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# ***Vapers Panel Baseline Survey 2022***

## **Executive Summary**

### **Prepared for Health Canada**

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For more information on this report, please contact Health Canada at: [hc.cpab.por-rop.dgcap.sc@canada.ca](mailto:hc.cpab.por-rop.dgcap.sc@canada.ca)

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**Canada**

## **Vapers Panel Baseline Survey 2022 – Executive summary**

Prepared for Health Canada by Environics Research

May 2022

This public opinion research report presents the results of a quantitative research study conducted by Environics Research on behalf of Health Canada, comprising an online survey with 4,815 Canadians aged 15 or older who are regular vapers, conducted from March 4 – April 8, 2022.

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## Executive summary

### A. Background and objectives

The *Tobacco and Vaping Products Act* (TVPA) regulates the manufacture, sale, labelling and promotion of tobacco products and vaping products sold in Canada. The TVPA creates a new legal framework for regulating vaping products to protect young persons from nicotine addiction and tobacco use, while allowing adults to legally access vaping products as a less harmful alternative to tobacco. Health Canada identified a need for transitional data to provide key insights into how changeable (or not) an individual's use behaviour can be over time, any factors influencing those changes (e.g., biases), and any factors that could be influenced by those changes (e.g., health self-ratings).

The main objective of this research is to understand patterns of use, attitudes and behaviours at the individual level with respect to vaping among Canadians who are regular vapers aged 15 years and older. This research will be designed to serve as a baseline, should Health Canada wish to measure changes in vaping behaviour using a return-to-sample methodology in the subsequent two years.

Specific research objectives include, but are not limited to, the following:

- To establish baseline patterns of use among regular vapers
- To understand factors driving changes in vaping status, including vaping cessation
- To understand changes in patterns of dual use (smoking and vaping)
- To measure Canadian regular vapers' level of awareness and knowledge around vaping products
- To gather information on Canadian regular vapers' behaviours with respect to vaping products, including product evolution, and
- To gather information on the vaping devices and e-liquids currently being used by Canadian vapers.

## B. Methodology

This research study consisted of a national online survey of 4,815 Canadians aged 15 or older who vaped at least once a week in the previous four weeks (also known as regular vapers). The incidence of regular vapers among Canadians 15+ is 3.4 percent nationally (per Canadian Tobacco and Nicotine Survey [CTNS] 2020 data). The survey was conducted from March 4 – April 8, 2022. The sample was designed to (a) be as representative as possible of the regular vaper population by age, gender and province, and (b) to maximize the subsample of youth (15-19 years) and young adult (20-24 years) regular vapers, for adequate analysis in subsequent waves (despite expected attrition).

As this online survey utilized an opt-in panel, it is a non-probability survey and no margin of sampling error should be calculated. Reported percentages are not generalizable to any group other than the sample studied, and therefore no formal statistical inferences can be drawn between the sample results and the broader target population it may be intended to reflect.

The following completions were achieved:

Age	2020 Population	Regular vaper incidence (CTNS 2020)	Proportion of vaper population	Unweighted sample size	Proportion of total sample	Weighted sample size
15-19	2,102,402	9.0%	17%	852	18%	843
20-24	2,484,313	8.7%	20%	1,524	32%	957
25+	27,408,756	2.5%	63%	2,439	50%	3,015
<b>Total</b>	<b>31,995,471</b>	<b>3.4%</b>	<b>100%</b>	<b>4,815</b>	<b>100%</b>	<b>4,815</b>

## C. Contract value

The contract value was \$207,954.80 (including HST).

### *Report*

This report begins with an executive summary outlining key findings and conclusions, followed by a detailed analysis of the survey data. Provided under a separate cover is a detailed set of “banner tables” presenting the results for all questions by population segments as defined by region and demographics. These tables are referenced by the survey question in the detailed analysis.

