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# ***Vaping Panel Surveys and Interviews 2022-2023***

## **Final Report**

### **Prepared for Health Canada**

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**Canada**

## **Vaping Panel Surveys and Interviews 2022-2023 - Final report**

Prepared for Health Canada by Environics Research

August 2023

This public opinion research report presents the results of a quantitative and qualitative research study conducted by Environics Research on behalf of Health Canada, comprising two, return-to-sample online surveys with 693 Canadians aged 15 or older who vaped regularly at the time of the baseline survey, and 379 interviews conducted with people who vape or who formerly vaped and had completed the Wave 2 survey. The Wave 2 survey was conducted from December 15, 2022, to January 22, 2023, and the Wave 3 survey was conducted from April 6, 2023, to June 1, 2023. The individual interviews were conducted from January 4 to February 1, 2023.

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## Table of Contents

<b>Executive summary .....</b>	<b>i</b>
<b>Introduction .....</b>	<b>9</b>
<b>I. Detailed findings – Quantitative.....</b>	<b>12</b>
A. Profile of respondents.....	12
B. Frequency, history and heaviness of use .....	16
C. Drivers to use and quality of life .....	37
D. Smoking status and questions for dual users.....	47
E. Vaping transitions, cessation and relapse.....	61
F. Access and affordability .....	73
G. Cannabis, alcohol and relative harm perceptions.....	89
<b>II. Detailed Findings – Qualitative IDIs .....</b>	<b>92</b>
A. IDI context and objectives.....	92
B. Demographic / vaping behaviour of participants.....	92
C. Life status and recent changes.....	93
D. Role of vaping in life.....	93
E. Smoking, alcohol and cannabis .....	94
F. Quitting considerations and attempts .....	95
G. Motivations for quitting.....	96
H. Quitting intentions and methods.....	97
I. Support to quit vaping.....	98
J. Drivers of continued vaping .....	99
K. Accessing vaping products .....	99
L. Final Thoughts .....	99
<b>Appendix A: Quantitative Methodology .....</b>	<b>101</b>
<b>Appendix B: Qualitative Methodology .....</b>	<b>107</b>
<b>Appendix C: Wave 2 Questionnaire.....</b>	<b>109</b>
<b>Appendix D: Wave 3 Questionnaire.....</b>	<b>134</b>
<b>Appendix E: IDI Discussion Guide .....</b>	<b>159</b>
<b>Appendix F: IDI Screener.....</b>	<b>162</b>

## 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 over time at the individual level with respect to vaping products. The research will also gather attitudes and behaviours of Canadians who were regular vapers aged 15 years and older in the baseline survey and examine any changes over time that could be associated with changes in use.

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

- To establish patterns of use among those who vaped regularly in the baseline survey
- To understand factors driving changes in vaping status, including quit attempts and vaping cessation
- To understand changes in patterns of cigarette use, including starting or quitting smoking
- To measure level of awareness and knowledge around vaping products among Canadians who vape, including product evolution
- To gather information on the vaping devices and e-liquids currently being used by Canadians who vape.

## B. Methodology

This research study consisted of three parts:

- **Wave 2 return-to-sample survey:** A quantitative online return to sample (RTS) survey of 693 Canadians who vape. The sample was drawn from a 2022 baseline survey (Wave 1) of 4,815 Canadians aged 15 or older who vaped.
- **Qualitative individual interviews (IDIs):** IDIs were conducted with 39 survey participants drawn from the Wave 2 survey, before the Wave 3 survey was fielded.
- **Wave 3 return-to-sample survey:** A second quantitative online RTS survey of 379 Canadians drawn from Wave 2 participants.

This study is a follow-up to the [Vapers Panel Baseline Survey 2022](#) (Wave 1) with 4,815 Canadians aged 15 or older who identified as regular vapers, conducted from March 4 – April 8, 2022.

The Wave 2 survey was conducted from December 15, 2022, to January 22, 2023, and the Wave 3 survey was conducted from April 6 to June 1, 2023. Waves 2 and 3 used an RTS approach, attempting to recontact all participants from the previous wave (i.e. Wave 2 is drawn from Wave 1, Wave 3 is drawn from Wave 2). Note that the original sample was designed to (a) reflect the demographic composition of the current vaping population by age, gender, and province, and (b) to maximize the subsample of youth (15-19 years) and young adults (20-24 years) who vape, for adequate analysis in subsequent waves (despite expected attrition).

	Dates	Sample size
Wave 1 (POR-097-21)	March 3 to April 10 2022	4,815
Wave 2	December 15 to January 22 2023	693
Wave 3	April 6 to June 1 2023	379

To note: the incidence of regular vaping among Canadians 15+ is 3.4 percent nationally (per Canadian Tobacco and Nicotine Survey [CTNS] 2020 data). 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 in Wave 2:

Age	2020 Population	Regular vaping incidence (CTNS 2020)	Proportion of vaping population	Unweighted sample size	Proportion of total sample	Weighted sample size
15-19	2,102,402	9.0%	17%	56	8%	121
20-24	2,484,313	8.7%	20%	134	19%	136
25+	27,408,756	2.5%	63%	503	73%	437
<b>Total</b>	31,995,471	3.4%	100%	693	100%	693

The following completions were achieved in Wave 3:

Age	2020 Population	Regular vaping incidence (CTNS 2020)	Proportion of vaping population	Unweighted sample size	Proportion of total sample	Weighted sample size
15-19	2,102,402	9.0%	17%	26	7%	N/A
20-24	2,484,313	8.7%	20%	75	20%	N/A
25+	27,408,756	2.5%	63%	278	73%	N/A
<b>Total</b>	31,995,471	3.4%	100%	379	100%	N/A

### C. Contract value

The contract value was \$256,013.03 (including HST).

#### Report

This report begins with an executive summary outlining key findings and conclusions, followed by a detailed analysis of the survey data and the qualitative interviews. 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. Notable 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 exclusive sub-groups, and not on differences compared to the total or groups that overlap.

The report uses certain terminology to differentiate between certain sub-groups of quantitative respondents based on their vaping behaviour, transitions, and smoking. The following groups are discussed throughout the report:

- **Past 30 day vaping:** Respondents who vaped with or without nicotine on a daily, weekly, or monthly basis in the 30 day time period leading up to the survey. In some instances in the narrative they are referred to as *still vaping*. Excludes cannabis vaping.
  - **Status quo vaping:** A subset of past 30 day vaping who were vaping continuously from Wave 1 until Wave 3 without detectable quitting, reducing, or increasing. In some instances in the narrative they are referred to as *vaping at the same rate* or similar wording to differentiate from others.
  - **Relapsed:** A subset of past 30 day vaping who quit between Wave 1 and 2, but were vaping again in Wave 3.
  - **Reduced:** A subset of past 30 day vaping who had reduced their vaping frequency between Wave 1 and Wave 3.

- **Increased:** A subset of past 30 day vaping who had increased their vaping frequency between Wave 1 and Wave 3.
- **Quit vaping:** Respondents who had not vaped in the 30 day time period leading up to the survey. In some instances they are referred to as having *formerly vaped*.
  - **Newly quit:** A subset of those who quit vaping who were still vaping in Wave 2, but had quit by Wave 3.
  - **Longer-term quitting:** A subset of those who quit vaping who had quit in Wave 2, and were still not vaping in Wave 3.
- **Past 30 day smoking:** Respondents who had smoked in the 30 day time period leading up to the survey.
  - **Alternating use:** A subset of past 30 day vaping who were both smoking and vaping in the past 30 days leading up to the survey.
  - **Smoking only:** A subset of past 30 day smoking, who had quit vaping.
- **Quit smoking:** Respondents who had not smoked in the 30 day time period leading up to the survey. In some instances they are referred to as having *formerly smoked*.
  - **Newly quit:** A subset of those who quit smoking who were still smoking in Wave 2, but had quit by Wave 3.
  - **Longer-term quitting:** A subset of those who quit smoking who had quit in Wave 2, and were still not smoking in Wave 3.
- **Never smoked:** Those who never smoked on a regular basis according to their survey responses.

Results are also analyzed by demographic sub-groups, mainly region, age, and gender; in some instances, other sub-groups are included in the analysis to illuminate the findings where relevant. To the extent possible, sub-group differences are noted for Wave 2 and Wave 3.

The nature of RTS sampling presents some complications when analyzing data across waves, including where sub-group differences are concerned. Due to the diminishing sample sizes from wave to wave, and changes in behaviour among respondents, some associations are present in one wave but not another. Regardless of their presence in one wave or the other, statistical differences between sub-groups are noted where they are interpreted to be important and relevant to the analysis.

**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

### *Key findings - Quantitative*

**Starting with the baseline study in 2022, through to Wave 3 in spring of 2023, transitions away from vaping are rare.** After three survey waves, eight in ten (83%) of those who vaped at the beginning of the baseline study were vaping in Wave 3, and a vast majority did not quit at any point between survey waves (75%). While the proportion of those not vaping in Wave 2 (18%) and Wave 3 (17%) was similar, nearly half of those who had stopped vaping in Wave 2 were vaping again by Wave 3 (8% relapse).

**Even at a more granular level, changes in vaping frequency are limited.** Among those who vape, the proportion vaping on a daily basis was virtually unchanged from Wave 1 (52%) through to Wave 3 (48%). Where shifts did occur, they were often toward more vaping, rather than less. By Wave 3, while those who were vaping *weekly* in Wave 1 were somewhat more likely to stop vaping than those vaping *daily*, they were more likely to vape *daily* than not at all.

**Those who vaped to stop smoking vape frequently and longer-term.** In terms of smoking behaviour and past smoking, by Wave 3, daily vaping is more prevalent among those who *formerly smoked* (55%), and particularly in those who *quit smoking on a long-term basis* (56%) in comparison with those who *never smoked* (36%). Further, by Wave 3, daily nicotine use was much more prevalent among those who *stopped smoking on a long-term basis* (63%) compared to those who had *newly quit smoking* (37%), those who had *relapsed smoking* (38%), and those who had *never smoked* (38%). Those who *stopped smoking on a long-term basis* are also likely to vape with nicotine within 30 minutes of waking (67%) and often vape continuously throughout the day (36%). Those who vape daily also tend to vape solitarily (80% to 81% alone / mostly alone), and usually with nicotine (80% to 84%); there are very few who vape daily without nicotine.

**Those who vape show little motivation or interest in quitting vaping.** Just one in three are trying to stop vaping (29% to 34%), similar proportions see quitting vaping as important (25% to 29%), or are confident that they will one day quit vaping for good (30% to 37%). This dovetails with the attitudes expressed in the qualitative interviews, where participants were largely uninterested in quitting vaping.

**In addition to using vaping to help them quit smoking, those who vape often do so to avoid relapsing back to smoking, and tend to see vaping as the lesser of two evils.** Looking specifically at people's reasons for vaping, avoiding returning to smoking is a distinct reason for one in three who vape (30% to 33%), and almost as many say they vape because it is less harmful than smoking (27% to 29%). Comparing vaping to several other potentially risky behaviours like smoking and alcohol, just one in three respondents saw vaping with nicotine as harmful; for comparison, twice as many saw smoking as harmful. This is further supported by the qualitative research, which found a high degree of concern that quitting vaping would mean resuming smoking, and a general belief that vaping was not risky.

**The health effects that people who vape experience and are aware of are not sufficient alone to drive quit attempts suggesting other benefits of quitting may need to be emphasized in messaging.** One theme that emerged in the qualitative interviews was the sense that if strong and reputable research were to be done which showed serious negative health effects of vaping, respondents would be more motivated to quit. In the quantitative research, among those who had not continued vaping health-related motivations for quitting (65% take responsibility for my own health) tended to resonate with respondents more strongly than other motivations like shame, social pressure, or affordability. However, while still one of the stronger hypothetical motivators to quit for those currently vaping (48% take responsibility for my own health), only about one in three would quit if there was evidence it was worse for their health than they thought (37%) or if they had a health scare (36%). While those who vape are sometimes skeptical about possible harms (for example, one in four currently vaping agree that the medical evidence against vaping is exaggerated), many are open to hearing more information that might dissuade them from vaping. Given that a majority of those who vape, or used to vape, report having at least one health symptom (from a given list of symptoms that can be related to vaping) suggests that health impacts alone won't be sufficient to drive a quit attempt.

