment* (*Vaping Reforms*) *Act 2024*, introduced a ban on the domestic manufacture, supply, and commercial possession and advertisement of disposable single use and non-therapeutic vapes. From 1 July 2024, the reforms limited nicotine concentration and flavours (mint, menthol and tobacco) and restricted the supply of therapeutic vaping goods, meeting Therapeutic Goods Administration (TGA) regulatory requirements to pharmacies with a prescription. From 1 October 2024, therapeutic vapes (≤20 mg/mL) became available for adults to access over-the-counter as a pharmacist-only medicine, without the need for a prescription, subject to state and/or territory legislation (9). During 2024, these reforms were complemented by Commonwealth-funded national public health campaigns and expanded cessation support services to further motivate and encourage people to quit smoking and vaping.

Government-funded surveys provide important intelligence on the prevalence of health behaviours to guide and evaluate policy decisions, which can be usefully complemented by other surveys undertaken by state governments, public health organisations, or reputable commercial enterprises where data have been analysed transparently.

This report presents recent population survey data collected by a well-respected national survey fieldwork company, Roy Morgan Research, on annual trends in current vaping and current smoking for the Australian population overall aged 14+ years and for four key age groups. We further present data on exclusive vaping, exclusive smoking and dual use for the population overall and for four age groups.

Methods

Survey design and participants

Roy Morgan Research supplied data from its national "Single Source" omnibus survey of Australians aged 14+ years. Data were available from five of Australia's major capital cities (Sydney, Melbourne, Brisbane, Perth and Adelaide), in which 64% of the national population resided in 2023 (10).

Up to and including March 2020, the survey used a multi-stage household sampling frame to split cities into areas of approximately equal population size and then divided areas into segments. Each month, beginning from a randomly selected address, households within segments were systematically approached and data were collected on weekends. Interviewers were instructed to recruit one person per household, asking for the youngest male and, if unavailable, then for the youngest female.

Due to the start of the COVID-19 pandemic and associated lockdowns, from April 2020 the survey moved to using a telephone sampling frame and survey administration. The CATI sample design comprised three elements within a dual frame system (mobile phone, landline) derived from address-based stratified random probability sampling, random digit dial, and a smaller proportion of targeted sample to 'boost' for difficult-to-reach populations. Respondent selection was based on the youngest person in the household with one person interviewed per household (landlines) and the mobile phone owner (mobile) (11). Data from a total sample of N = 262,770 respondents aged 14+ years (2018: N = 30,685; 2019: N = 30,492; 2020: N = 39,470; 2021: N = 40,941; 2022: N = 40,970; 2023: N = 39,671 and 2024: N = 40,541) are included in this report.

Survey questions

Two questions determined current smoking behaviour, namely 'Do you now smoke factory-made cigarettes' and 'In the last month, have you smoked any roll-your-own cigarettes of tobacco?' Participants were defined as current smokers if they answered yes to at least one of these two questions.

The question on e-cigarette use asked all participants between February 2018 and December 2024: 'Next about vaping devices and e-cigarettes. Have you used a vaping device or e-cigarette in the last month? Response options were: (1) 'Yes' and (2) 'No'. Participants were defined as current vapers if they answered yes to this question. Detailed data on the type of vaping device used (e.g., rechargeable, disposable, etc.) was collected but is not within the scope of this report[iii].

[iii] The question used to measure type of vaping device used changed in August 2023. Prior to August 2023, respondents were asked: 'Which vaping devices and e-cigarettes have you used in the last month?'. Response options were: (1) a device with refillable cartridge that is refilled with e-liquid – called a Mod system, (2) a device with prefilled cartridge that is replaced when empty – called a Pod system, (3) a disposable device thrown away after use, (4) some other device and (5) have used a vaping device, but don't know which device. From August 2023, two questions were asked to measure type of vaping device used. The first asked 'In the last month, have you used a disposable vaping device which you throw away after use, a rechargeable vaping device or both types?'. Response options were: (1) disposable device (thrown away after use), (2) a rechargeable device (also known as a POD system or open tank/MOD system), (3) both and (4) don't know. Participants who selected 'yes' to having used a rechargeable device or both (a rechargeable and disposable device) were further asked: 'Which of the following types of rechargeable vaping devices have you used in the last month?'. Response options were: (1) an open tank device that is refilled with e-liquid, (2) a device that uses pods that are refilled with e-liquid, (3) a device with a prefilled pod that is replaced when empty, (4) some other device, (5) don't know which type. When combined, the proportion who selected 'yes' to the five options of device type (prior to August 2023) and the proportion of the mutually exclusive categories of the two measures (from August 2023) are <u>equivalent</u> to the proportion who selected 'yes' to 'Have you used a vaping device or e-cigarette in the last month' across the data series.

Appendix A provides the full breakdown of distribution of product use among the overall population and for each key age group defined as: (i) non-users: does not smoke or vape, (ii) exclusive smoker: current smoker but not current vaper, (iii) exclusive vaper: current vaper but not current smoker, and (iv) dual user: current smoker and current vaper. Current vaper and/or smoker was defined as current vaper and/or current smoker.

To monitor change over time among the adult population, current vaping, current smoking and current vaping and/or smoking prevalence among those aged 18+ years are included in Appendix B (Appendix B1 – B3). Appendix B4 provides the full breakdown of distribution of product use (non-user, exclusive smoker, exclusive vaper and dual user) among adults aged 18+ years.

Outcomes and analysis

The present study reports annual prevalence of current vaping, current smoking and current vaping and/or smoking using data from February 2018 to December 2024. Although Roy Morgan Single Source data has included the two questions on current smoking for decades, the single question on e-cigarette use was first included from February 2018. Therefore, respondents interviewed in January 2018 (N = 2,320) were excluded, and a total N = 260,450 was retained as the final sample.

In previous reports, monthly prevalence estimates were aggregated to the six-monthly and annual level for five separate age groups (14 – 17 years; 18 – 24 years; 25 – 34 years; 35 – 49 years; 50+ years). Limitations of this approach due to the large variability in monthly prevalence estimates, especially for the youngest age group, were noted. Additionally, in those reports, prevalence estimates over time were provided using descriptive statistics, with no significance testing undertaken. For the current report, we provide more stable estimates of annual prevalence, significance testing to examine recent change over time (2024 cf. 2023 and 2022) and confidence interval overlap to examine year-on-year change in prevalence (for earlier years in the data series). Adopting statistical significance testing enables us to determine that the observed effect in a sample is unlikely due to chance and represents a true effect in the population. Due to the notably smaller sample size and hence large variability in prevalence estimates for those aged 14 – 17 years, and with advice from the data provider, in this report we combined those aged 14 – 17 years and 18 – 24 years to a single group of 14 – 24 years, representing young Australians (adolescents and young adults) to allow for greater stability of estimates of smoking and vaping prevalence over time.

It is important to note that findings from this cross-sectional survey are limited to reporting nationally representative prevalence of vaping and smoking among Australians aged 14+ years and by age group. Assessment of the effect of the regulatory environment on vaping and smoking prevalence requires adjustment for other contextual factors such as seasonality and campaign activity.

Data were weighted by age, sex, and city to provide representative estimates of smoking and vaping for all these cities combined to correct for imbalances between the sample and population on these characteristics. Population weights were constructed using population estimates from the Australian Bureau of Statistics' Labour Force Survey. Rim-weighting was additionally applied to more accurately reflect the population of smaller geographic areas in the 5 capital cities.

Unadjusted weighted proportions and 95% confidence intervals around the estimates were reported for each outcome, overall and by age group. Year-on-year changes over time were examined using confidence intervals and considered statistically significant

where the confidence intervals did not overlap. Comparisons between 2024, the most recent data point, and other years across outcomes were examined using logistic regression. For recent trends (i.e., 2024 cf. 2023 and 2022), p-values were reported, as this period aligns with substantial shifts in tobacco and vaping control activities.

Results

Vaping among the overall population

Figure 1 shows the prevalence of *current vaping* began increasing markedly in 2020 and continued to do so year-on-year peaking in 2023, before significantly declining for the first time in 2024 among the overall population aged 14+ years (2024 cf. 2023: *p*<.001). A similar pattern of prevalence over time for *current vaping* was observed among adults aged 18+ years (Appendix B1).