In this report, quantitative results are expressed as percentages unless otherwise noted. Results may not add to 100% due to rounding or multiple responses. Net results cited in the text may not exactly match individual results shown in the tables due to rounding. Differences between subgroups are noted based on Z-test results at 95% probability for comparing proportions, and based on two-tailed T-test results at 95% probability for comparing means. Comparisons are based on differences between sub-groups, and not on differences compared to the total.

People who smoke, had formerly smoked, and vape are referred to as smokers, former smokers, and vapers, respectively, in the interest of brevity. Likewise, given that participants must have vaped on a regular basis, any reference to 'vaper' refers to someone that is a regular vaper.

**Use of findings of the research.** Data from this research will allow the Tobacco Control Directorate to understand and contextualize any recent changes in vaping prevalence.

## D. Key findings

In general, patterns of use in vapers are somewhat different between youth (age 15 to 19), young adults (20 to 24), and adults (25+). While there is overlap between age groups, among adults, vaping is more often used as a smoking cessation aide; this is evident in direct answers about their reasons for vaping, as well as their preferences and behaviours that point to vaping as a replacement for smoking. Among youth and young adults, vaping is more often a recreational activity and substance habit in its own right; many younger vapers take up vaping without ever being regular smokers, and they are more likely to be heavily dependent on vaping with nicotine compared to older vapers. Younger vapers are more likely to mention non-smoking reasons for vaping, prefer using flavoured liquids, and enjoy vaping in social settings. These patterns also extend to quitting vaping behaviour, and should be noted when considering approaches to reducing vaping behaviour overall; quitting vaping may be seen as less urgent for those using it to reduce or quit smoking. Detailed results for this study are outlined below.

### Frequency, history, and heaviness of use

- Qualifying respondents for this study are Canadians, age 15 or older, who vaped at least once a week for the past 30 days (also known as regular vapers). Of these, half (52%) vape on a daily basis; daily vaping is most common among youth, i.e., those aged 15 to 19 (55%).
- Based on past 30 days behaviour, most vapers vape with nicotine every day (48%) or on occasion (49%). Daily vaping with nicotine is highest among youth (52%).
- Vaping products without nicotine is less common with one in five doing it daily (20%) and about half doing so occasionally (48%). Adults, i.e., those aged 25+, are more likely to vape without nicotine on a daily basis (21%), compared to youth (18%).
- Nearly six in ten (58%) have their first nicotine vape of the day within 30 minutes of waking, and about one in four (25%) vape with nicotine more than 30 times per day. These metrics are used to calculate the Heaviness of Vaping with Nicotine Index (HVNI), a score from 0 to 6 where 0 indicates very low nicotine dependence and 6 is very high dependence. Half of vapers (52%) fall into a range of 0 to 2, indicating low dependence on nicotine, but there is considerable variation by age. One in three youth (34%) show high dependence, compared to 28% in young adults and 16% in adults.
- Regardless of age, over half of vapers (60%) have been vaping regularly for less than two years.
- Fruit is the most popular vaping flavour, regardless of vaping liquid type, i.e., with nicotine (35%), without nicotine (28%), and unsure of nicotine (24%). For vaping with nicotine, tobacco (15%) is the second favourite. For vaping without nicotine, mint and candy were each reported by 13% of respondents. Fruit flavours are especially popular among youth (51% with nicotine) and young adults (43% with nicotine); tobacco flavour is more popular among adults (21%) compared to youth and young adults (both 5%).

- The mean starting age for vaping is 29 years old, but this varies considerably between age cohorts; since vaping products are relatively new in Canada, most adults did not have an opportunity to start using them at a very young age. The mean starting age for those who have never smoked on a regular basis is 20 years, notably lower than those who currently smoke (30 years) and former smokers (39 years).