**Flavour choices, particularly with nicotine, point to differences between those vaping for smoking cessation, and those vaping for social or recreational reasons.** While fruit flavours are used most often in general (32% to 35%), they are used more often by who had never smoked (50% to 52%), compared to those smoking in both



waves (26% to 29%). Tobacco flavour which ranks second overall for use (18%), tends to be used more often by those who alternate vaping and smoking (24%), with little use by those who never smoked (5%) or formerly smoked (12%). Fruit flavours were used by nearly half (45%) of those who *increased* their vaping between Waves 2 and 3. Similar patterns are noted in results for vaping flavour preferences.

**Differences between age groups illustrate the role vaping plays in the lives of adults, who mainly use it for smoking cessation, in contrast with younger people who tend to do it for social or recreational reasons.**

Consistent with the findings from the baseline study in 2022, there are numerous ways where adults differ from younger cohorts in terms of their vaping behaviour, history of smoking, and attitudes towards vaping. Adults are more likely to be smoking, or to have a history of past smoking in general. In Wave 2, adults are more likely than youth and young adults to give smoking-related reasons for vaping, for example, they often say they vape to quit smoking (49% adults, 31% youth and young adults) or to avoid a return to smoking (41%, compared to 23%). Also of note, one in four adults (27%) say they smoke because of addiction, compared to just 9 percent of youth and young adults.

**Even though vaping is often explicitly stated as a way to stop smoking, smoking is more common among those who still vape than it is among those who stopped vaping over the course of the study.** Those with past 30-day vaping are more likely to have smoked in the past 30 days (51% to 52%) compared to those no longer vaping (18% to 34%). Smoking is most common among those vaping weekly (58% to 68%), rather than daily or monthly, which may indicate vaping as an occasional stand-in for cigarettes. Even those who reduced their vaping in both waves are more likely to have smoked (49% to 60%) than those who had quit vaping in each wave (18% to 34%).

**Those who relapse to exclusive smoking smoke more compared to those who alternate smoking and vaping, and have lower interest in vaping in the future.** Those who are *no longer vaping but still smoke* are more likely to report daily smoking (72% to 73%) compared to those *still vaping* in each wave (40% to 48%). Additionally, those with past 30 day vaping (i.e., alternating use) tend to smoke fewer cigarettes per day (76% to 85% smoking 10 or fewer), compared to those who are *no longer vaping but still smoke* (50% to 55%). Those with a history of smoking, but who no longer vape, also showed lower interest in vaping in their responses to other questions; most did not try to talk to anyone about using vaping as a smoking cessation technique (54% to 72%), compared to those with past 30 day vaping (11% to 36%). This cohort was also notable for its confidence that they would quit vaping for good (70%, compared to just 27% of those still vaping), suggesting that they do not see vaping as a smoking cessation technique.

**While affordability has potential to drive quitting for some people who vape, serious concern about its affordability appears to be limited despite the pressures of inflation.** About one in four (27%) agreed that if they were to stop vaping, it would be because they couldn't afford devices and liquids, but only about one in ten (8% to 14%) see vaping as unaffordable. With average monthly spend on vaping sitting around \$70, most (59% to 61%) are neutral about affordability, rating it between 4 and 7 on a 10-point scale where 10 is most affordable. This is still despite the fact that over half of those who vape say they have noticed an increase in vaping product prices (55%), and two in three say that inflation has impacted their ability to afford those products (67%). When those who vape were asked how they fit vaping into their budget, they most often said they weren't doing anything at all (30%), and a few even specifically said that vaping was their budgeting solution to offset the cost of smoking (3%).

**Disposal of vaping products and device components is often done through means that are environmentally unsound.** Vaping products contain many potentially harmful chemicals, including nicotine and other compounds in vaping liquid, and metals in the devices themselves, so they should be treated cautiously for disposal. Unfortunately, many of those who vape have inappropriate habits around disposal, including putting items in

the garbage or recycling. Disposable vaping devices, pre-filled cartridges, and liquid bottles in particular are most likely to end up in the garbage (51%, 51%, 47% respectively). It is worth noting that about half dispose of batteries to appropriate facilities (47%).

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### **Key Findings – Qualitative**

**Almost all participants smoked cigarettes in addition to or prior to beginning vaping.** Most interviewees had come to vaping as a smoking cessation or reduction aid, and many of them had even been successful in their attempts to quit smoking. While the primary function of vaping for most respondents was to help them quit or reduce smoking, many also saw vaping as a stress reliever, a habit, or an addiction itself.

**Vaping was seen as highly related to smoking cigarettes and drinking alcohol, but participants did not see a relationship between vaping and cannabis.** Vaping was almost unanimously viewed as a healthier alternative to smoking cigarettes. Those who said they drink alcohol often noted that vaping and drinking tend to go hand-in-hand, but the same observation did not hold true for those who use cannabis, which was seen as serving an entirely different purposes in their lives.

**Most interview participants lacked a serious intention to quit vaping, although some were trying to reduce either their vaping frequency or nicotine content.** Only a handful had ever tried to quit vaping, and four no longer vaped at the time of the interview. Many expressed a fear that if they quit vaping, it might lead them back to smoking; for two of the four who had stopped vaping, this was indeed the case. Others didn't perceive vaping as harmful enough for them to seriously consider a quit attempt, and a few simply enjoyed vaping.

**Even if they had only vague intentions to quit, participants varied considerably on what a successful quit attempt would mean to them.** Some would consider vaping occasionally in social situations to be success, while others considered complete abstinence from vaping with or without nicotine to be the only true version of success. Some additionally defined success as total cessation of nicotine in all forms. For those who had a stronger desire to quit, they envisioned themselves being free from cravings and taking control of their own health.

**Participants indicated that health concerns and affordability were potential motivators that would convince them to quit vaping.** Many suggested that if they or someone they knew experienced a vaping-related health scare, or if reputable research was published which showed provable and strong negative effects of vaping, this would be enough to drive their first quit attempt. Others indicated that if prices increased to the point where vaping was no longer an affordable option for them, they would have to seriously consider quitting.

**For those who did plan on quitting, getting away from nicotine and vaping was seen as a long-term process, as opposed to an all-in decision.** When asked about their intentions to quit, a common pattern emerged where most of those who saw a nicotine or vape-free future for themselves intended to wean themselves off slowly. They hoped to gradually reduce the nicotine content in their vaping liquids, as well as the frequency with which they vaped, to eventually reach their goals. While the slow approach was common, a few saw going "cold turkey" as the preferable quitting method, believing that their own internal motivations would be enough to succeed. Only a few mentioned the use of nicotine replacement therapies such as patches or gum.

**Social supports were not seen as important factors in the quitting process, as most believed their own willpower would be enough to see them through.** Quitting was seen as a personal decision driven by internal motivation, and few expected to seek support from others in the event they decided to quit.

**Continued vaping was largely attributed to habit, smoking cessation attempts, addiction, and stress relief.** Some participants acknowledged that they knew vaping was bad for them and did not understand why they hadn't stopped. Others simply saw vaping as a much healthier alternative to smoking, and had found no reason to be seriously concerned about the health effects of vaping.

**Interviewees emphasized the need for more research to be done on the potential negative health effects of vaping.** Many felt that there was simply not enough reputable data available to make an informed decision based on health concerns, and hoped that Health Canada would take action to fill this knowledge gap.

**Vaping was seen as a valuable method for adults trying to quit smoking.** A number of participants expressed fears that higher taxes and bans on devices and flavours would deprive them of this option, which many relied on to keep them away from smoking. This perception does not necessarily align with the objective realities of their experiences.

**There was significant concern about youths picking up the habit without ever having smoked.** To combat this, participants suggested targeted advertising and strict regulations on the sale of vaping products to minors. The hope was that this trend could be slowed or reversed while still allowing adults to legally access vaping as a smoking cessation aid.

## **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.

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## Introduction

The Tobacco and Vaping Products Act (TVPA) came into force on May 23, 2018, to regulate 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. However, there is limited understanding of the transition between products occurring among people who are smoking and using vaping products at the individual level. More transitional and prospective data are required to provide key insights into how changeable (or unchangeable) use behaviour can be over time, any factors influencing those changes, and any factors that could be influenced by those changes.

This research continues the exploration into attitudes and changes in vaping behaviour that started in the baseline survey.

### **Objectives**

The main objective of this research is to understand patterns of use over time at the individual level with respect to vaping products. The research will also gather attitudes and behaviours of Canadians who aged 15 years and older who vaped at the time of the baseline survey, and examine any changes over time that could be associated with changes in use.

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

- To establish patterns of use among those who vaped regularly in the baseline survey;
- To understand factors driving changes in vaping status, including quit attempts and vaping cessation;
- To understand changes in patterns of cigarette use, including starting or quitting smoking;
- To measure level of awareness and knowledge around vaping products among Canadians who vape;
- To gather information on behaviours with respect to vaping products, including product evolution among Canadians who vape; and,
- To gather information on the vaping devices and e-liquids currently being used by Canadians who vape.

### **About this report**

This report begins with an executive summary outlining the key findings of the survey and IDIs, followed by a detailed analysis and breakdown of the results. Detailed descriptions of the survey and IDI methodologies are presented in Appendix A and Appendix B. The Wave 2 and Wave 3 survey questionnaires are provided in Appendix C and Appendix D. The IDI discussion guide and screener are provided in Appendix E and F.

The report uses certain terminology to differentiate between certain sub-groups of respondents based on their vaping behaviour, transitions, and smoking. The following groups are discussed throughout the report:

- **Past 30 day vaping:** Respondents who vaped with or without nicotine on a daily, weekly, or monthly basis in the 30 day time period leading up to the survey. In some instances in the narrative they are referred to as *still vaping*. Excludes cannabis vaping.

- **Status quo vaping:** A subset of past 30 day vaping who were vaping continuously from Wave 1 until Wave 3 without detectable quitting, reducing, or increasing. In some instances in the narrative they are referred to as *vaping at the same rate* or similar wording to differentiate from others.
- **Relapsed:** A subset of past 30 day vaping who quit between Wave 1 and 2, but were vaping again in Wave 3.
- **Reduced:** A subset of past 30 day vaping who had reduced their vaping frequency between Wave 1 and Wave 3.
- **Increased:** A subset of past 30 day vaping who had increased their vaping frequency between Wave 1 and Wave 3.
- **Quit vaping:** Respondents who had not vaped in the 30 day time period leading up to the survey. In some instances they are referred to as having *formerly vaped*.
  - **Newly quit:** A subset of those who were still vaping in Wave 2, but had quit by Wave 3.
  - **Longer-term quitting:** A subset of those who quit vaping in Wave 2, and were still not vaping in Wave 3.
- **Past 30 day smoking:** Respondents who had smoked in the 30 day time period leading up to the survey.
  - **Alternating use:** A subset of respondents who were both smoking and vaping in the past 30 days leading up to the survey.
  - **Smoking only:** A subset of past 30 day smoking, who had quit vaping.
- **Quit smoking:** Respondents who had not smoked in the 30 day time period leading up to the survey. In some instances they are referred to as having *formerly smoked*.
  - **Newly quit:** A subset of those who were still smoking in Wave 2, but had quit by Wave 3.
  - **Longer-term quitting:** A subset of those who quit smoking in Wave 2, and were still not smoking in Wave 3.
- **Never smoked:** Those who never smoked on a regular basis according to their survey responses.

Note that in the Baseline report, the terms ‘vapers’ and ‘smokers’ were used to refer to people who vaped or smoked. In an effort to avoid stigma, this report uses different terminology to describe sub-groups of survey respondents based on their smoking and vaping behaviour.

Quantitative results are based on the entire sample unless otherwise noted. In this report, results are expressed as percentages unless otherwise noted. Results may not add to 100% due to rounding or multiple responses.

Provided under a separate cover is a detailed set of “banner tables” presenting the results for all survey questions for Wave 2 and Wave 3 by subgroup segments. These tables are referenced by the survey question in the detailed analysis.

Notable 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 exclusive sub-groups, and not on differences compared to the total or overlapping groups.

When interpreting results, note that because this online survey used 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.

## I. Detailed findings – Quantitative

### A. Profile of respondents

The following table shows the profile of participants in the study by wave. Note that Wave 1 and Wave 2 data were weighted to align with CTNS 2020 data by region, age, and gender. Wave 3 data was not weighted in order to avoid amplifying individual responses within smaller sub-groups.

In Wave 3, the weighted sample composition shifted to some degree by age and gender, with adults 25+ and women somewhat overrepresented relative to previous waves. This is an artifact of the decision to not weight the data in Wave 3. Further discussion of the sample composition is included in the methodology section of this report.