**Figure 1: Current vaping among the overall population aged 14+ years, 2018 to 2024 (weighted %)**
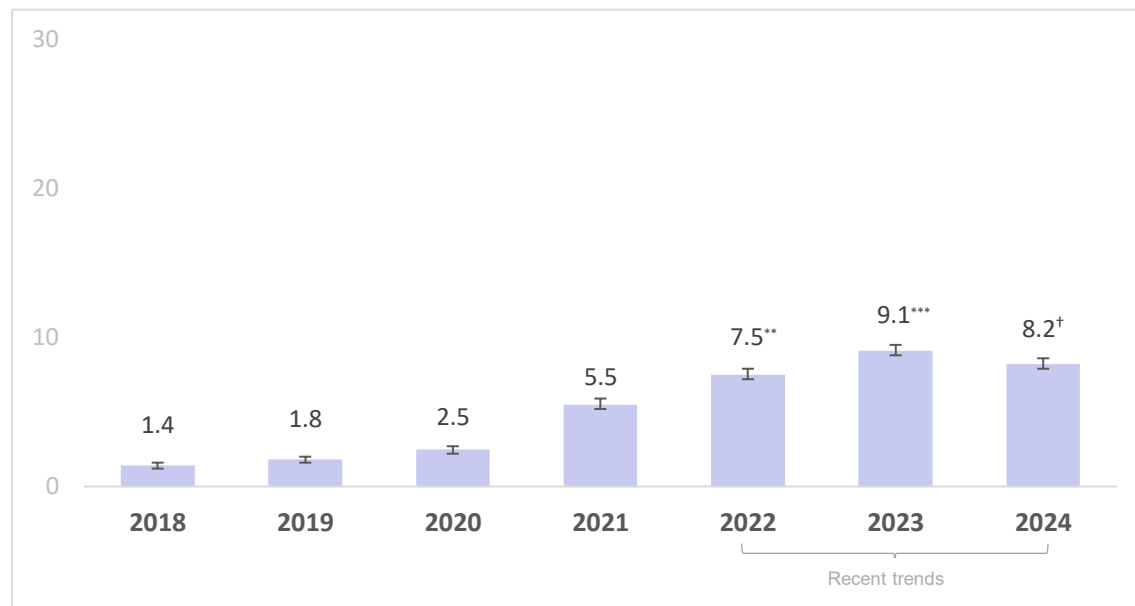
Notes. Current vaping: used e-cigarettes in the past month (N = 260,450). Error bars represent 95% confidence intervals around survey estimates. 2018 includes February to December only. ***p<0.001, **p<0.01, †Reference year.

Smoking among the overall population

Figure 2 shows the prevalence of *current smoking* remained relatively stable across the data series among the overall population aged 14+ years, though has trended downwards in recent years, with a significant decline in 2024 compared to 2022 (p<0.001). Annual smoking prevalence was lowest in 2024. A similar pattern of prevalence over time for *current smoking* was observed among adults aged 18+ years (Appendix B2).

Figure 2: Current smoking among the overall population aged 14+ years, 2018 to 2024 (weighted %)
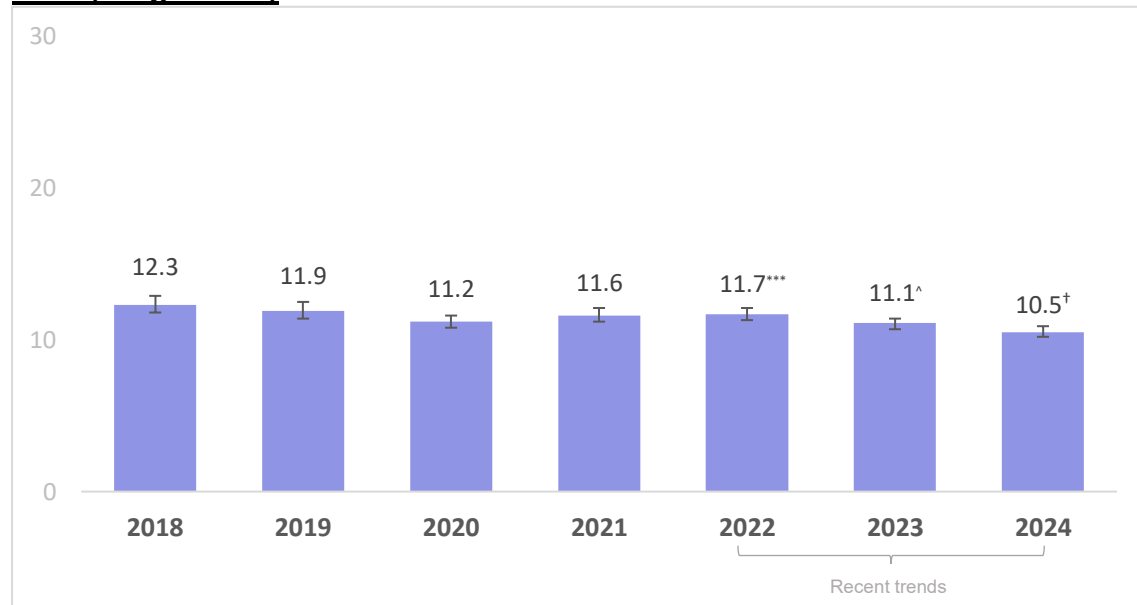
Notes. Current smoking: smokes factory-made cigarettes or smoked roll-your-own cigarettes in the past month (N = 260,450). Error bars represent 95% confidence intervals. 2018 includes February to December only. ***p<0.001, ^p<0.10, †Reference year.

Vaping and/or smoking among the overall population

As shown in Figure 3, the prevalence of *current vaping and/or smoking*, an indicator of overall nicotine use in the population, remained consistent between 2018 and 2020 among the overall population aged 14+ years, with an increase in 2021 and a further slight increase in 2022, plateauing in 2023, before significantly declining for the first time in 2024 (2024 cf. 2023, *p*<0.001 and 2024 cf. 2022: *p*<0.05). A similar pattern of prevalence over time for *current vaping and/or smoking* was observed among adults aged 18+ years (Appendix B3).

Figure 3: Current vaping and/or smoking among the overall population aged 14+ years, 2018 to 2024 (weighted %)
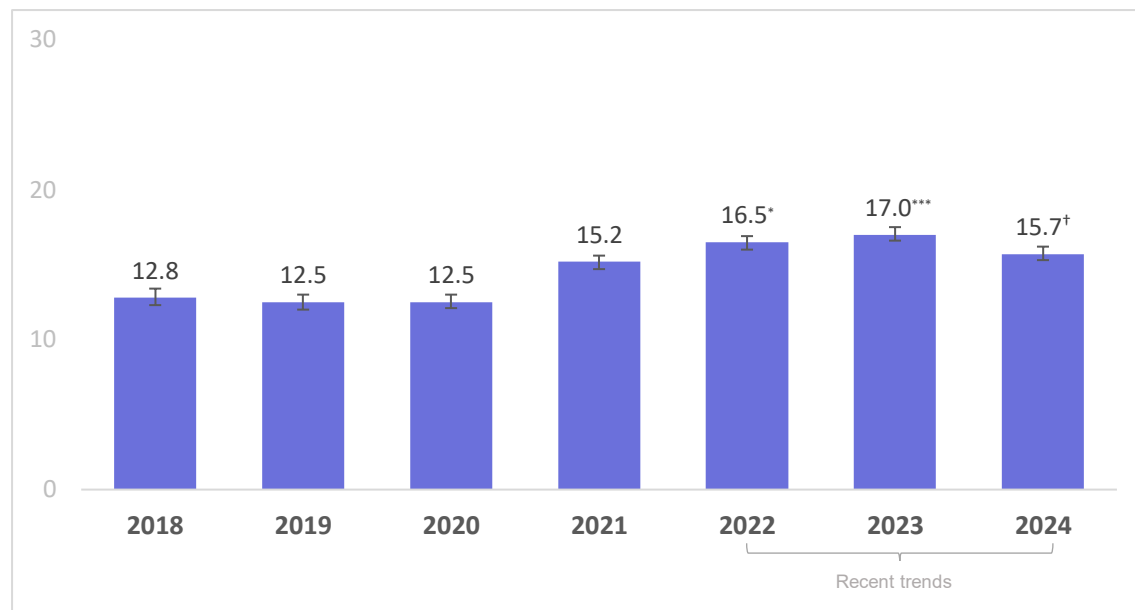
Notes. Current vaping and/or smoking: current vaper and/or current smoker (N = 260,450). Error bars represent 95% confidence intervals. 2018 includes February to December only. *p<0.05, ***p<0.001, †Reference year.

Vaping and smoking by age group

Among those aged 14 – 24 years

As shown in Figure 4a, the prevalence of *current vaping* increased for the first time in 2020, followed by a three-fold increase in 2021, and another increase in 2022, and plateaued across 2023 and 2024. The prevalence of *current smoking* was stable between 2018 and 2021, increasing for the first time in 2022, with no significant differences thereafter. The prevalence of *current vaping and/or smoking* was stable between 2018 and 2020, before increasing considerably in 2021 and again in 2022, with a downward trend noted between 2024 and 2022 ($p<0.10$).