### Drivers to use and quality of life

- Using a 0 to 10 scale to measure satisfaction with life, where 0 means “very dissatisfied” and 10 means “very satisfied,” vapers report an average satisfaction rating of 6.8. Satisfaction is highest for adults (7.1) and lowest for youth (6.2).
- Youth vapers (47%) and young adults (36%) are more likely than adults (17%) to say most or all of their friends also vape; this points to a sociable aspect of vaping that is more prominent for younger vapers compared to adults. A similar pattern holds for those saying most or all of their classmates or co-workers vape (youth 31%, young adult 23%, adult 14%). Younger vapers (i.e., youth and young adults) are also more likely to have a spouse or partner who also vapes (48% youth, 52% young adult with ‘not applicable’ and ‘don’t know’ responses removed).
- Rating agreement with a series of statements about vaping on a scale of 1 to 10, vapers most often agree with the statement that vaping calms them down (48% with an 8 to 10 rating) or that they enjoy vaping when with others who vape (45%). Youth vapers are the most likely to agree vaping calms them down (54%) compared to young adults (47%) and adults (47%). Youth also are the most likely to agree they enjoy vaping with others (youth 55%, young adults 46%, adults 42%).
- While quitting smoking is the top overall reason vapers give for vaping, with 47% naming it as one of their top three reasons, this varies starkly by age. A majority of adults (54%) name this as a top reason for vaping. For youth, relaxation (41%) and flavours (30%) outrank quitting smoking (27%) as reasons for vaping.

### Smoking status and questions for dual users

- Over half of vapers (58%) are dual users who currently both vape regularly and smoke cigarettes. Another 18% are former smokers, while 24% have never been regular smokers. Adults are more likely to be dual users (66%) and former smokers (23%).
- Asked their reasons for smoking in addition to vaping, similar proportions mention habit (30%), trying to quit smoking (29%), cravings (28%), stress (28%), and enjoyment (27%). Among adults, reasons related to smoking addiction are more common, such as habit (32%), trying to quit (31%), and enjoyment (30%), whereas the top reason for youth is smoking with others in social situations (35%).
- Dual users smoke an average of about eight cigarettes a day, ranging from just under five (4.7) for youth to nine (9.2) for adults.
- Dual users report that they vape an average of nearly eight times a day (7.5) in situations where they cannot smoke; this ranges from 6.9 in adults to 10.2 times per day in youth, perhaps reflecting more limited opportunities for smoking among younger dual users.

- Among dual users, one in five say they have never tried to quit smoking (21%); those who have tried to quit report an average of nearly nine (8.7) quit attempts. Most report their longest period of time without smoking was a matter of days (33%) or weeks (19%).
- Among former smokers, a majority (76%) say they quit between one and ten years ago; this is similar across all age groups. Breaking this down further, roughly equal proportions say they quit between one and three years (37%) and between four and ten years (39%).
- Rating the usefulness of vaping as a tool to quit smoking, a majority of current and former smokers (52%) rate it between 8 and 10 (on a scale where 1 means “not useful at all” and 10 means “very useful”). This breaks down to 73% among former smokers, and 43% among those who are still smoking.
- Regardless of age cohort, friends or family are the most common source of information on using vaping to quit or reduce smoking (48%). Young adults are most likely to talk to vape shop staff (33%), and adults are more inclined to speak to a healthcare professional (26%) compared to youth (24% and 20%, respectively).
- Nicotine gum (44%), quitting cold turkey (33%), and the nicotine patch (32%) are the most common other smoking cessation methods tried by vapers who are current or former smokers. Higher proportions of adults report trying most methods in the list, compared to youth and young adults.