For interpretation of results, it is important to note the decreasing sample size in subsequent study waves. The smaller sample sizes make it difficult to detect trends within specific sub-groups, or differences between sub-groups, particularly on an ongoing (i.e. wave to wave) basis.

## Respondent profile by wave

<i>Characteristic</i>	<b>Wave 1 total (n=4,815)</b>	<b>Wave 2 total (n=693)</b>	<b>Wave 3 total (n=379)</b>
<b>Age</b>			
Youth (15-19)	17%	17%	7%
Young adult (20-24)	20%	20%	20%
Adult (25+)	63%	63%	73%
<b>Gender</b>			
Female	34%	34%	45%
Male	65%	66%	55%
Gender diverse	1%	<1%	0%
Prefer not to say	<1%	0%	0%
<b>Region</b>			
BC/Territories	16%	15%	16%
Alberta	11%	11%	11%
Saskatchewan	5%	4%	2%
Manitoba	5%	6%	3%
Ontario	30%	30%	31%
Quebec	26%	26%	30%
Atlantic	8%	8%	7%
<b>Marital status</b>			
Never legally married lived with common-law partner	42%	42%	36%
Legally married/not separated	29%	30%	32%
Living with common-law partner	16%	15%	17%
Separated, still legally married	2%	3%	3%
Divorced	4%	6%	7%
Widowed	2%	1%	2%
Prefer not to say	5%	3%	2%

Base: All respondents



## Respondent profile by wave

<i>Characteristic</i>	<b>Wave 1 total (n=4,815)</b>	<b>Wave 2 total (n=693)</b>	<b>Wave 3 total (n=379)</b>
<b>Occupation</b>			
Senior/middle management	19%	18%	18%
Professional	17%	18%	23%
Technical/Paraprofessional	9%	8%	9%
Sales and Service	18%	16%	11%
Administrative, clerical and office support	10%	14%	19%
Industrial, electrical and construction trades	5%	5%	5%
Maintenance and equipment operation trades, installers, repairers, and material handlers	5%	4%	4%
Processing, manufacturing and utilities machine operators and assemblers	4%	6%	2%
Construction, agricultural, forestry, fishing, landscaping labourer/general worker	5%	5%	3%
Prefer not to say	8%	8%	5%
<b>Household income</b>			
NET: Under \$40K	26%	22%	23%
\$40,000 to just under \$60,000	16%	17%	15%
\$60,000 to just under \$80,000	14%	17%	19%
\$80,000 to just under \$100,000	14%	12%	13%
\$100,000 to just under \$150,000	16%	17%	16%
\$150,000 and above	8%	10%	12%
<b>Identity</b>			
A member of a visible minority group	23%	20%	19%
A member of the LGBTQ2+ community	14%	11%	8%
Someone living with a physical disability	N/A	13%	18%
Someone living with a mental illness	N/A	16%	15%
None of the above	65%	58%	57%

Base: All respondents

## Respondent profile by wave

<i>Characteristic</i>	<b>Wave 1 total (n=4,815)</b>	<b>Wave 2 total (n=693)</b>	<b>Wave 3 total (n=379)</b>
<b>Indigenous identity</b>			
NET: Indigenous	5%	6%	4%
First Nations	3%	3%	3%
Métis	2%	3%	2%
Inuk (Inuit)	<1%	0%	0%
A non-Indigenous person	81%	85%	86%
Prefer not to say	14%	9%	9%
<b>Education</b>			
NET: HS or less	38%	34%	23%
Registered Apprenticeship/ other trades certificate/ diploma	6%	8%	10%
College, CEGEP or other non- university certificate/diploma	20%	20%	22%
University certificate/diploma below bachelor's level	7%	8%	6%
Bachelor's degree	18%	22%	27%
Postgraduate degree above bachelor's level	9%	7%	10%
<b>Language most spoken at home</b>			
English	77%	75%	73%
French	20%	22%	24%
Other	3%	3%	3%
<b>Insurance for prescription medications</b>			
Fully or partially insured	-	69%	71%
Not insured	-	28%	26%

Base: All respondents

## B. Frequency, history and heaviness of use

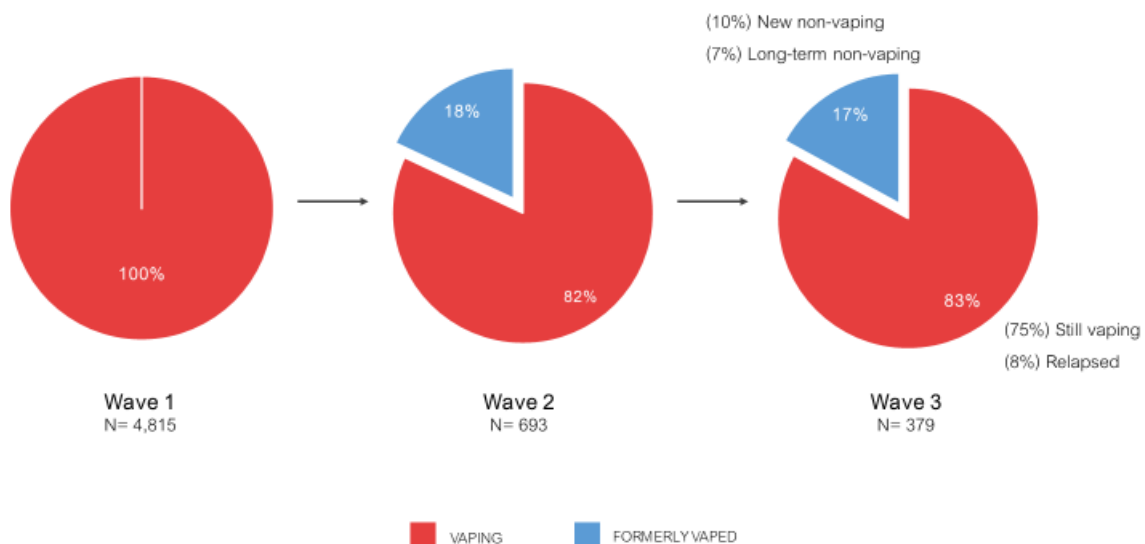
### 1. Vaping status

*For most, vaping was continuous and ongoing from the baseline survey through to Wave 3; just one in four had stopped vaping in Wave 2 and/or Wave 3.*

Across three waves of studies, respondents' vaping behaviour over time resulted in four possible dispositions by the end of the study:

1. Still vaping – those who were currently vaping in the Baseline (Wave 1), Wave 2, and Wave 3.
2. Longer term non-vaping – those who were vaping in Wave 1, but were not vaping in Waves 2 or 3.
3. New non-vaping – those who were vaping in Wave 1 and 2, but not vaping in Wave 3.
4. Relapsed vaping – those who were vaping in Wave 1, not vaping in Wave 2, and vaping again in Wave 3.

Looking across the three waves, three quarters of respondents (75%) did not ever quit vaping (i.e., they had vaped in the past 30 days when asked during each survey wave). Within those vaping at Wave 3, some had detectably increased (15%) or reduced (13%) their frequency of vaping, shifting between daily, weekly, or monthly vaping. Of those who experienced transitions in vaping behaviour, there was a considerable amount of churn. Only 7 percent of Wave 3 respondents quit on a longer-term basis; this means that most of those not vaping in Wave 2 had relapsed by Wave 3, and most of those not vaping in Wave 3 had quit more recently, i.e., between Wave 2 and Wave 3.



A more detailed breakdown of vaping behaviour across each wave shows that even with quitting included in the total, the proportion of respondents vaping daily was nearly unchanged across all three waves, declining about 4 points from Wave 1 (52%) to Wave 3 (48%); this means that among those still vaping, the proportion of those vaping on a daily basis actually increased.

Looking more closely at vaping status over time, while those who were vaping *weekly* in Wave 1 are more likely to be not vaping than those who were vaping daily (22% vs. 12%) by Wave 3, those who were vaping weekly in Wave 1 were more likely to vape daily than not at all (37% vs. 22%).

#### Vaping status across three waves of study

<b>QA2. During the past 30 days, how often have you used a vaping product with or without nicotine?</b>	<b>W1 total (n=4,815)</b>	<b>W2 total (n=693)</b>	<b>W3 total (n=379)</b>
Daily	52%	47%	48%
<i>Net: Occasional vaping</i>	48%	35%	35%
Less than daily, but at least once a week	48%	26%	25%
Less than once a week, but at least once in the past month	N/A	9%	9%
Not at all	N/A	18%	17%

Base: All respondents

#### Wave 2 vaping status by Wave 1 vaping status

<b>QA2. During the past 30 days, how often have you used a vaping product with or without nicotine?</b>	<b>W1 Daily (n=327)</b>	<b>W1 Weekly (n=366)</b>
Daily	73%	25%
<i>Net: Occasional vaping</i>	14%	53%
<i>Less than daily, but at least once a week</i>	10%	40%
<i>Less than once a week, but at least once in the past month</i>	4%	13%
Not at all	13%	23%

Base: All respondents

#### Wave 3 vaping by Wave 1 vaping status

<b>QA2. During the past 30 days, how often have you used a vaping product with or without nicotine?</b>	<b>W1 Daily (n=183)</b>	<b>W1 Weekly (n=196)</b>
Daily	60%	37%
<i>Net: Occasional vaping</i>	29%	40%
<i>Less than daily, but at least once a week</i>	19%	31%
<i>Less than once a week, but at least once in the past month</i>	10%	9%
Not at all	12%	22%

Base: All respondents

In Wave 2 and 3, incidence of daily, weekly, and monthly vaping was generally consistent across demographic groups. In British Columbia, daily vaping was less prevalent (Wave 2 37%, Wave 3 36%) compared to other regions (other regions ranged from 39% to 63% vaping daily across both waves).

In terms of smoking behaviour and past smoking, by Wave 3, daily vaping is more prevalent among those who used to smoke (55%), and particularly in those who quit smoking on a long term basis (56%) in comparison with those who never smoked (36%); this difference was present in the Wave 1 baseline, and is also noted directionally in Wave 2, though it is not statistically significant there. This pattern is the foundation of one of the central findings of this study: where vaping completely replaces smoking, individuals tend to vape daily and frequently, and continued to do so through the duration of the study. While it is unclear how their use would change in later years, intentions to quit vaping in this group are quite low.

## 2. Vaping frequency among those vaping occasionally

*Most vaped 10 or fewer days out of the past 30; women are more likely than men to vape for 10 or more days.*

Among those vaping on an occasional basis, i.e., less than daily, most vaped 10 days or fewer out of the past 30 days (Wave 2 63%, Wave 3 64%).

### Vaping days in past month

<b>QA2b. On how many days of the last 30 days did you vape with or without nicotine? (please exclude vaping cannabis.)</b>	<b>W2 total (n=249)</b>	<b>W3 total (n=131)</b>
Net: 1 to 10 days	63%	64%
1-5	41%	37%
6-10	22%	27%
Net: More than 10 days	36%	36%
11-15	16%	13%
16-20	12%	20%
21-25	6%	2%
26-30	2%	1%
Mean	9.90	9.73

*Base: Those who vaped less than daily but at least once in the past 30 days (Wave 2 n=249, Wave 3 n=131)*

Among those vaping occasionally, women are more likely to have vaped more than 10 times in the past 30 days (44%) compared to men (29%). Comparing by region and age, rates of vaping are similar across groups.

With this question limited to the subset of those vaping weekly or monthly, comparisons between vaping and smoking sub-groups are limited:

- In Wave 2, those vaping monthly are more likely to vape 5 times a month or less (89%) compared to those vaping weekly (25%).
- In Wave 2 and 3, those who never smoked are more likely to vape 5 times a month or less (Wave 2 58%, Wave 3 60%) compared to those who smoke (Wave 2 31%, Wave 3 25%).

### 3. Vaping alone or with others

*A strong majority of about 8 in 10 of those who vape reported doing so alone most or all of the time.*

In Wave 2 and 3, those who vape were asked if they tend to vape alone, or with others. About eight in ten (Wave 2 80%, Wave 3 77%) say they vaped alone, or mostly alone; this was split about equally between those who vape only on their own, and mostly on their own.