Among those aged 25 – 34 years

Figure 4b shows the prevalence of current vaping, current smoking and current vaping and/or smoking among those aged 25 – 34 years. The prevalence of *current vaping* increased sharply in 2021 and again in 2022, peaking in 2023, and then significantly declining for the first time among this age group in 2024 (2024 cf. 2023: $p<.001$). There were no notable changes in the prevalence of *current smoking* between 2018 and 2022, with a decline first observed in 2023, which was maintained in 2024 (2024 cf. 2022: $p<0.01$). The prevalence of *current vaping and/or smoking* was stable between 2018 and 2020 and increased in 2021 and again in 2022, before plateauing in 2023 and significantly declining for the first time in 2024 (2024 cf. 2023: $p<0.01$ and 2024 cf. 2022: $p<0.01$).
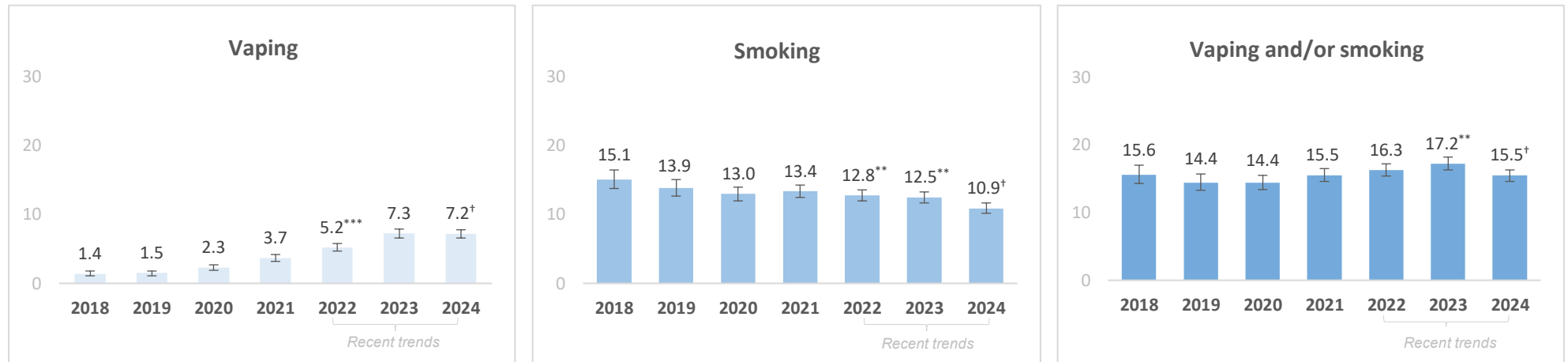
Among those aged 35 – 49 years

Figure 4c shows the prevalence of current vaping, current smoking and current vaping and/or smoking among those aged 35 – 49 years. The prevalence of *current vaping* was stable at the very start of the data series, increasing for the first time in 2020 and then rising steadily year-on-year until 2023, and then plateauing in 2024. This represented a significant increase in the prevalence of *current vaping* from 2022 to 2024 (2024 cf. 2022: $p<0.001$), driven by increases between 2022 and 2023. The prevalence of *current smoking* was stable between 2018 and 2023, declining for the first time in 2024 (2024 cf. 2023: $p<0.01$ and 2024 cf. 2022: $p<0.01$). The prevalence of *current vaping and/or smoking* peaked in 2023, with the first decline observed in 2024 (2024 cf. 2023: $p<0.01$).

Among those aged 50+ years

The prevalence of *current vaping* has remained consistently low and relatively stable across the data series, though two slight increases in 2021 and 2023 and a significant decline in 2024 were observed among this age group (Figure 4d). The prevalence of *current smoking* has been relatively stable over time, with a downward trend between 2023 and 2024 ($p<0.10$). The prevalence of *current vaping and/or smoking* remained relatively unchanged between 2018 and 2023, with a significant decline in 2024 (2024 cf. 2023: $p<0.05$).

Figure 4: Current vaping, current smoking and current vaping and/or smoking (weighted %)

a) Among those aged 14 – 24 years (N = 33,690)
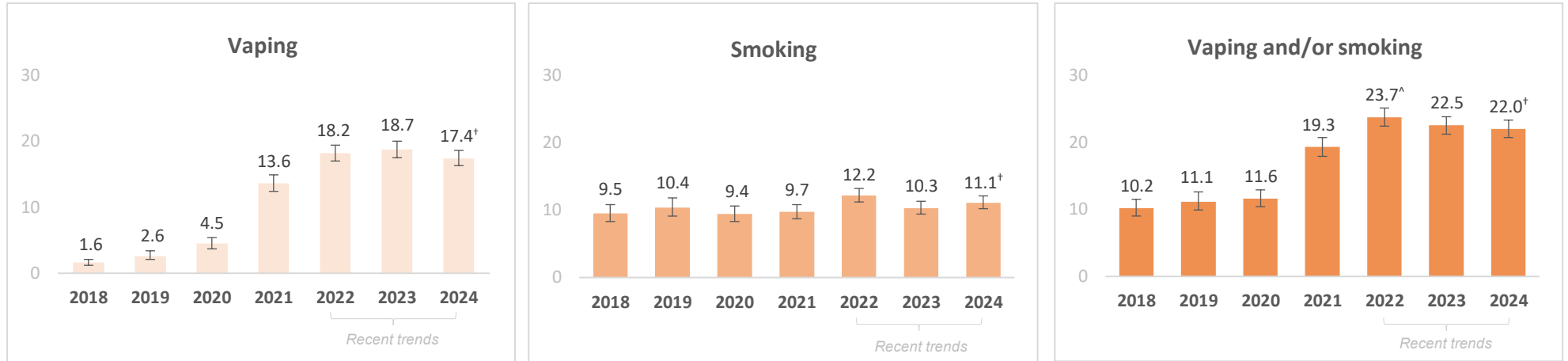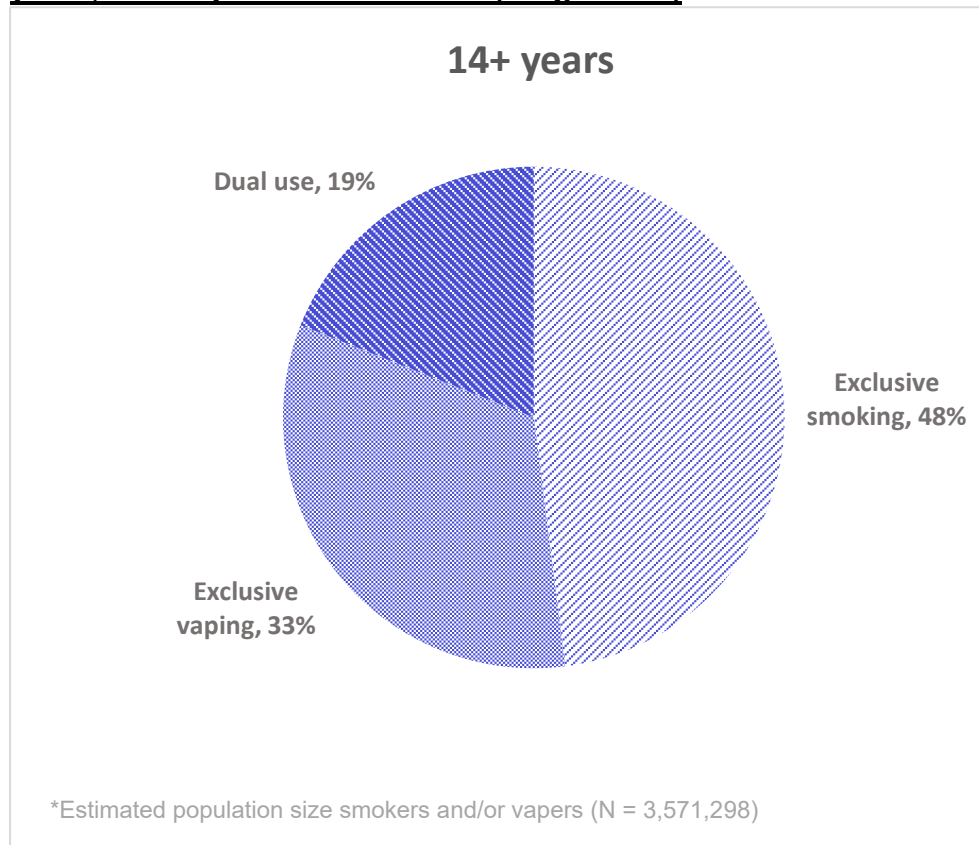

b) Among those aged 25 – 34 years (N = 40,006)
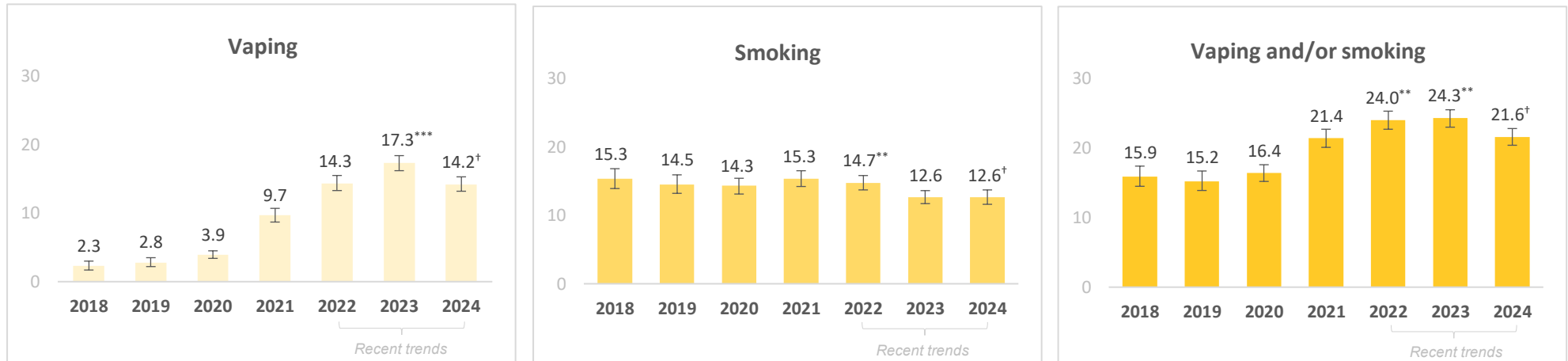
c) Among those aged 35 – 49 years (N = 57,218)