### Vaping transitions, cessation, and relapse

- Over half of vapers (54%) have either previously tried (31%) or are currently trying (23%) to stop vaping. Reducing vaping is even higher, with a total of two-thirds (66%) who have tried (28%) or are trying (38%) to reduce. Younger vapers are more likely to report trying to quit or reduce, again pointing to differences in the way vaping tends to be used recreationally among younger vapers, and more often for smoking cessation in adults. This is also reflected in former smokers, who are less likely to try quitting or reducing vaping compared to those currently smoking and those who have never smoked regularly; this suggests that for former smokers, vaping is used on an ongoing basis to prevent a smoking relapse. Vapers who have tried to quit vaping report an average of four (4.1) quit attempts so far, and two in three (65%) have gone at least a week without vaping.
- Around one in four vapers (28%) say quitting vaping is an important life goal, rating it between 8 and 10 on a scale where 1 means not important at all and 10 means it is the most important goal of their life; adults are somewhat more likely to say it is important (30% rating it 8 to 10). The average importance rating is 5.7.
- On a similar scale rating confidence from 1 to 10, about four out of ten vapers (42%) say they are confident (8 to 10) they will one day quit vaping for good; these confidence ratings are similar across age groups.
- Asked to rate a set of statements about quitting vaping in terms of how true each statement is for them personally, vapers most often find it true (8 to 10 on 1 to 10 scale) that if they were to quit vaping, it would be because of a belief that it is best for their health (54%) and that it would be because they want to take responsibility for their health (52%). Ratings were similar for the three age groups.

### Access and affordability

- Vape shops are the most common source for vapers to obtain both devices (70%) and liquids or pods (55%). Age restrictions on vaping products clearly have some impact on purchase behaviour, with many youth having

someone else buy devices (32%) or liquids (31%) for them, and others getting devices (25%) or liquids (22%) from friends or family on a lending or giving basis.

- About four in ten vapers (43%), most often youth (55%) and young adults (57%), report that, in the past six months, they have had a situation where the device or vape flavour they wanted was not available. Most often this was due to flavours becoming unavailable (51%).
- Vapers say they most often pay attention to company branding (38%) and colour (31%) when buying vape products.
- Used by nearly half of vapers (46%), pen-style devices are the most popular choice among all age groups. This is not surprising considering the most important considerations for vapers when selecting a device: quality (73%), convenience (73%), being refillable (68%), and size (68%).
- Vapers report an average spend of \$87 over the past month on devices (among those who purchased in the past month), and \$66 on liquids or pods. Spending on both is highest among young adults (\$107 and \$75, respectively).
- Rating the affordability of vaping overall, most vapers give a neutral rating between 4 and 7 (on a scale where 1 means very unaffordable and 10 means very affordable). The average affordability rating for vapers is 6.5, ranging from 6.0 among youth to 6.8 among adults.

### **Cannabis, alcohol, and relative harm perceptions**

- Among vapers, majorities say they have tried cannabis through smoking (69%), edibles (58%), and vaping (56%). Reported cannabis use is lower in adults, but still constitutes majorities for each method.
- Most vapers who have ever used cannabis report using it in the past 30 days, whether by vaping (84%), smoking (76%), or edibles (73%).
- Most vapers say they vape about the same, with or without nicotine, when they are using cannabis through either vaping or smoking; youth are more likely to say they vape more with nicotine while vaping cannabis (23%, compared to 14% in young adults and 10% in adults) or smoking cannabis (21%, compared to 15% in young adults and 9% in adults).
- Most vapers (91%) have had alcohol at some point, and of these, most (88%) have at least one drink in the past 30 days. Most vapers who drink say their vaping with nicotine (57%) and without nicotine (60%) remains the same while drinking.
- Most vapers perceive smoking cigarettes to be harmful, with two in three (68%) rating it between 8 and 10 (on a scale where 1 means not harmful at all and 10 means extremely harmful). In comparison, vapers find drinking alcohol (39%), eating junk food (37%), smoking cannabis (35%), vaping with nicotine (34%), and vaping cannabis (33%) to be relatively less harmful. Youth rate smoking as more harmful compared to other ages (72%), while adults find alcohol (42%), junk food (42%), and smoking cannabis (39%) more harmful compared to younger vapers.



## E. Political neutrality statement and contact information

I hereby certify as senior officer of Environics that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the Communications Policy of the Government of Canada, and Procedures for Planning and Contracting Public Opinion Research. Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, standings with the electorate, or ratings of the performance of a political party or its leaders.

Sarah Roberton  
Vice President, Corporate and Public Affairs  
Environics Research Group  
[sarah.roberton@environics.ca](mailto:sarah.roberton@environics.ca)

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