#### Vaping alone or with others

<b>QA2c. Thinking of the past 30 days, did you only vape by yourself or only with others or somewhere in between?</b>	<b>W2 total (n=572)</b>	<b>W3 total (n=314)</b>
<i>Net: Alone/Mostly alone</i>	80%	77%
Only on my own	41%	40%
Mostly on my own but sometimes with others	39%	38%
About equally on my own and with others	13%	16%
<i>Net: Always/Usually with others</i>	7%	7%
Sometimes on my own but mostly with others	3%	3%
Only with others	4%	4%

*Base: Those who vaped in the past 30 days (Wave 2 n=572, Wave 3 n=314)*

Looking at demographic sub-groups, there were some differences in vaping alone or with others:

- Men are more likely to say they vape only on their own (Wave 2 46%, Wave 3 46%) compared to women (Wave 2 31%, Wave 3 32%).
- Vaping alone is more common among adults (Wave 2 84%, Wave 3 80%) than youth and young adults (Wave 2 72%, Wave 3 68%).
- Those who vape daily are more likely to vape alone or mostly alone (Wave 2 81%, Wave 3 80%) compared to those who vape monthly (Wave 2 50%, Wave 3 61%).
- Those who reduced their vaping from one wave to the next are more likely to vape always or usually with others (Wave 2 31%, Wave 3 18%) compared to those who continued vaping at the same rate (Wave 2 3%, Wave 3 4%).

#### 4. Vaping locations

*Most commonly, vaping occurs at home whether alone or with others; vaping at a friend's place is also common for those who vape with others.*

Whether vaping alone, or in company, the most reported location for vaping is home. Nearly three-quarters of vaping with others occurs at home (Wave 2 74%, Wave 3 72%), and solo vaping at home is even more frequent (Wave 2 82%, Wave 3 82%).

Vaping at a friend's place is commonly reported for those who vape with others (Wave 2 49%, Wave 3 44%), but just one in five who vape alone say they do so at a friend's place (Wave 2 20%, Wave 3 20%).

The car is a common location for vaping both in company (Wave 2 38%, Wave 3 32%) and alone (Wave 2 37%, Wave 3 39%).

##### Locations for vaping with others

<b>QA2d. While vaping with others in the past 30 days, where did you vape?</b>	<b>W2 total (n=350)</b>	<b>W3 total (n=189)</b>
At home	74%	72%
At a friend's place	49%	44%
In a car	38%	32%
At a public location (e.g., park, restaurant, sidewalk)	36%	34%
At work (excluding working at home)	35%	33%
At school (excluding studying at home)	18%	12%
Other	<1%	2%

Base: P30D vaping with others (Wave 2 n=350, Wave 3 n=189)

Note: QA2d was not asked in Wave 1

##### Locations for vaping alone

<b>QA2e. While vaping on your own in the past 30 days, where did you vape?</b>	<b>W2 total (n=550)</b>	<b>W3 total (n=300)</b>
At home	82%	82%
In a car	37%	39%
At work (excluding working at home)	33%	27%
At a public location (e.g., park, restaurant, sidewalk)	26%	26%
At a friend's place	20%	20%
At school (excluding studying at home)	12%	9%
Other	1%	1%

Base: Those who have vaped alone in the past 30 days (Wave 2 n=550, Wave 3 n=300)

Note: QA2d was not asked in Wave 1

There are some differences between sub-groups when it comes to vaping locations:

- In Wave 2, adults are less likely to vape with others in a car (31%) compared to youth and young adults (48%).

- In Wave 3, youth are less likely to vape alone in a car (12%) compared to young adults (45%) and adults (40%). They are also less likely to vape alone in a public place (6%), compared to young adults (22%) and adults (28%).
- In both waves, adults 25+ are understandably less likely to vape at school, either alone or with others, compared to youth and young adults.
- In Wave 3, women are more likely to vape alone in a car (48%) than men (32%); a directional difference is also present in Wave 2 but it is not statistically significant.
- Those vaping on a monthly basis are less likely to vape at home with others (Wave 2 37%, Wave 3 35%) compared to those vaping daily (Wave 2 85%, Wave 3 77%) or weekly (Wave 2 66%, Wave 3 75%).

**5. Needing assistance to read written materials provided by medical professionals**

*Most respondents rarely or never need help reading medical materials. Those who formerly smoked or vaped were less likely than those who currently smoked or vaped to need assistance.*

In Wave 3, a question was added to gauge how often those who vape or who previously vaped need help to read instructions, pamphlets or other written materials from their doctors or pharmacies. While most respondents reported never or rarely needing help, one in five (18%) said they need help some of the time, and about one in ten (8%) say they need help reading medical materials most or all of the time.

<b>QA4. How often do you need to have someone help you when you read instructions, pamphlets or other written materials from your doctor or pharmacy?</b>	<b>W3 Total (n=379)</b>
<i>Net: Never/rarely</i>	72%
Never	48%
Rarely	24%
Sometimes	18%
<i>Net: Most of the time/always</i>	8%
Most of the time	4%
Always	3%

*BASE: All respondents (Wave 3 n=279)*

*Note: QA4 was only asked in the Wave 3 survey*

No notable differences arose between demographic subgroups. With regards to vaping and smoking behavior, the following differences emerged:

- Those who had quit vaping (83%) were more likely than those who continued to vape (70%) to indicate that they rarely or never need help reading written materials provided by their doctor or pharmacy.
- Similarly, those who formerly smoked (80%) were more likely than those who had smoked in the past 30 days (62%) to say that they rarely or ever need help reading these materials.

While it is not possible ascertain why these differences exist with this data alone, one possible explanation is that people who are able to comprehend medical materials without help are better equipped to find the information they need to help them quit smoking and/or vaping.



## 6. Vaping with nicotine

*Most of those who vape use nicotine liquids, with about half doing so daily across all three waves.*

Across all waves of the study, nicotine liquids are used by a vast majority of those vaping. Consistently, about half vape with nicotine every day, while only a very small proportion say they never use nicotine (from 3% in Wave 1 to 6% in Wave 3).

### Vaping with nicotine

<b>QB1. Which of the following best describes how often you vaped liquids with nicotine in the past 30 days?</b>	<b>W1 total (n=4,815)</b>	<b>W2 total (n=572)</b>	<b>W3 total (n=314)</b>
I vaped them every day	48%	50%	49%
<i>Net: Occasional</i>	49%	44%	45%
I vaped them at least once a week, but not daily	43%	32%	33%
I vaped them less than weekly, but at least once in the past 30 days	6%	12%	12%
Not at all	3%	5%	6%

*Base: W1 all respondents (n=4,815), W2 & W3 vaped in the past 30 days (Wave 2 n=572, Wave 3 n=314)*

In terms of region, age, and gender, use of nicotine liquids is relatively consistent between groups.

Because most of those who vape use nicotine, vaping frequency with nicotine (i.e., daily, weekly, monthly) is closely aligned with overall vaping frequency:

- Among those who vape daily in Wave 2, 84% report vaping with nicotine every day. In Wave 3 this is still high at 80%.
- There is a cohort of people who vape on a daily basis, but only use nicotine occasionally (Wave 2 12%, Wave 3 17%) or not at all (Wave 2 4%, Wave 3 2%).
- Of those who continued to vape at the same rate between Wave 2 and Wave 3, most (59%) use nicotine every day, compared to just 8 percent of those who indicated they had reduced their vaping between waves.

Vaping with nicotine is associated with longer-term smoking cessation:

- In Wave 3, those who stopped smoking over a longer term were more likely to report using nicotine liquids daily (63%) compared to those who had newly quit smoking since Wave 2 (37%), those who had relapsed smoking since Wave 2 (38%), and those who had never smoked (38%).
- Those still smoking in Wave 3 are more likely to use nicotine liquids on an occasional basis (52%) compared to those who had quit by Wave 3 (38%) or never smoked at all (38%).

## 7. Vaping without nicotine

*Those who vape also use vaping liquids that do not contain nicotine at least occasionally; there is a downward trend in the use of non-nicotine liquids from Wave 1 to Wave 3.*

Among those who vape, most use vaping liquids without nicotine on an occasional basis. However, there is a notable decline in the proportion who use liquids without nicotine from Wave 1 to Wave 3, especially in daily use which declined from 20 percent in Wave 1 to 12 percent in Wave 3.

### Vaping without nicotine

<b>QB2. Which of the following best describes how often you vaped liquids without nicotine in the past 30 days?</b>	<b>W1 total (n=4,815)</b>	<b>W2 total (n=572)</b>	<b>W3 total (n=314)</b>
I vaped them every day	20%	17%	12%
<i>Net: Occasional</i>	48%	42%	43%
I vaped them at least once a week, but not daily	35%	27%	30%
I vaped them less than weekly, but at least once in the past 30 days	13%	15%	13%
Not at all	32%	41%	45%

Base: W1 all respondents (n=4,815), W2 & W3 vaped in the past 30 days (Wave 2 n=572, Wave 3 n=314)

For the most part, non-nicotine liquid use is similar across region, age, and gender lines. In Wave 3, men report higher daily use (16%) compared to women (7%).

Though non-nicotine vaping occurs at lower rates than vaping with nicotine, results by vaping transition or status are still closely aligned with vaping overall:

- Among those who vape daily in Wave 2, 26% report vaping without nicotine every day. In Wave 3, this is 19%.
- Those who are status quo vaping (i.e., had not reduced or increased vaping between waves) in Wave 2 and 3 report higher daily use of non-nicotine liquids (Wave 2 20%, Wave 3 16%) compared to those who reduced their vaping (Wave 2 3%, Wave 3 2%).

Unlike vaping with nicotine, vaping without nicotine is not associated with cessation, rather, it is more common among those still smoking in Wave 3:

- In Wave 2 and 3, those who smoke are less likely to say they never use non-nicotine vaping liquids (Wave 2 29%, Wave 3 35%) compared to those who formerly (Wave 2 50%, Wave 3 55%) or never smoked (Wave 2 55%, Wave 3 55%).
- Daily non-nicotine vaping rates are similar across smoking groups in Wave 3, including ongoing smoking (i.e., continuous from Wave 2 to Wave 3) 14%, relapsed smoking (16%), and new smoking (14%).
- Occasional use of non-nicotine liquids is higher in Wave 3 for those still smoking (51%) compared to those who formerly smoked (34%).

## 8. Vaping when unsure of nicotine content

*Rates of vaping without knowing the nicotine content have decreased over the three waves.*

The proportion of respondents who reported vaping when unsure of nicotine content has decreased over the course of three waves of study. In Wave 1, about one in three (36%) said they never vaped liquids without knowing the nicotine content; by Wave 3 this had risen to almost half (47%). It is possible that with continued exposure to vaping products, the respondents became more familiar with nicotine content in their vaping liquid. Alternatively, because this is a return-to-sample study, there could be some degree of interviewer effect leading respondents to be more aware of the products they are using in subsequent surveys.

### Vaping when unsure of nicotine content

<b>QB3. Which of the following best describes how often you vaped liquids you weren't sure contained nicotine or not in the past 30 days?</b>	<b>W1 total (n=4,815)</b>	<b>W2 total (n=572)</b>	<b>W3 total (n=314)</b>
I vaped them every day	21%	16%	18%
<i>Net: Occasional</i>	43%	40%	35%
I vaped them at least once a week, but not daily	32%	27%	24%
I vaped them less than weekly, but at least once in the past 30 days	11%	13%	11%
Not at all	36%	44%	47%

Base: W1 all respondents (n=4,815), W2 & W3 vaped in the past 30 days (Wave 2 n=572, Wave 3 n=314)

In terms of demographics, there are few significant differences:

- In Wave 2, women are more likely to say they do not use these liquids with unknown nicotine content (53%) compared to men (40%). There is a similar directional, but not significant difference present in Wave 3.
- In Wave 2, occasional use is higher for Ontario (46%) and BC (53%) compared to Quebec (32%) and the prairies (31%). This is still the case for Ontario in Wave 3 (45%).
- Somewhat paradoxically, youth aged 15 to 19 are more likely than other age groups to report using them not at all in Wave 2 (58%), but less likely in Wave 3 (11%). It is possible this difference between waves reflects a change in awareness of vaping products, rather than an actual shift in use.

Again, results by vaping transition or status line up with vaping overall:

- Among those who vape daily in Wave 2, 24% report vaping when they are unsure of nicotine every day. In Wave 3, this is 30%.
- Those who are status quo vaping (i.e., had not reduced or increased vaping between waves) in Wave 2 and 3 report higher daily use when unsure of nicotine (Wave 2 18%, Wave 3 18%) compared to those who reduced their vaping (Wave 2 4%, Wave 3 4%).