d) Among those aged 50+ years (N = 129,536)
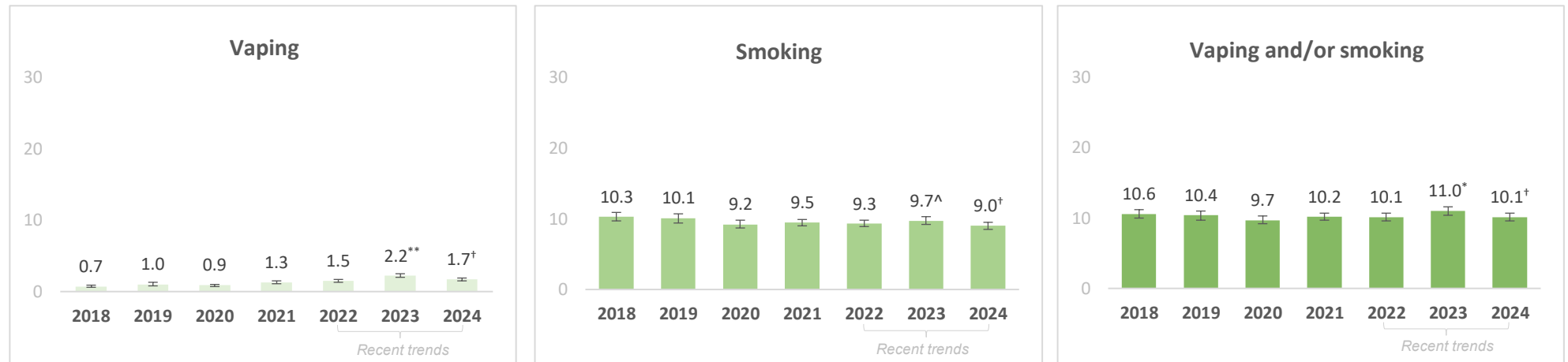
Notes. Current vaping: used e-cigarettes in the past month. Current smoking: smokes factory-made cigarettes or smoked roll-your-own cigarettes in the past month. Current vaping and/or smoking: current vaper and/or current smoker. 2018 includes February to December only. ***p<0.001, **p<0.01, *p<0.05, ^p<0.10, †Reference year.

Distribution of product use among the overall population (2024)

Figure 5 shows among the overall population of smokers and/or vapers aged 14+ years, almost half *exclusively smoked* compared to one-third who *exclusively vaped* and about one-fifth who both *smoked and vaped*.

Figure 5: Distribution of product use among smokers and/or vapers aged 14+ years, January – December 2024 (weighted %)
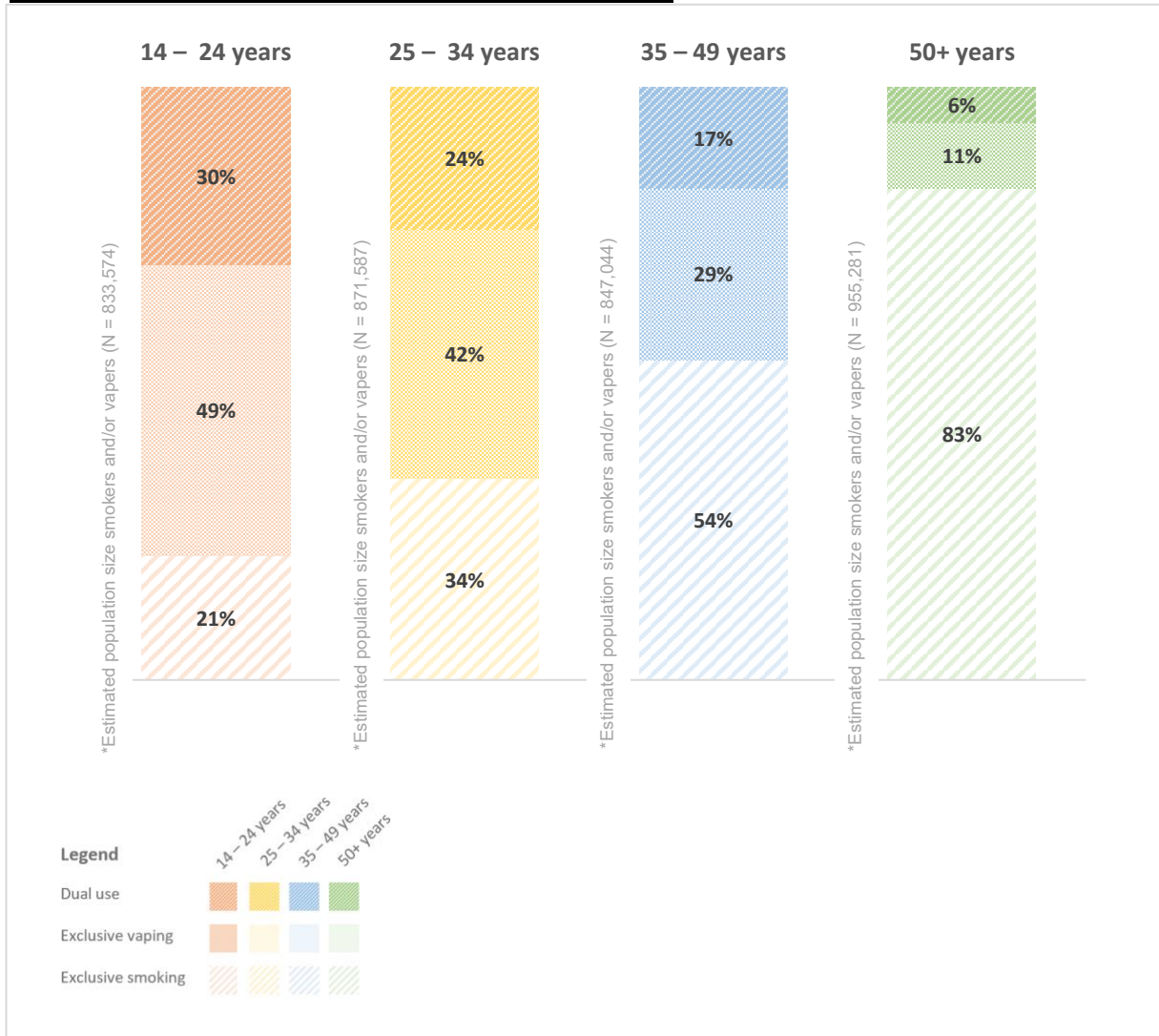

14+ years

Dual use, 19%

Exclusive smoking, 48%

Exclusive vaping, 33%

*Estimated population size smokers and/or vapers (N = 3,571,298)

Notes. Estimated population size Australia wide. Exclusive smoking: current smoker but not current vaper. Exclusive vaping: current vaper but not current smoker. Dual use: current smoker and current vaper. Percentages may not add to 100 due to rounding.

Distribution of product use by age group (2024)

Figure 6 shows that among smokers and/or vapers, *exclusive vaping* was more common than *exclusive smoking* among those under 35 years. In contrast, *exclusive smoking* was more common than *exclusive vaping* among those 35 years or older. *Dual use* decreased with age; 14 – 24 years (30%), 25 – 34 years (24%), 35 – 49 years (17%) and 50+ years (6%). Exclusive smoking, exclusive vaping and dual use were similar in 2024 compared to 2023.

Figure 6: Distribution of product use among smokers and/or vapers for four age groups, January – December 2024 (weighted %)

Notes. Estimated population size smokers and/or vapers Australia wide. Exclusive smoking: current smoker but not current vaper. Exclusive vaping: current vaper but not current smoker. Dual use: current smoker and current vaper. Percentages may not add to 100 due to rounding.

Finally, we investigated the age distribution of current vapers and current smokers among the overall population aged 14+ years (including dual users). Figure 7 shows that more than one-third of current vapers (37%) compared to about one-fifth of current smokers (18%) were aged under 25 years.