It may be that those who have quit smoking are more conscientious about the liquids they vape. Looking in terms of smoking behaviour, vaping when unsure of nicotine is associated with ongoing smoking:

- Most of those who formerly smoked in Wave 2 and 3 say they do not vape when unsure of nicotine content (Wave 2 55%, Wave 3 57%), significantly higher than those who smoke (Wave 2 29%, Wave 3 37%).
- This is particularly true for those who quit smoking on a longer-term basis (66%), even compared to those who had newly quit smoking in Wave 3 (37%).

**9. Timing of first vape**

*Timing of first vape with nicotine is consistent across all waves; about six in ten vape within 30 minutes of waking up.*

For each wave, of those who vaped with nicotine in the past 30 days, about six in ten have their first vape within 30 minutes of waking; timing of first vape with nicotine is very consistent across all waves.

**First vape**

<b>QB4. How soon after you wake up do you usually have your first vape with nicotine?</b>	<b>W1 total (n=4,666)</b>	<b>W2 total (n=542)</b>	<b>W3 total (n=295)</b>
Net: within 30 minutes	58%	63%	58%
Less than 5 minutes	18%	15%	17%
6 to 30 minutes	40%	48%	41%
31 minutes to 1 hour	19%	15%	20%
More than 1 hour	23%	22%	22%

*Base: Those who vape with nicotine (Wave 1 n=4,666, Wave 2 n=542, Wave 3 n=295)*

There are few significant demographic differences.

- In Wave 3, women more often report having their first vape within 5 minutes of waking (22%) compared to men (12%); this correlation is not present in Wave 2.

In terms of vaping status and transitions, ongoing and frequent vaping is associated with a higher likelihood of vaping soon after waking:

- Vaping within 30 minutes of waking is significantly more common among those vaping daily in both waves (Wave 2 77%, Wave 3 71%) compared to those vaping occasionally (Wave 2 44%, Wave 3 38%).
- Those vaping on a status quo basis from Wave 2 to 3 are more likely to vape within 30 minutes of waking (64%) compared to those who reduced their vaping in that time (39%).

Vaping soon after waking is associated with longer term smoking cessation:

- Those who had quit smoking on a longer-term basis in Wave 3 are more likely to vape within 30 minutes of waking (67%) than those who have never smoked (50%) or those who are newly smoking in Wave 3 (50%).
- In Wave 2, those who formerly smoked are more likely to vape within 30 minutes (74%) compared to those still smoking (62%) and those who never smoked (49%).

## 10. Number of vapes per day – with nicotine

*About half vape with nicotine between one to ten times per day, consistent across all three survey waves.*

Counting number of vapes per day (with nicotine) is a measurement of vaping heaviness that forms part of the Heaviness of Vaping with Nicotine Index (HVNI). Results are generally consistent from Wave 1 through Wave 3, with nearly half of those vaping with nicotine vaping one to ten times per day. Note that results for number of vapes per day without nicotine, and when nicotine is unknown are shown later in the report.

### Number of vapes per day – with nicotine

<b>QB5CA. On days you use them, please estimate how many separate times per day you usually vape with nicotine?</b>	<b>W1 total (n=4,666)</b>	<b>W2 total (n=542)</b>	<b>W3 total (n=295)</b>
Net: 1-10	49%	48%	47%
5 or less times per day	32%	35%	32%
6 – 10 times per day	17%	13%	15%
Net: 11-20	17%	21%	22%
11 – 15 times per day	10%	12%	14%
16 – 20 times per day	8%	9%	8%
Net: 21-30	9%	9%	7%
21 – 25 times per day	5%	7%	5%
26 – 30 times per day	3%	3%	3%
Net: 31+	25%	22%	24%
31 or more times per day	4%	5%	3%
I vape continuously throughout the day	21%	17%	20%

Base: Those who vape with nicotine (Wave 1 n=4,666, Wave 2 n=542, Wave 3 n=295)

Looking across key demographic groups, there are few significant differences:

- Women are more likely to say they vape continuously throughout the day (Wave 2 23%, Wave 3 28%) compared to men (Wave 2 13%, Wave 3 14%).
- In Wave 2, BC residents are notably less likely to vape continuously (4%) compared to all other regions (17% to 24%). A directional, but not statistically significant difference is also noted in Wave 3.

In terms of vaping behaviour, there are some noteworthy differences between sub-groups:

- Daily vaping is associated with a high frequency of vaping throughout the day. Among those who vape every day, about one in three (Wave 2 33%, Wave 3 36%) vape more than 30 times a day; for those who vape on an occasional basis, this is less than one in ten (Wave 2 7%, Wave 3 4%).
- Those who reduced their vaping between Waves 2 and 3 are far more likely to vape ten times a day or less (64%) compared to those whose vaping did not change (44%) or those whose vaping increased (44%).

Smoking behaviour also relates to vaping frequency during the day in some interesting ways:

- Those who newly quit smoking between Wave 2 and Wave 3 tend to vape on a less frequent basis, with more than half (W3 57%) vaping 10 times a day or less, which is significantly higher than those who stopped smoking between Wave 1 and Wave 2 (W2 34%).
- Most often, those with longer term smoking cessation in Wave 3 report vaping continuously throughout the day (36%). Interestingly, vaping continuously is also common among those who never smoked (32%). This stands in contrast to those who relapsed smoking (10% continuously) and those whose smoking is ongoing (11%).

## 11. Heaviness of Vaping with Nicotine Index (HVNI)

*Across all three waves, half of those vaping daily land in the low dependence bracket for HVNI.*

The Heaviness of Vaping with Nicotine Index (HVNI) measures a person who vapes' nicotine dependence. This metric is calculated based on the timing of each respondent's first vape of the day with nicotine (QB4), and the number of vapes per day with nicotine (QB5A)<sup>1</sup>; each person who vapes is assigned a score based on how early they vape and how often they vape in a day. The formula for calculating HVNI can be found in the detailed methodology section of this report.

HVNI scores were very consistent across all three waves of study with half of those vaping with nicotine landing in the low dependence category.

### Heaviness of Vaping with Nicotine Index (HVNI)

Score	W1 total (n=4,666)	W2 total (n=542)	W3 total (n=295)
Low dependence (score 0-2)	52%	49%	52%
Moderate dependence (score 3-4)	26%	34%	27%
High dependence (score 5-6)	22%	18%	22%
Mean	2.65	2.60	2.60
Median	2	3	2

Base: Those who vape with nicotine (Wave 2 n=542, Wave 3 n=295)

There are few sub-group differences where HVNI is concerned. As far as demographics go, in Wave 3, men are more likely to be low dependence (59%) compared to women (43%), though in Wave 2 the groups are statistically similar. There are no meaningful differences by age or region.

Some differences by vaping and smoking status are noted:

- In Wave 2 and 3, those who vape daily are less likely to be in the low dependence category (Wave 2 31%, Wave 3 37%) compared to those vaping weekly or monthly (Wave 2 73%, Wave 3 74%).

<sup>1</sup> B4 How soon after waking first vape with nicotine: SCORE: 0 if 61+ minutes; 1 if 31-60 minutes; 2 if 6-30 minutes; 3 if 0-5 minutes

B5A # times vape with nicotine: SCORE: 0 if 1-10 (codes 01 or 02); 1 if 11-20 (codes 03 or 04); 2 if 21-30 (codes 05 or 06); 3 if 31 or more (codes 07 or 08).

- In Wave 2, those with past 30 day smoking were more likely to be low dependence (53%) compared to those who formerly smoked (39%), consistent with the finding people who formerly smoked vape more frequently than those who currently smoke and vape. A directional difference is also noted in Wave 3 but it is not statistically significant.

**12. Nicotine Content**

*Those who vape daily use higher concentrations than those who vape weekly, while those who vape monthly are more often unaware of the nicotine levels in their vaping.*

In Waves 2 and 3, a new question was introduced asking respondents who vape with nicotine about the concentration levels of the liquids they vape. Lower concentrations below 10.0 mg/ml are most common (Wave 2 58%, Wave 3 55%). One in ten could not recall the concentration they use (Wave 2 9%, Wave 3 9%).

**Nicotine Concentration**

<b>QB5b. How much nicotine did the e-cigarettes, cartridges, pods or e-liquids you used contain? If you used different concentrations of nicotine, please select the one used most frequently.</b>	<b>W2 total (n=542)</b>	<b>W3 total (n=295)</b>
Net 10.0 mg/ml (1.00%) or lower	58%	55%
Up to 5.0 mg/ml (or 0.10 to 0.50%)	27%	26%
5.1 to 10.0 mg/ml (or 0.51 to 1.00%)	31%	29%
Net over 10.0 mg/ml (1.00%)	33%	36%
10.1 to 15.0 mg/ml (or 1.01 to 1.50%)	17%	18%
15.1 to 20.0 mg/ml (or 1.51 to 2.00%)	11%	16%
Over 20 mg/ml (or over 2.00%)	5%	2%
Not sure	9%	9%

Base: Those who vape with nicotine (Wave 2 n=542, Wave 3 n=295)

Note: QB5b was not asked in Wave 1

As a general pattern, those who vape daily use higher concentrations than those who vape weekly, while those who vape monthly are more often unaware of the nicotine levels in their vaping.

**Nicotine Concentration by Vaping Frequency**

<b>QB5b. How much nicotine did the e-cigarettes, cartridges, pods or e-liquids you used contain? If you used different concentrations of nicotine, please select the one used most frequently.</b>	<b>W2 Daily Vaping (n=310)</b>	<b>W3 Daily Vaping (n=179)</b>	<b>W2 Weekly Vaping (n=177)</b>	<b>W3 Weekly Vaping (n=89)</b>	<b>W2 Monthly Vaping (n=55)</b>	<b>W3 Monthly Vaping (n=27)</b>
Net 10.0 mg/ml (1.00%) or lower	53%	52%	69%	64%	51%	41%
Up to 5.0 mg/ml (or 0.10 to 0.50%)	26%	26%	25%	24%	36%	30%
5.1 to 10.0 mg/ml (or 0.51 to 1.00%)	27%	26%	44%	40%	15%	11%

Net over 10.0 mg/ml (1.00%)	39%	43%	24%	25%	25%	30%
10.1 to 15.0 mg/ml (or 1.01 to 1.50%)	18%	21%	16%	16%	15%	7%
15.1 to 20.0 mg/ml (or 1.51 to 2.00%)	16%	20%	3%	9%	10%	19%
Over 20 mg/ml (or over 2.00%)	5%	2%	5%	0%	0%	4%
Not sure	7%	4%	7%	11%	24%	30%

Where demographic sub-groups are concerned, nicotine concentration is broadly consistent across region, age, and gender in Waves 2 and 3.

In Wave 2, those who smoke are more likely to favour slightly higher concentrations between 5.1 mg/ml and 15.0 mg/ml (64%) compared to those who formerly (38%) or never smoked (25%). Those who formerly or never smoked (35%), on the other hand, used the lowest concentrations, i.e., up to 5.0 mg/ml, more than those still smoking (19%). It may be that those using vaping to assist with smoking cessation are inclined to choose lower concentrations as they transition away from nicotine, while those still smoking tend to use vaping as a substitute for smoking and therefore prefer the higher nicotine. These differences are present directionally but are not statistically significant in Wave 3.

### 13. Number of vapes per day – without nicotine

*Those who vape without nicotine usually do so 10 times per day or less.*

Similar to Wave 1, most who vape liquids without nicotine do so 10 times per day or less (Wave 2 71%, Wave 3 62%).

#### Number of vapes per day – without nicotine

<b>QB5CB. On days you use them, please estimate how many separate times per day you usually vape without nicotine?</b>	<b>W1 total (n=3,358)</b>	<b>W2 total (n=340)</b>	<b>W3 total (n=173)</b>
Net: 1-10	66%	71%	62%
5 or less times per day	48%	51%	55%
6 – 10 times per day	18%	20%	7%
Net: 11-20	17%	16%	20%
11 – 15 times per day	10%	10%	10%
16 – 20 times per day	7%	6%	9%
Net: 21-30	7%	8%	8%
21 – 25 times per day	5%	6%	5%
26 – 30 times per day	3%	2%	3%
Net: 31+	9%	5%	10%
31 or more times per day	2%	1%	3%
I vape continuously throughout the day	8%	4%	7%

Base: Those who vape without nicotine (Wave 1 n=3, 358, Wave 2 n=340, Wave 3 n=173)

Vaping without nicotine is generally consistent across region, age, and gender groups in Waves 2 and 3.



In terms of vaping behaviour, there are some differences to speak of:

- A strong majority of those vaping occasionally say they vape 10 times a day or less (Wave 2 81%, Wave 3 75%) compared to about half of those vaping daily (Wave 2 58%, Wave 3 47%).
- In Wave 3, vaping without nicotine is less frequent among those with reduced vaping (75% 10 times a day or less) and relapsed vaping (77%), compared to those with increased vaping (47%).

There does not appear to be a relationship between vapes per day without nicotine, and smoking behaviour or cessation.

**14. Number of vapes per day – unsure of nicotine**

*Those who vape while unsure of nicotine content usually do so 10 times per day or less.*

Again in line with Wave 1 and quite similar to vaping without nicotine, most of those who vape liquids without knowing the nicotine content do so 10 times per day or less (Wave 2 61%, Wave 3 63%).

**Number of vapes per day – unsure of nicotine**

<i>QB5CC. On days you use them, please estimate how many separate times per day you usually vape when you're not sure if it contains nicotine?</i>	<b>W1 total (n=3,183)</b>	<b>W2 total (n=309)</b>	<b>W3 total (n=167)</b>
Net: 1-10	61%	61%	63%
<i>5 or less times per day</i>	46%	48%	50%
<i>6 – 10 times per day</i>	15%	14%	13%
Net: 11-20	18%	19%	14%
<i>11 – 15 times per day</i>	10%	12%	7%
<i>16 – 20 times per day</i>	7%	7%	7%
Net: 21-30	8%	10%	11%
<i>21 – 25 times per day</i>	5%	6%	8%
<i>26 – 30 times per day</i>	3%	3%	3%
Net: 31+	13%	10%	13%
<i>31 or more times per day</i>	2%	2%	1%
<i>I vape continuously throughout the day</i>	11%	8%	11%

*Base: Those who vape when unsure of nicotine content (Wave 1 n=3,183, Wave 2 n=309, Wave 3 n=167)*

Vaping when unsure of nicotine does not differ in any substantial way between region, age, or gender groups.

Looking at vaping behaviour, those vaping occasionally in Wave 3 are more likely to say they vape 10 times a day or less (74%) compared to those vaping daily (52%). There is a directional difference noted in Wave 2 that is not statistically significant.

Smoking behaviour or cessation is not correlated with vapes per day when unsure of nicotine content.

### 15. Most frequent vaping flavours

*Regardless of nicotine content, fruit is the flavour used most often by people who vape.*

In Waves 2 and 3, those still vaping were asked about the flavour they use most often, in addition to which flavours they prefer. Fruit emerged as the flavour used most often, regardless of nicotine content. Mint was consistently in the top three choices for vaping with nicotine, without nicotine, or when unsure. Tobacco flavour is also top three among those vaping with or without nicotine, but falls in ranking when looking at those vaping liquids of unknown nicotine content; this may be because unknown vaping liquids are used more often in a recreational context where other flavours are preferable, rather than in a smoking cessation context.

#### Flavours vaped most often: with nicotine

<b>QB7a. We recognize your preferred flavour may or may not be the same as the one you most often vape. What flavour do you most often vape with nicotine?</b>	<b>Wave 2 total (n=542)</b>	<b>Wave 3 total (n=295)</b>
Fruit	35%	32%
Tobacco flavour	18%	18%
Mint	10%	13%
Menthol	10%	8%
Dessert	6%	7%
Candy	5%	8%
Coffee/tea	5%	5%
Flavourless	3%	4%
Alcohol flavour	2%	2%
Other	1%	1%
Not sure	3%	3%

Base: Those who vape with nicotine (Wave 2 n=542, Wave 3 n=295)

Note: QB7a was not asked in Wave 1

## Flavours vaped most often: without nicotine

<b>QB7b. What flavour do you most often vape without nicotine?</b>	<b>Wave 2 total (n=340)</b>	<b>Wave 3 total (n=173)</b>
Fruit	22%	31%
Mint	15%	13%
Tobacco flavour	11%	12%
Dessert	10%	6%
Coffee/tea	10%	6%
Menthol	9%	7%
Candy	8%	8%
Flavourless	7%	5%
Alcohol flavour	2%	3%
Other	2%	2%
Not sure	6%	8%

Base: Those who vape without nicotine (Wave 2 n=340, Wave 3 n=173)

Note: QB7b was not asked in W1

## Flavours vaped most often: unsure of nicotine

<b>QB7c. What flavour do you most often vape when you're not sure if it contains nicotine?</b>	<b>Wave 2 total (n=309)</b>	<b>Wave 3 total (n=167)</b>
Fruit	16%	20%
Mint	13%	13%
Candy	10%	10%
Menthol	9%	9%
Flavourless	9%	5%
Tobacco flavour	8%	9%
Dessert	7%	5%
Coffee/tea	7%	8%
Alcohol flavour	5%	5%
Other	4%	2%
Not sure	13%	15%

Base: Those who vape when unsure of nicotine content (Wave 2 n=309, Wave 3 n=167)

Note: QB7c was not asked in W1

Differences in flavour preferences between demographic groups are somewhat transient between survey waves; this may in part be an artifact of diminishing sample sizes. Looking specifically at vaping with nicotine:

- In Wave 2, women prefer fruit flavour when vaping with nicotine (47%) compared to men (29%), but in Wave 3, this difference disappears.

- Similarly, youth 15 to 19 also prefer fruit (55%) when vaping with nicotine in Wave 2 compared to older age groups (30% to 33%), but again, this difference is not present in Wave 3.
- Mint (with nicotine) is used more in the Prairies (19%) in Wave 2 compared to Quebec (4%) and Atlantic Canada (6%), but this difference is not present in Wave 3. In Wave 3, however, tobacco flavour (with nicotine) is considerably more common in the prairies (33%) and Atlantic Canada (29%) than in BC (7%), Ontario (16%), or Quebec (13%). Differences between regions may be related to rules limiting the availability of flavours in some provinces.

Flavour use between vaping and smoking sub-groups reveals some interesting differences that suggest flavour choices are related to the role of vaping. Fruit flavour may be associated with recreational vaping or vaping otherwise not tied to current smoking, whereas tobacco flavour is associated with use of both vaping and cigarettes (but not smoking cessation):

- Among those vaping daily with nicotine, fruit is used more often (41%) in Wave 2 compared to those vaping occasionally (27%); this difference is not seen in Wave 3.
- Those who increased their vaping from Wave 2 to Wave 3 use fruit flavour more often (45%) than those with status quo vaping (29%) or those who relapsed vaping (24%).
- Those who had never smoked in Wave 2 and 3 are more likely to use fruit flavour (Wave 2 52%, Wave 3 50%) compared to those with past 30 day smoking (Wave 2 29%, Wave 3 26%).
- Fruit flavour is the most preferred flavour among those who formerly smoked but this preference is not significantly different than other sub-groups (Wave 2 35%, Wave 3 37%).
- Tobacco flavour, on the other hand, is used more often by those in Wave 3 who alternate vaping and smoking (24%) than those who had never smoked (5%) or formerly smoked (12%).
- Those who alternate smoking and vaping have a stronger preference for tobacco (Wave 2 22%, Wave 3 24%) compared to those who or never smoked (Wave 2 4%, Wave 3 5%). In Wave 3, this also holds true in comparison to those who formerly smoked (24% compared to 12%).

**16. Preferred vaping flavours**

*Fruit is the most preferred flavour, regardless of nicotine content. While tobacco takes second place when vaping with nicotine, candy flavour is a more common choice for those vaping without nicotine or when unsure of nicotine.*

On top of being the flavour used most often, fruit is also the flavour most preferred by those who vape, regardless of nicotine content. Mint also appears in the top three for vaping with, without, and when unsure of nicotine content. While tobacco ranks highly as a flavour with nicotine, for vaping without nicotine or when unsure, candy is the flavour that rounds out the top three.

**Preferred vaping flavours: with nicotine**

<b>QB7i-a. What is your preferred flavour to vape with nicotine?</b>	<b>Wave 1 total (n=4,666)</b>	<b>Wave 2 total (n=542)</b>	<b>Wave 3 total (n=295)</b>
Fruit	35%	39%	34%
Tobacco flavour	15%	13%	18%
Mint	12%	11%	13%
Candy	11%	9%	8%
Menthol	10%	10%	6%
Dessert	4%	4%	6%
Coffee/tea	4%	7%	8%
Flavourless	3%	3%	3%
Alcohol flavour	2%	2%	<1%
Other	1%	1%	1%
Not sure	2%	1%	2%

*Base: Those who vape with nicotine (Wave 1 n=4,666, Wave 2 n=542, Wave 3 n=295)*

## Preferred vaping flavours: without nicotine

<b>QB7i-b. What is your preferred flavour to vape without nicotine?</b>	<b>Wave 1 total (n=3,358)</b>	<b>Wave 2 total (n=340)</b>	<b>Wave 3 total (n=173)</b>
Fruit	28%	29%	26%
Mint	13%	14%	14%
Candy	13%	12%	10%
Tobacco flavour	9%	7%	9%
Menthol	9%	12%	9%
Coffee/tea	7%	11%	10%
Dessert	6%	7%	8%
Flavourless	5%	3%	5%
Alcohol flavour	4%	1%	2%
Other	2%	<1%	2%
Not sure	6%	3%	6%

Base: Those who vape without nicotine (Wave 1 n=3,358, Wave 2 n=340, Wave 3 n=173)

## Preferred vaping flavours: unsure of nicotine

<b>QB7i-c. What is your preferred flavour to vape when you're not sure if it contains nicotine?</b>	<b>Wave 1 total (n=3,183)</b>	<b>Wave 2 total (n=309)</b>	<b>Wave 3 total (n=167)</b>
Fruit	24%	19%	23%
Candy	12%	11%	10%
Mint	11%	14%	13%
Menthol	10%	9%	10%
Tobacco flavour	9%	7%	11%
Dessert	7%	9%	7%
Coffee/tea	5%	10%	5%
Flavourless	5%	5%	3%
Alcohol flavour	4%	5%	5%
Other	2%	2%	2%
Not sure	11%	9%	12%

Base: Those who vape when unsure of nicotine content (Wave 1 n=3,183, Wave 2 n=309, Wave 3 n=167)

Flavour preferences are largely unvaried, regardless of nicotine content, across demographic groups, and the differences that exist are not consistent from wave to wave.

Some differences are visible between regions, but these may also reflect limits on flavour availability. For instance, in Wave 2, fruit is preferred more by those vaping with nicotine in Ontario (47%) and Quebec (48%) compared to all other regions (23% to 32%), but this pattern is not present in Wave 3.

Another pattern that disappears from Wave 2 to Wave 3 is a stronger preference for fruit flavours with nicotine among youth and young adults (50%) compared to adults 25+ (33%). This may be due to the diminishing sample size from one wave to the next, particularly since youth were less likely to return to subsequent study waves.

Preferred flavours with nicotine, like flavours used most, point to differences between those who smoke, and those who have never smoked, perhaps due to the different roles vaping plays (i.e. smoking cessation or recreation):

- Those who never smoked in both waves are more likely to prefer fruit flavours (Wave 2 62%, Wave 3 55%) compared to those with past 30 day smoking (Wave 2 33%, Wave 3 29%).
- On the other hand, those who never smoked are less likely to prefer tobacco flavour (Wave 2 2%, Wave 3 5%) compared to those with past 30 day smoking (Wave 2 14%, Wave 3 22%).

## C. Drivers to use and quality of life

### 1. Overall satisfaction with life

*While satisfaction levels are broadly consistent across survey waves, there is some indication that vaping cessation is associated with higher life satisfaction in Wave 2.*

Respondents were asked to rate their satisfaction with life on a scale of 0 to 10. Across the three waves of the study, general life satisfaction is fairly consistent; nearly two in three give their satisfaction with life a score of 7 to 10 in each wave, and the mean overall score is virtually unchanged over time at about 6.8 in each wave

#### Overall satisfaction with life

<b>QA3 Using a scale of 0 to 10, where 0 means "Very dissatisfied" and 10 means "Very satisfied," how do you feel about your life as a whole right now?</b>	<b>W1 total (n=4,815)</b>	<b>W2 total (n=693)</b>	<b>W3 total (n=379)</b>
Satisfied (7-10)	63%	62%	66%
Neutral (4-6)	28%	30%	26%
Dissatisfied (0-4)	9%	8%	8%
<i>Mean</i>	6.79	6.77	6.85
<i>Median</i>	7	7	7

Base: All respondents (Wave 1 n=4,815, Wave 2 n=693, Wave 3 n=379)

Overall satisfaction in Wave 3 varies between some key demographic groups:

- Satisfaction is notably lower among those in the Prairies (49% satisfied), compared to BC (73%), Quebec (73%), and Atlantic Canada (74%).
- Youth are significantly less satisfied (38%) than young adults (72%) and adults 25+ (67%) in Wave 3. This is slightly different compared to Wave 2, where adults (66%) are more satisfied than youth and young adults (55%), but youth are not substantially different than young adults.