Figure 7: Distribution by age group for current vapers and current smokers in Australia, January – December 2024 (weighted %)
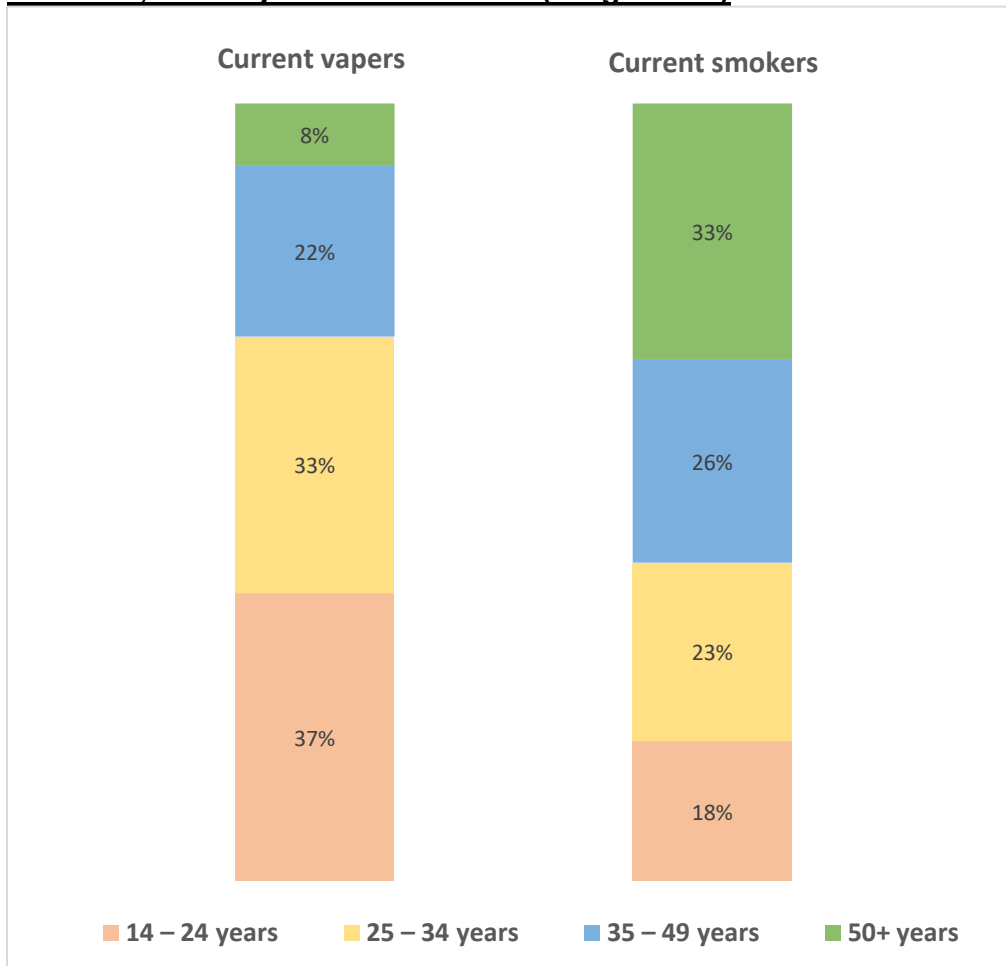
Notes. Current vapers: used e-cigarettes in the past month. Current smokers: smokes factory-made cigarettes or smoked roll-your-own cigarettes in the past month.

Discussion

Following marked increases from 2020 (2.5%), *current vaping* reached a peak in 2023 (9.1%) and significantly declined for the first time in 2024 (8.2%) among the overall population aged 14+ years. For each of the key age groups, *current vaping* peaked in 2023 and has either declined or remained stable in 2024.

In contrast, the prevalence of *current smoking* has been relatively stable across the data series among the overall population aged 14+ years, with evidence of a downward trend in recent years. The prevalence of *current smoking* among those aged 14 – 24 years was stable in the recent period (2022 to 2024), whereas it declined or trended downward for all older age groups (25+ years).

Consistent with the sharp increases in *current vaping* observed in 2020, *current vaping and/or smoking*, an indicator of overall nicotine use, peaked in 2023 for each of the age groups 25 years or older (25 – 34 years, 35 – 49 years and 50+ years), with a significant decline in 2024. Among those aged 14 – 24 years, *current vaping and/or smoking* peaked in 2022 and trended downward to 2024.

In 2024, among smokers and/or vapers, *exclusive smoking* was more common than *exclusive vaping* for the overall population aged 14+ years (48% cf. 33%) and those aged 35 – 49 years (54% cf. 29%) and 50+ years (83% cf. 11%). In contrast, *exclusive vaping* was more common than *exclusive smoking* among those aged 14 – 24 years (49% cf. 21%) and 25 – 34 years (42% cf. 34%). *Dual use* decreased with age; 14 – 24 years (30%), 25 – 34 years (24%), 35 – 49 years (17%) and 50+ years (6%).

In 2024, the majority of current vapers were under 35 years of age, with a similar proportion of current vapers aged 14 – 24 years (37%) and 25 – 34 years (33%). In contrast, the majority of current smokers were 35 years or older, with about one-fifth aged 14 – 24 years and one-quarter aged 25 – 34 years.

Limitations of the data included in this report is the inclusion of data from residents of the five major capital cities only, which cover about two-thirds of the population aged 14+ years (10). Given that smoking prevalence tends to be higher in rural compared to urban locations, prevalence estimates for smoking presented in this report may be slightly lower than those using data with greater geographic coverage. Variations in age group categorisation, questionnaire wording and data collection time frames, may lead to differences in prevalence estimates between this report and other population estimates of smoking and vaping (12). Though current vaping and/or smoking is a useful measure of overall nicotine use in the population, it is not all-encompassing, as it excludes use of emerging nicotine products such as oral nicotine pouches. Moreover, the question assessing e-cigarette use did not specify 'nicotine-containing e-cigarettes', and the prevalence estimates should therefore be considered approximations of nicotine use. Strengths of the Roy Morgan data are its use of consistent questions to measure smoking and vaping over an extended period (February 2018 – December 2024), the large representative sample overall and for most age groups, and the consistent surveying of the population across each month of the year.

Acknowledgements

We thank Roy Morgan Research for provision of the dataset used in this report.

References

1. Australian Bureau of Statistics. Table 8 Estimated resident population, by age and sex–at 30 June 2024. 2024 [Available from: https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/latest-release#data-downloads.

2. National Drug Strategy Household Survey: 3. Electornic cigarettes and vapes 2022-2023 [Available from: https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey/data.

3. Greenhalgh EM, Winnall W, Scollo MM. 18.1 The e-cigarette market. In: Greenhalgh EM, Scollo MM, Winstanley MH, editors. Tobacco in Australia: Facts & issues. Melbourne: Cancer Council Victoria; 2023.

4. Greenhalgh EM, Jenkins S, Bain E, Scollo MM. 18.3 Prevalence of e-cigarette use. In: Greenhalgh EM, Scollo MM, Winstanley MH, editors. Tobacco in Australia: Facts & issues. Melbourne: Cancer Council Victoria; 2024.

5. Baenziger ON, Ford L, Yazidjoglou A, Joshy G, Banks E. E-cigarette use and combustible tobacco cigarette smoking uptake among non-smokers, including relapse in former smokers: umbrella review, systematic review and meta-analysis. BMJ Open. 2021;11(3):e045603.

6. Hackshaw A, Morris JK, Boniface S, Tang JL, Milenković D. Low cigarette consumption and risk of coronary heart disease and stroke: meta-analysis of 141 cohort studies in 55 study reports. BMJ. 2018;360:j5855.

7. Freeman B, Owen K, Rickards S, Brooks A, Clare PJ, Dessaix A. E-cigarette use by people who smoke or have recently quit, New South Wales, 2016-2020. Med J Aust. 2022.

8. Byrne S, Brindal E, Williams G, Anastasiou K, Tonkin A, Battams S, et al. E-cigarettes, smoking and health. A Literature Review Update. Australia: Commonwealth Scientific and Industrial Research Organisation; 2018.

9. Grace C, Greenhalgh EM, Smith L, Scollo MM. 18.13 Legal status in Australia. In: Greenhalgh EM, Scollo MM, Winstanley MH, editors. Tobacco in Australia: Facts & issues. Melbourne: Cancer Council Victoria; 2024.

10. Australia Bureau of Statistics. Capital cities: population change 2023 [cited 2024 14 November]. Available from: https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#capital-cities.

11. Roy Morgan Research. Smoking Prevalence Database Jan - Dec 2024: Technical Details. 2025.

12. Greenhalgh EM, Scully M, Scollo M, Durkin SJ. Quantifying differences in teenage vaping across countries: the importance of comparing like with like. Tob Control. 2025.