Satisfaction is not meaningfully associated with vaping transitions or smoking history in Wave 3. In Wave 2, satisfaction levels were higher for those who had quit vaping since Wave 1 (75%) compared to those who continued vaping at the same rate (58%).



## 2. People in life who vape

### *Reported vaping among friends, classmates/coworkers, and spouses decreased from Wave 1 to Wave 2.*

In Waves 1 and 2, all respondents were asked about the people in their life who vape. From Wave 1 to Wave 2, the proportion of survey respondents who report that most or all of their friends vape declined (14%, down from 26%). A similar decline is seen for classmates or coworkers (11%, down from 19%), and for spouses or partners (21%, down from 32%).

Because the Wave 2 sample contains those who have reduced and quit vaping in addition to those vaping at the same rate (i.e. status quo), these groups were analyzed separately. Even looking at the status quo vaping group in isolation, vaping is still notably lower for friends, classmates or coworkers, and spouses, than it was in the Wave 1 survey. This could point to a general decline in vaping in the population overall, efforts to minimize temptation by spending less time with people who vape, or that those more entrenched in a vaping lifestyle were less likely to return to subsequent waves of the survey.

#### W2 People in life who vape

<b>QC1 How many of the following people in your life vape?</b>	<b>Most or all</b>	<b>Some</b>	<b>None</b>	<b>Not applicable</b>	<b>Not sure</b>
Friends	14%	60%	19%	2%	4%
Classmates/coworkers	11%	43%	24%	14%	7%
Family members	8%	36%	46%	5%	4%
Parents/guardians	6%	14%	65%	12%	3%

<b>QC1B Do the following people in your life vape?</b>	<b>Yes</b>	<b>No</b>	<b>Not applicable</b>	<b>Not sure</b>
Spouse/partner	21%	51%	26%	2%
<i>With "Not applicable" and "Not sure removed"</i>	29%	71%	N/A	N/A

Base: All respondents (Wave 2 n=693)

Note: QC1 was not asked in Wave 3

## Most or all vape

<b>QC1 Most or all of the following people vape</b>	<b>W1 total (n=4,815)</b>	<b>W2 total (n=693)</b>	<b>W2 status quo (n=468)</b>	<b>W2 reduced (n=104)</b>	<b>W2 quit (n=121)</b>
Friends	26%	14%	18%	9%	3%
Classmates/coworkers	19%	11%	14%	10%	2%
Family members	9%	8%	11%	4%	2%
Parents/guardians	7%	6%	7%	6%	0%
<b>QC1B Spouse/partner vapes</b>	32%	21%	25%	16%	10%
<i>With "Not applicable" and "Not sure removed"</i>	41%	29%	31%	24%	15%

Base: All respondents (Wave 1 n= 4,815, Wave 2 n= 693)

Note: QC1 was not asked in Wave 3

With regard to demographic subgroups, the following notable differences were observed in Wave 2:

- Ontario residents (22%) were more likely than those in all other provinces (4%-13%) to report that most or all of their friends vaped.
- Youth and young adults were more likely to report that most or all of their friends (22%) and classmates or coworkers (17%) vaped, when compared to adults aged 25+ (10% and 8%, respectively); this likely reflects higher prevalence of vaping among young people in general.
- Women (19%) were more likely than men (12%) to report that most or all of their friends vaped.

### 3. Agreement with statements about the experience of vaping

*Vaping is often seen as a way of dealing with stress. Those no longer vaping in Wave 2 and Wave 3 are less likely to agree with all six statements about vaping.*

In all three survey waves, respondents were asked about their level of agreement with six statements about vaping. At Wave 2, there was a notable decline of 12 points in two statements, “*Vaping calms me down when I am stressed or upset*” and “*I enjoy vaping when I’m with other people who vape.*” Agreement was more stable from Wave 2 and 3. Because the question was asked of all respondents, including those who had quit vaping, this decline may reflect a shift in thinking among those no longer vaping.

#### Agreement with statements about the experience of vaping

<b>QC3 Agree (score 8-10) with statements about the experience of vaping</b>	<b>W1 total (n=4,815)</b>	<b>W2 total (n=693)</b>	<b>W3 total (n=379)</b>
Vaping calms me down when I am stressed or upset.	48%	36%	37%
I enjoy vaping when I'm with other people who vape.	45%	33%	28%
I enjoy vaping when having coffee or tea.	37%	33%	33%
Vaping is an important part of my life.	28%	22%	26%
The medical evidence that vaping is harmful is exaggerated.	25%	22%	22%
Vaping helps me control my weight.	19%	18%	13%

*Base: All respondents (Wave 1 n=4,815, Wave 2 n=693, Wave 3 n=379)*

When those not vaping at all are compared to those still vaping, there is a stark difference in attitudes; those still vaping in both waves are markedly more likely to agree with all statements in both waves, with just one exception in the *medical evidence* statement in Wave 2.

Relating back to the qualitative interviews, those still vaping expressed some viewpoints in line with the perceptions noted here, especially with regard to vaping as a stress reliever and as a habit or ritual, regardless of whether or not they had intentions of eventually quitting. So it may be that shifting away from these beliefs tends to occur after a person has had time to distance themselves from vaping and experience the benefits of quitting.

## Agreement with statements about the experience of vaping

<b>QC3 Agree (score 8-10) with statements about the experience of vaping</b>	<b>W2 P30 Day Vaping (n=572)</b>	<b>W2 Formerly Vaped (n=121)</b>	<b>W3 P30 Day Vaping (n=379)</b>	<b>W3 Formerly Vaped (n=65)</b>
Vaping calms me down when I am stressed or upset.	42%	9%	42%	11%
I enjoy vaping when I'm with other people who vape.	38%	10%	32%	9%
I enjoy vaping when having coffee or tea.	38%	8%	38%	9%
Vaping is an important part of my life.	25%	6%	32%	2%
The medical evidence that vaping is harmful is exaggerated.	24%	15%	26%	6%
Vaping helps me control my weight.	21%	5%	15%	5%

Base: All respondents (Wave 2 n=693, Wave 3 n=379)

In terms of demographics subgroups:

- There are few notable differences between regions, and none that are consistent from Wave 2 to Wave 3.
- In Wave 2, men are more likely than women to agree with the statement about medical evidence being exaggerated (25%, compared to 16%), that they enjoy vaping with their coffee or tea (36% vs. 25%) and that vaping is an important part of life (25%, compared to 15%); these differences are not present in Wave 3.
- In Wave 2, adults 25+ are more likely than youth and young adults to agree that they enjoy vaping with coffee and tea (37% vs. 24%), that the medical evidence against vaping is exaggerated (27% vs. 14%), and that vaping is an important part of their lives (27% vs. 13%). These differences are no longer significant in Wave 3.

In addition to the comparison between past 30-day vaping and former vaping groups noted above, those vaping daily were more likely to agree with most statements when compared to those vaping weekly or monthly in Wave 2 and Wave 3.

#### 4. Reasons for vaping – top ten reasons

*In all three waves of study, quitting smoking is the most common reason for vaping.*

Smoking-related reasons for vaping are dominant through Waves 2 and 3. Quitting smoking is the most common reason for vaping across all three waves, though it declines from 47 percent in Wave 1 to 40 percent in Wave 3 rating this as a top three reason. Reducing cigarettes remains in second place through three study waves with one in three giving this among their top three reasons. Avoiding a return to smoking, and because it is less harmful than smoking also remain in the top four reasons. These findings align with observations from the qualitative interviews.

##### Reasons for vaping – top ten reasons

<b>QC2 Consider the following reasons why people might vape and rank your top three main reasons for vaping.</b>	<b>W1 total (n=4,815)</b>	<b>W2 total (n=572)</b>	<b>W3 total (n=314)</b>
<b>Combined 1<sup>st</sup> to 3<sup>rd</sup></b>			
To quit smoking	47%	42%	40%
To reduce the number of cigarettes I smoke	32%	30%	33%
Avoid returning to smoking	30%	34%	32%
It's less harmful to my health than smoking	25%	27%	29%
Helps me to relax/cope	24%	22%	16%
I like the flavours and/or smell	21%	20%	19%
Can vape discreetly/without being noticed	17%	15%	23%
It's cheaper than smoking	15%	14%	18%
I vape where smoking is restricted/not allowed	13%	15%	15%
I vape in certain social settings where it is more socially acceptable than smoking	12%	11%	14%

Base: W1 all respondents (n=4,815), W2 & W3 vaped in the past 30 days (Wave 2 n=572, Wave 3 n=314)

In Wave 2 there are several differences between age groups that illustrate substantive differences in the role vaping plays in the lives of adults, who mainly use it for smoking cessation, and younger people who do it for other reasons. With diminishing sample sizes from Wave 2 to 3, many of these differences are no longer statistically significant in Wave 3.

- Adults age 25+ are more likely than youth and young adults to name four key smoking related reasons for vaping:
  - To quit smoking (49% for adults, compared to 31% for youth and young adults).
  - To avoid returning to smoking (41%, compared to 23%). This is also significant in Wave 3.

- To reduce cigarettes (35%, compared to 22%).
- Because it is cheaper than smoking (18%, compared to 6%).
- Compared to adults, youth and young adults are more like to vape because:
  - They like the flavours or smells (27%, compared to 16% of adults).
  - Out of habit or ritual (18%, compared to 7%). This is also significant in Wave 3.
  - For the buzz (11%, compared to 5%). This is also significant in Wave 3.
  - Because it gives them a break (13%, compared to 3%).
  - As a social activity (10%, compared to 3%).
  - To ease boredom (9%, compared to 3%).

There are some noteworthy differences by vaping frequency in Wave 2:

- Compared to those who vape weekly or monthly, those who vape daily are more like to cite the following reasons:
  - To quit smoking (48%, compared to 35% weekly and monthly). This is also significant in Wave 3.
  - To avoid returning to smoking (38%, compared to 22% monthly). This is also significant in Wave 3.
  - For the buzz (9%, compared to 4% weekly).
- For those who vape weekly, cigarette reduction was cited as a reason (38%) more often compared to those who vape monthly (21%).
- For those who vape monthly, three reasons stand out as more common:
  - Liking the flavours or smells (32%, compared to 19% of those who vape daily or weekly). This is also significant in Wave 3.
  - As a social activity (15%, compared to 5%). This is also significant in Wave 3.
  - I vape when it is offered to me (16%, compared to 3%). This distinction is particularly interesting in its divergence from others who vape.

In Wave 3, some different reasons stand out for daily, weekly, or monthly vaping:

- It's cheaper than smoking is noted less often by those who vape monthly (3%) compared to those who vape daily or weekly (20%).
- Similarly, it's less harmful to others / family / children than smoking is noted less often by those who vape monthly (3%) compared to those who vape daily or weekly (13%).

- Those who vape daily are more likely to vape out of habit (12%) compared to those who vape weekly or monthly (4%).
- Vaping discreetly without being noticed is among the top reasons for those who vape weekly (32%), compared to those who vape daily (19%) or monthly (19%).
- Fun and excitement are mentioned more often by those who vape monthly (28%) compared to those who vape daily or weekly (7%).

In Wave 2 and 3, differences between smoking sub-groups are quite numerous. They tend to fall along predictable lines, with those who smoke or formerly smoked more often naming smoking cessation reasons, while those who never smoked more often name other kinds of reasons for vaping.

**5. Feeling of vaping**

*Respondents were generally neutral about the feeling of vaping; those no longer vaping tend to have more negative perceptions of it than those who still vape.*

In Wave 3, all survey respondents were asked to rate the feeling of vaping across five 7-point scales; questions were shown to all respondents as sliders on-screen. Across the five scales, responses clustered in the middle, with 60 to 70 percent of respondents picking neutral (i.e. 3 to 5) responses on each one.

For those who picked a side, vaping was more likely to be perceived positively with regards to:

- Smoothness (32% smooth vs. 8% harsh)
- Cleanliness (23% clean vs. 14% dirty)
- Lightness (22% light vs. 11% heavy)

Vaping was more likely to be perceived negatively when it came to:

- Healthiness (8% healthy vs. 21% unhealthy)
- Natural (9% natural vs. 23% chemical)

These perceptions of vaping line up with findings from the qualitative interviews, where many participants noted that while they understood that vaping was probably not good for them, it felt less harsh and harmful compared to smoking cigarettes.