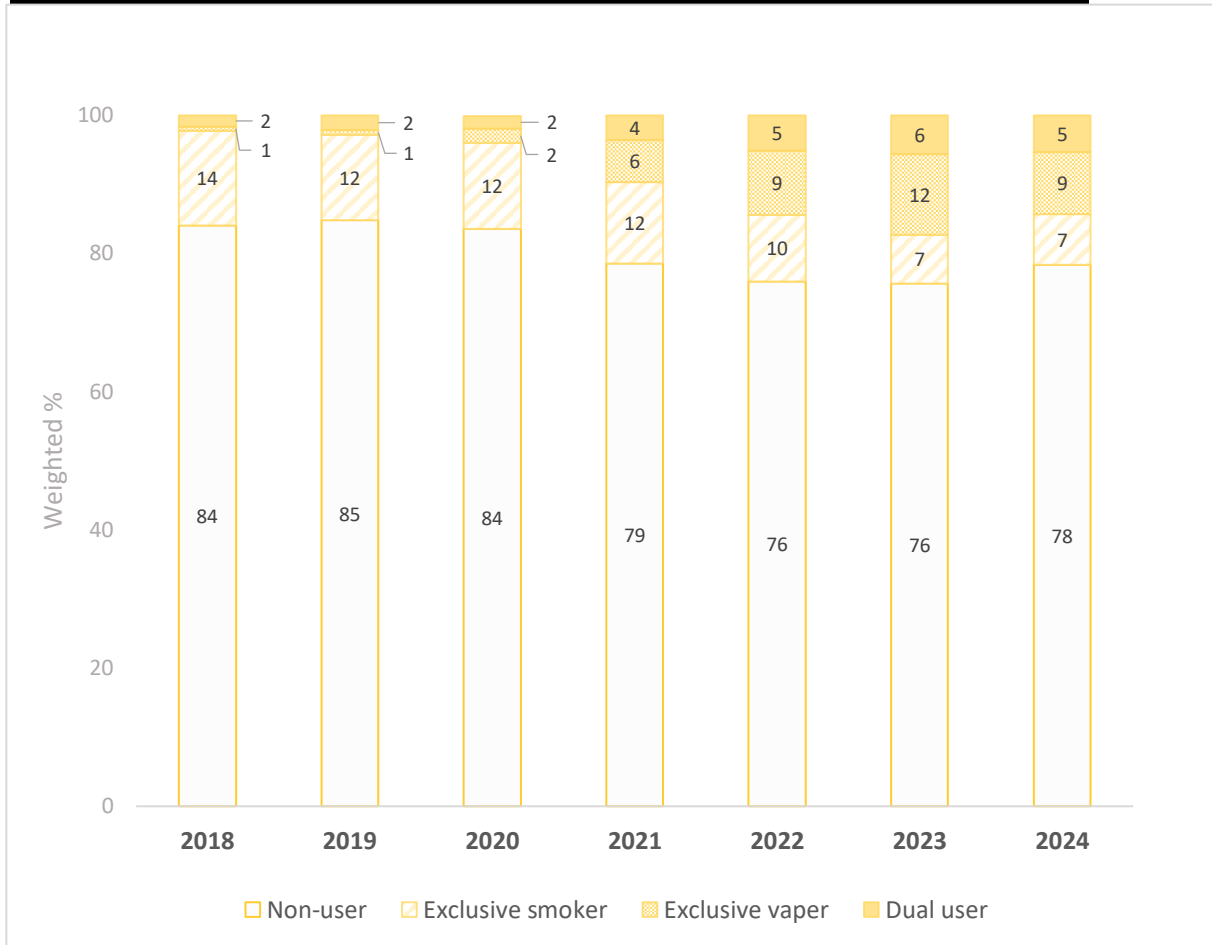# Appendix A: Distribution of product use

Figure A1: Distribution of product use among the overall population 14+ years
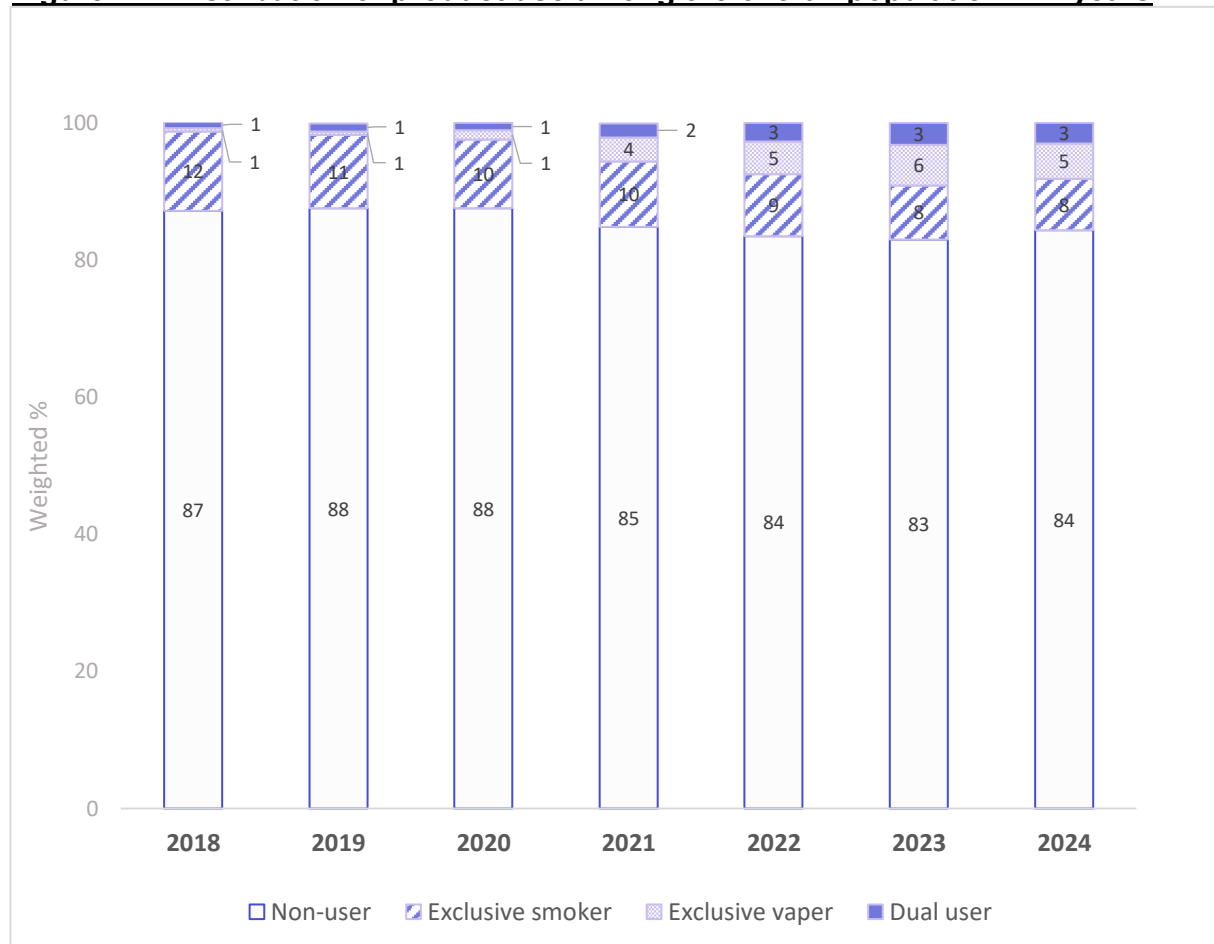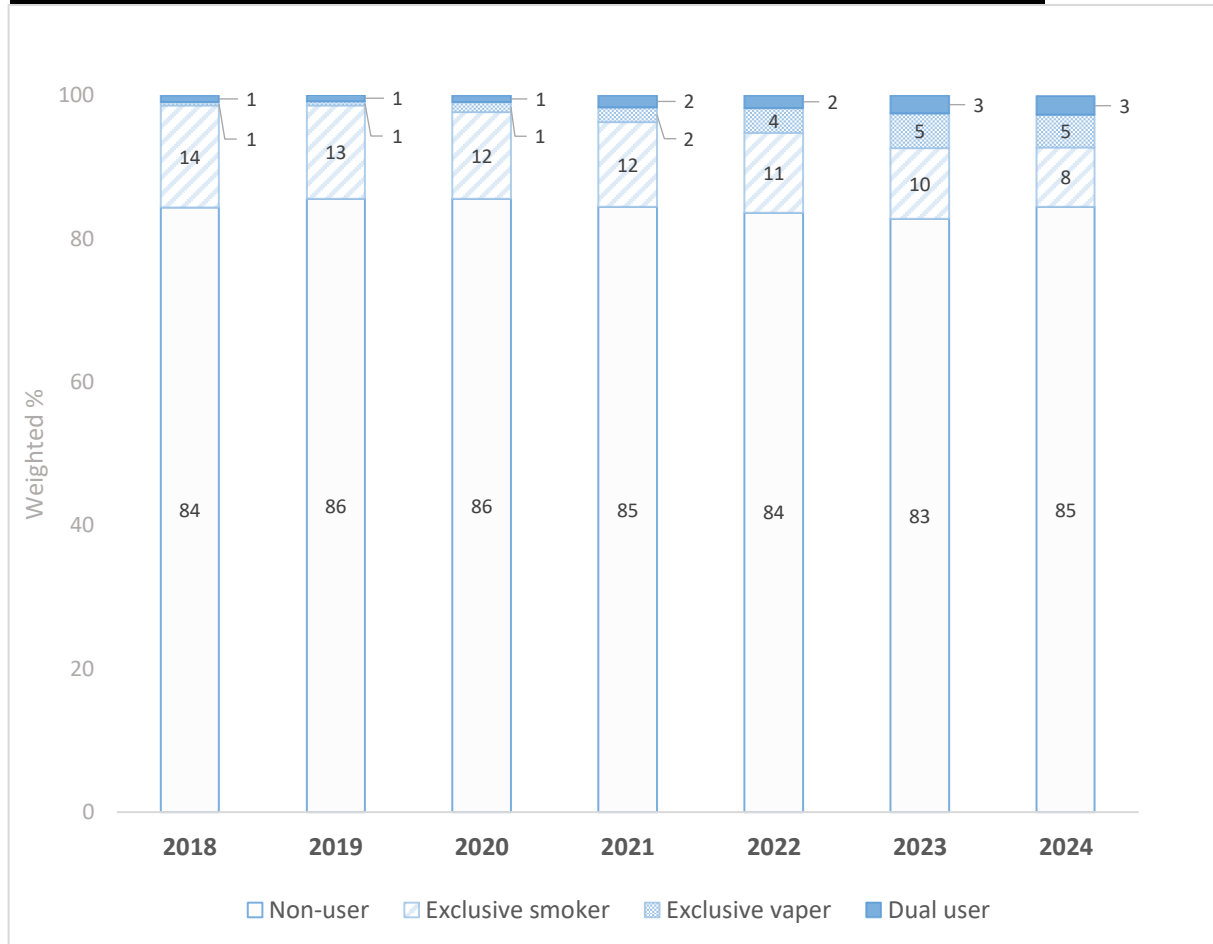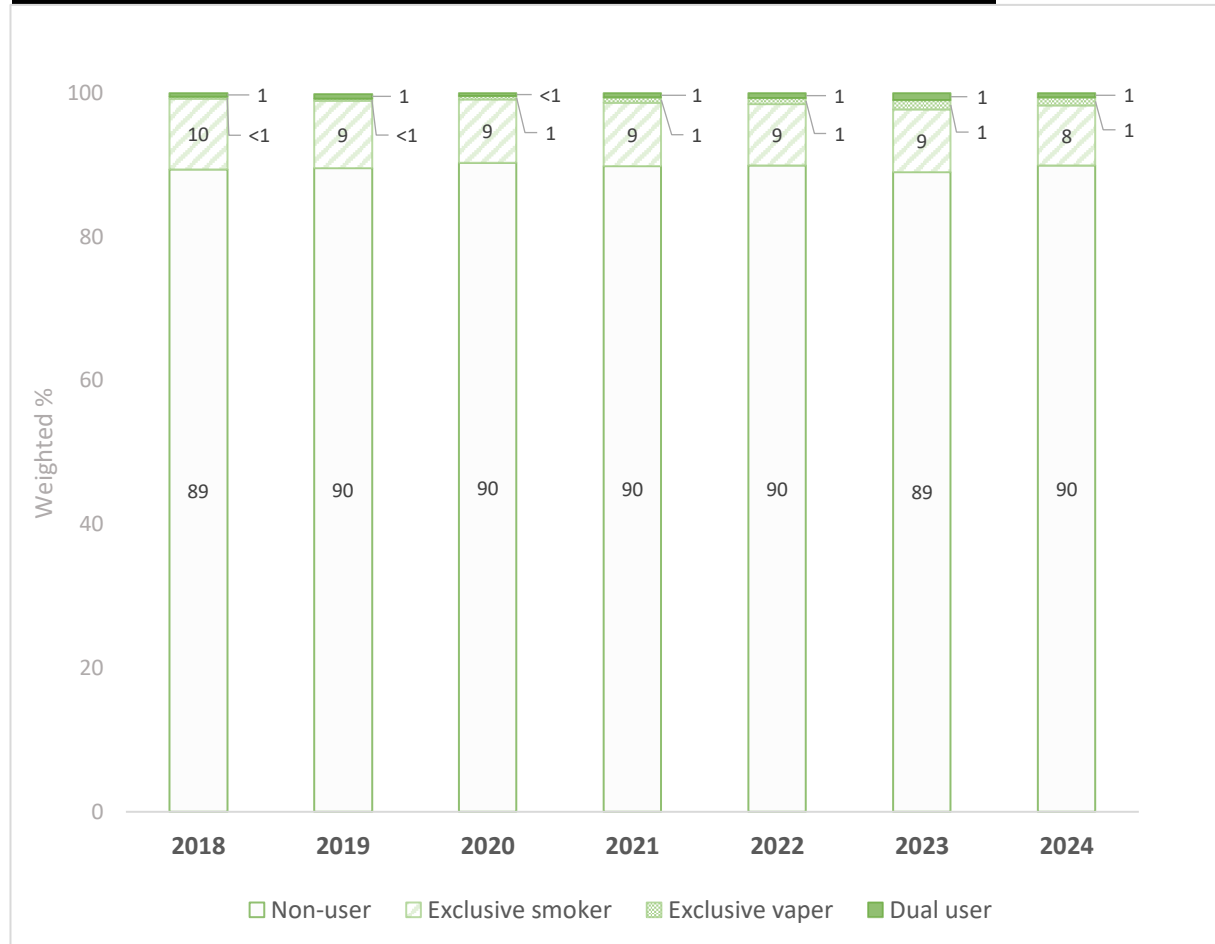

Notes. Non-user: does not smoke or vape. Exclusive smoker: current smoker but not current vaper. Exclusive vaper: current vaper but not current smoker. Dual user: current smoker and current vaper. 2018 includes February to December only.

Figure A2: Distribution of product use among those aged 14 – 24 years
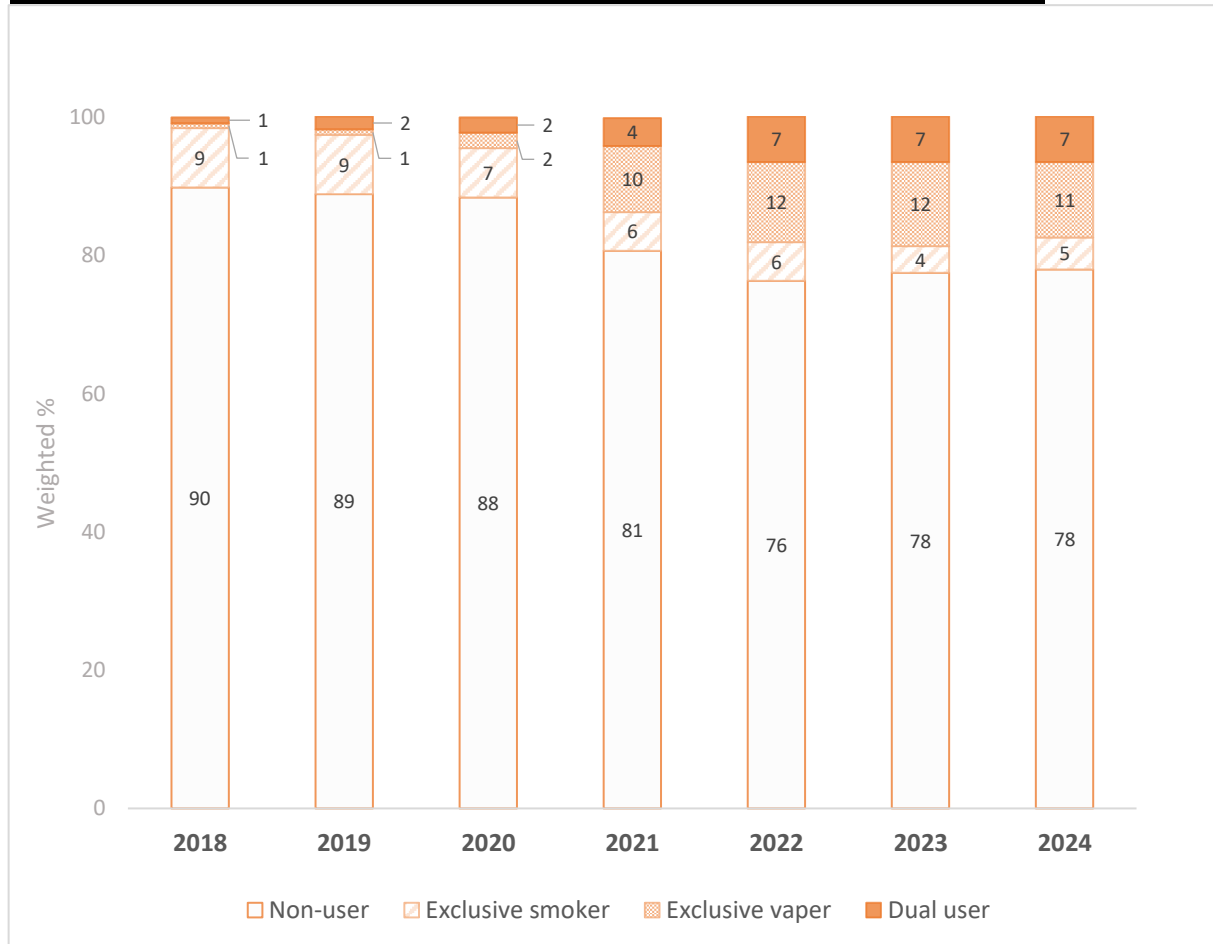
Notes. Non-user: does not smoke or vape. Exclusive smoker: current smoker but not current vaper. Exclusive vaper: current vaper but not current smoker. Dual user: current smoker and current vaper. 2018 includes February to December only.

Figure A3: Distribution of product use among those aged 25 – 34 years

Notes. Non-user: does not smoke or vape. Exclusive smoker: current smoker but not current vaper. Exclusive vaper: current vaper but not current smoker. Dual user: current smoker and current vaper. 2018 includes February to December only.

Figure A4: Distribution of product use among those aged 35 – 49 years

Notes. Non-user: does not smoke or vape. Exclusive smoker: current smoker but not current vaper. Exclusive vaper: current vaper but not current smoker. Dual user: current smoker and current vaper. 2018 includes February to December only.

Figure A5: Distribution of product use among those aged 50+ years

Notes. Non-user: does not smoke or vape. Exclusive smoker: current smoker but not current vaper. Exclusive vaper: current vaper but not current smoker. Dual user: current smoker and current vaper. 2018 includes February to December only.
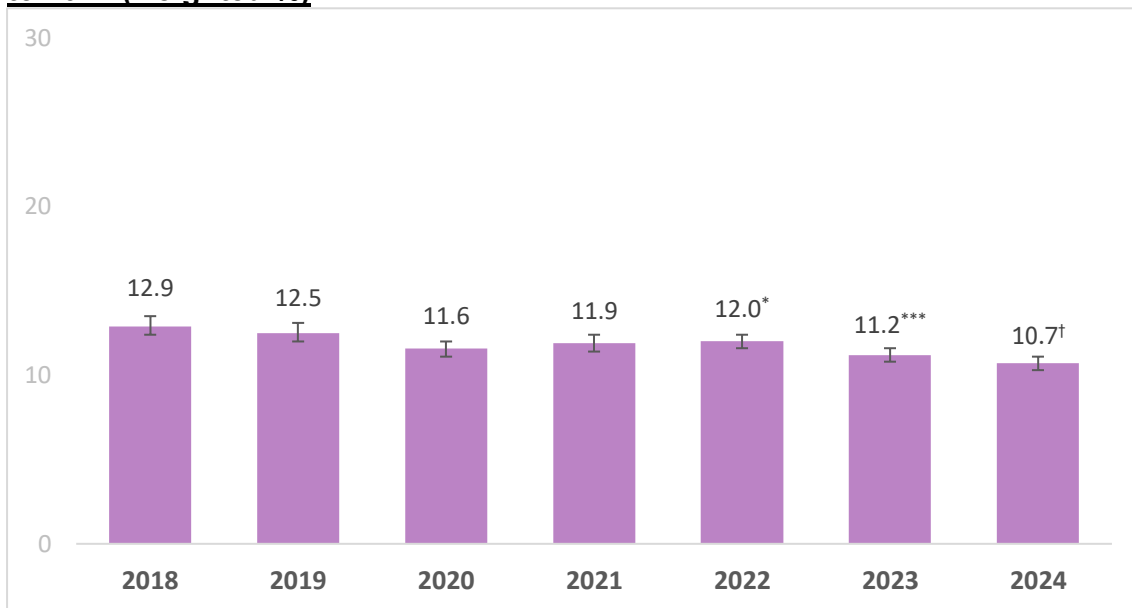
Appendix B: Vaping and smoking among the overall population aged 18+ years

Appendix B1: Current vaping among the overall population aged 18+ years, 2018 to 2024 (weighted %)
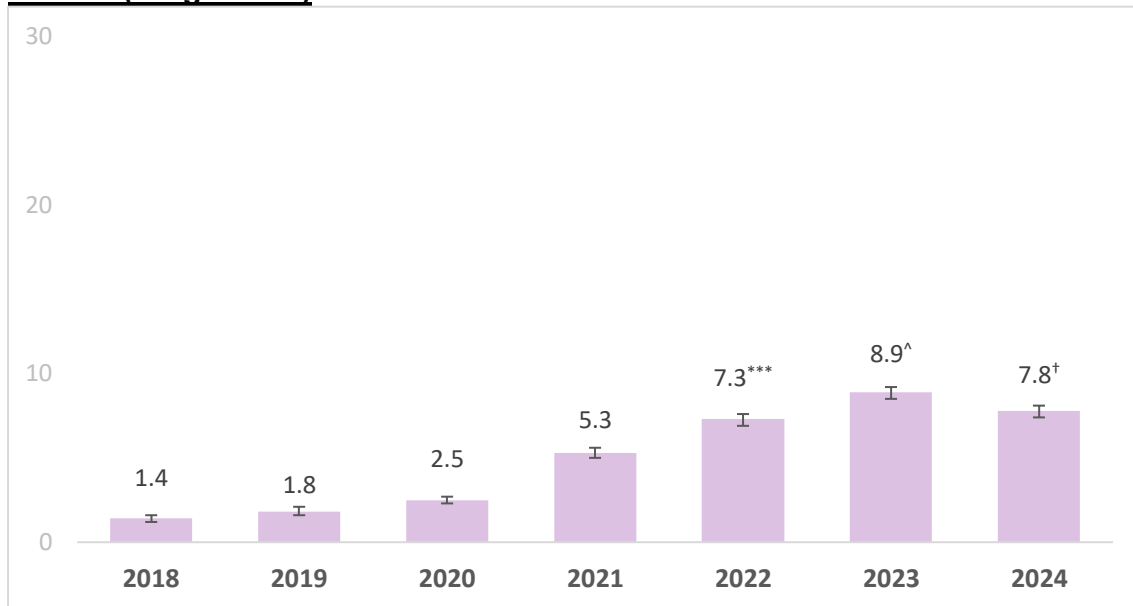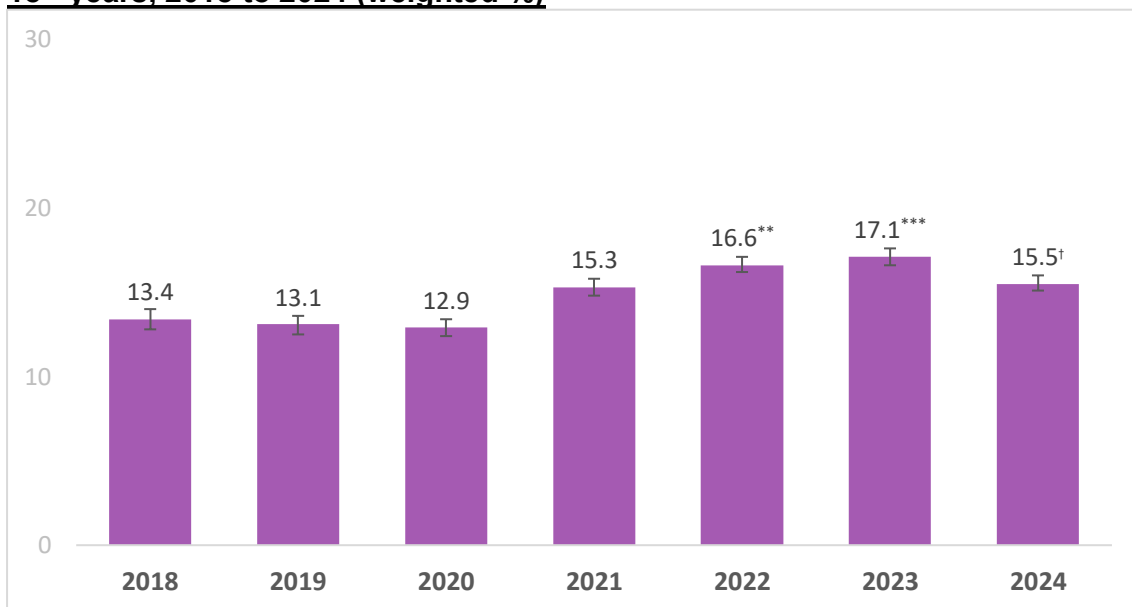

Notes. Current vaping: used e-cigarettes in the past month (N = 249,819). Error bars represent 95% confidence intervals around survey estimates. 2018 includes February to December only. ***p<0.001, ^p<0.10, †Reference year.

Appendix B2: Current smoking among the overall population aged 18+ years, 2018 to 2024 (weighted %)

Notes. Current smoking: smokes factory-made cigarettes or smoked roll-your-own cigarettes in the past month (N = 249,819). Error bars represent 95% confidence intervals. 2018 includes February to December only. ***p<0.001, *p<0.05, ^p<0.10, †Reference year.

Appendix B3: Current vaping and/or smoking among the overall population aged 18+ years, 2018 to 2024 (weighted %)

Notes. Current vaping and/or smoking: current vaper and/or current smoker (N = 249,819). Error bars represent 95% confidence intervals. 2018 includes February to December only. ***p<0.001, **p<0.01, ^p<0.10, †Reference year.

Appendix B4: Distribution of product use among the overall population 18+ years

Notes. Non-user: does not smoke or vape. Exclusive smoker: current smoker but not current vaper. Exclusive vaper: current vaper but not current smoker. Dual user: current smoker and current vaper. 2018 includes February to December only.