<b>QC4 People experience different sensations when they vape. Use the slider to indicate what vaping feels like to you.</b>			
<b>1-2</b>	<b>3-5</b>	<b>6-7</b>	<b>Mean</b>
Harsh 8%	Neither 59%	Smooth 32%	4.72
Clean 23%	Neither 63%	Dirty 14%	3.73
Light 22%	Neither 67%	Heavy 11%	3.64
Healthy 8%	Neither 72%	Unhealthy 21%	4.43
Natural 9%	Neither 68%	Chemical 23%	4.41

Base: All respondents (Wave 3 n=379)

Note: QC4 was only asked in Wave 3.



Across demographic groups, there were few notable differences in these perceptions of vaping. Looking at vaping behaviour in Wave 3, those who had quit vaping were significantly more likely to select negative feelings on every scale, with the exception of light / heavy.

<b>QC4</b> <i>People experience different sensations when they vape. Use the slider to indicate what vaping feels like to you.</i>	<b>Formerly vaped (n=65)</b>	<b>P30 Day vaping (n=314)</b>
Harsh	25%	5%
Dirty	28%	11%
Heavy	17%	10%
Unhealthy	42%	16%
Chemical	42%	19%

Base: All respondents (Wave 3 n=379)

Note: QC4 was only asked in Wave 3.

## D. Smoking status and questions for dual users

### 1. Smoking status

*Most Wave 2 respondents, and about half of Wave 3 respondents smoked between study waves.*

To better understand the relationship between vaping and smoking, respondents in every study wave were asked about their smoking behaviour. This line of questioning began with a simple question about smoking a whole cigarette since the previous survey wave (in Wave 1 this was asked differently). Nearly half say they had smoked in Wave 2 (45%) and Wave 3 (49%).

#### Smoked a whole cigarette

<b>QD1 Since you did the previous survey... did you smoke a whole cigarette?</b>	<b>Wave 1* (n=4,815)</b>	<b>Wave 2 (i.e., since Wave 1) (n=693)</b>	<b>Wave 3 (i.e., since Wave 2) (n=379)</b>
Yes	83%	45%	49%
No	16%	53%	50%
Don't know/prefer not to say	1%	2%	2%

*Base: All respondents (Wave 1 n=4,815, Wave 2 n=693, Wave 3 n=379)*

*\*Note: In the Wave 1 Baseline study, this question was asked in reference to all past smoking, rather than smoking between study waves. Wave 1 data is shown for informational purposes.*

Smoking was more prevalent in some demographic sub-groups:

- In Wave 2, Ontario residents are most likely to have smoked (53%), significantly higher than Quebec (35%).
- Those living in Atlantic Canada are more likely to have smoked in Wave 3 (70%) compared to Ontario (48%) and Quebec (42%).
- Adults age 25+ are more likely to have smoked in Wave 2 (50%) compared to youth (23%). In Wave 3, they are more likely (51%) compared to young adults (36%) but not youth (54%).
- In Wave 2, smoking is more prevalent in men (48%) compared to women (39%).

With regards to vaping behaviour, smoking a cigarette is more common in some groups:

- Where overall vaping is concerned, those with past 30-day vaping in both Wave 2 and Wave 3 are more likely to have smoked (Wave 2 51%, Wave 3 52%) compared to those no longer vaping (Wave 2 18%, Wave 3 34%).
- Smoking is most common among those vaping weekly (Wave 2 58%, Wave 3 68%), rather than daily or monthly. This may be indicative of vaping as an occasional stand-in for cigarettes.
- Those who reduced their vaping in both waves are more likely to have smoked (Wave 2 49%, Wave 3 60%) than those who had quit vaping in each wave (Wave 2 18%, Wave 3 34%).

## 2. Smoking frequency

*Among those who smoke, daily smoking is more common than weekly or monthly smoking. A majority of those who stopped vaping are smoking daily in each wave.*

Among those who had smoked a cigarette in the past 30 days, daily smoking was most common (Wave 2 42%, Wave 3 51%). Those answering not at all (Wave 2 5%, Wave 3 7%) may represent extremely intermittent or one-time instances of smoking.

Frequency of smoking

<b>QD2 In the past 30 days, how often did you smoke cigarettes?</b>	<b>Every day</b>	<b>Net: Occasional smoking</b>	<b>Less than daily, but at least once a week</b>	<b>Less than once a week, but at least once in the past month</b>	<b>Not at all</b>	<b>Don't know/Prefer not to say</b>
Wave 1*	30%	39%	20%	19%	30%	<1%
Wave 2	42%	53%	37%	16%	5%	0%
Wave 3	51%	42%	25%	17%	7%	1%

*Base: Those who have smoked a whole cigarette ever (Wave 1 n=3,882) or in the past 30 days (Wave 2 n=331, Wave 3 n=184).*

*\*Note: In the Wave 1 Baseline study, this question was asked in reference to all past smoking, rather than smoking between study waves. Wave 1 data is shown for informational purposes.*

In Wave 3, there is a very clear pattern between regions, where those in Atlantic Canada are most likely to smoke on an occasional basis (74%), while those in all other regions are most likely to smoke daily (48% to 63%). This pattern is not present in Wave 2.

In Wave 2, adults are more likely to smoke daily (49%) compared to youth and young adults (28%). This difference is not present in Wave 3.

In both study waves, those who no longer vape are more likely to report daily smoking (Wave 2 72%, Wave 3 73%) compared to those still vaping in each wave (Wave 2 40%, Wave 3 48%). It is possible this is due to failed smoking cessation attempts with vaping.

### 3. *Reasons why those who vape may also smoke*

*Habit, stress, cravings, and enjoyment are the most common reasons why those who vape also smoke.*

For those who smoke and vape (i.e., alternating use), the top five reasons for smoking are broadly consistent from Waves 1 through 3. The top reason across all three waves is simply habit (30% to 31%). Rounding out the top four, with almost three in ten naming each as a reason in every wave of the study, are: smoking when stressed, cravings, and general enjoyment. Trying to quit smoking gradually, the second most common reason in Wave 1, ranks fifth in Wave 2 and Wave 3.

#### Reasons why those who vape may also smoke

<b>QD5 Which of the following best describes the main reason you smoke in addition to vaping?</b>	<b>W1 total (n=2,755)</b>	<b>W2 total (n=286)</b>	<b>W3 total (n=150)</b>
Habit	30%	30%	31%
Smoke when I am stressed/anxious	28%	27%	29%
Craving nicotine/tobacco	28%	26%	28%
Still enjoy smoking	27%	30%	27%
Trying to quit smoking gradually	29%	23%	25%
Addiction/can't give it up/hard to quit	25%	21%	23%
Smoke with other smokers/social thing	23%	22%	23%
Like the taste of cigarettes better	15%	18%	20%
Like the feeling after smoking/vaping does not give the same feeling	17%	20%	15%
Use with cannabis/alcohol	<1%	0%	0%
When I run out of vape products	<1%	0%	0%
Other	1%	1%	2%
Not sure	1%	2%	0%

Base: Those who smoke and vape (Wave 1 n=2,755, Wave 2 n=286, Wave 3 n=150)

Where demographic sub-groups are concerned, the reasons for smoking are broadly consistent, with few notable differences:

- In Wave 2, adults 25+ are more likely to say they smoke because they still enjoy smoking (37%) compared to youth and young adults (17%).
- In Wave 3, adults 25+ differ from youth and young adults on two other reasons. Almost one in three say they smoke because of cravings (34%) compared to just 6 percent of youth and young adults. Along similar lines, about one in four adults (27%) say they smoke because of addiction, compared to just 9 percent of youth and young adults.

There are some interesting differences between different vaping groups:

- In Wave 2, those who vape daily or weekly are more likely to say they still enjoy smoking (32%) compared to those who vape monthly (13%).

- In Wave 2, those who vape monthly are also less likely to name cravings as a reason for smoking (5%) compared to those who vape daily (29%) or weekly (27%).
- In Wave 3, habit is a more common reason among those whose vaping increased (41%) or stayed the same (35%) compared to those whose vaping was reduced (15%).
- Those who increased their vaping in Wave 3 are more likely to name enjoyment (48%) compared to those with status quo vaping (20%).
- Lastly, those with status quo vaping in Wave 3 are more likely to say they like the feeling of smoking (22%) compared to those who increased (7%) or reduced (4%) their vaping.

Looking at smoking transitions, there are a couple of minor differences to note:

- Those who relapsed smoking are less likely to name habit as a reason (19%) compared to those whose smoking was ongoing in Wave 3 (36%).
- Addiction was more of a factor for those with ongoing smoking in Wave 3 (26%) compared to those who were new to smoking (7%).

#### 4. **Frequency of smoking per day**

*A majority of those who smoke have between 1 and 10 cigarettes on the days that they smoke.*

Looking at those who had smoked specifically in the past 30 days in each wave of the study, a strong majority say they smoke between one and ten cigarettes each day they smoke, though the proportion declines from Wave 2 to Wave 3 (Wave 2 83%, Wave 3 73%). This may reflect more entrenched smoking over time, among those who continue to smoke. This metric is part of the Heavy Smoking Index (HSI).

##### Frequency of smoking per day

<b>QD6 On average, how many cigarettes do you smoke per day? / On the days that you smoke, about how many cigarettes do you smoke?</b>	<b>W1 total (n=2,755)</b>	<b>W2 total (n=311)</b>	<b>W3 total (n=170)</b>
1-10	76%	83%	73%
11-20	17%	13%	22%
21-30	5%	3%	5%
31+	1%	1%	1%
Mean	7.97	6.71	8.65
Median	5	4	5

*Base: Those who have smoked a cigarette in the past 30 days (Wave 1 n=2,755, Wave 2 n=311, Wave 3 n=170)*

The average number of cigarettes smoked per day differs for some demographic groups:

- In Wave 2, youth and young adults are more likely to smoke 10 cigarettes a day or less (96%) compared to adults (77%). A directional difference is also noted in Wave 3.

- In Wave 2, those in the Prairies are more likely to report smoking 10 cigarettes a day or less (94%) compared to Ontario (81%), Quebec (79%), or Atlantic Canada (73%).
- In Wave 3, the regional differences shift, with Atlantic Canada more likely to report 10 cigarettes a day or less (88%) compared to BC (61%) and Quebec (66%).

Looking at vaping groups:

- In Wave 2 and 3, those with past 30 day vaping (i.e., alternating use) are more likely to smoke 10 cigarettes a day or less (Wave 2 85%, Wave 3 76%), compared to those who are no longer vaping but still smoke (Wave 2 55%, Wave 3 50%). This suggests a subset of people who have given up vaping because they didn't like it in comparison with cigarettes, or because it didn't help them with smoking cessation.

### 5. First cigarette

*More than half of those who smoke cigarettes have their first cigarette within 30 minutes of waking.*

To facilitate the calculation of the Heavy Smoking Index (HSI), in Wave 2 and 3 those with past 30 day smoking were asked how soon after waking they have their first cigarette. In Wave 2, just over half smoke within 30 minutes of waking (52%), this rises to 59 percent in Wave 3, again possibly indicating entrenchment among those who continue to smoke.

#### Time before first cigarette

<b>QD6B How soon after you wake up do you usually have your first cigarette?</b>	<b>W2 total (n=311)</b>	<b>W3 total (n=170)</b>
Net: within 30 minutes	52%	59%
<i>Less than 5 minutes</i>	14%	13%
<i>6 to 30 minutes</i>	38%	46%
31 minutes to 1 hour	17%	18%
More than 1 hour	31%	24%

*Base: Those who have smoked a cigarette in the past 30 days (Wave 2 n=311, Wave 3 n=170)*

*Note: QD6B was not asked in Wave 1*

Timing of first daily cigarette varies little between demographic groups:

- In Wave 2, youth are more likely to report smoking more than an hour after waking (64%) compared to young adults (30%) or adults (28%). This difference is noted directionally in Wave 3 but is not significant.
- In Wave 3, women report smoking within five minutes of waking (19%) more often than men (8%).

Where vaping and smoking behaviour is concerned, there are no notable differences between sub-groups.

## 6. Heavy smoking index (HSI)

*Among those smoking daily in Wave 2 and Wave 3, most score as low dependence on the HSI.*

The Heavy Smoking Index (HSI) assigns a score to those who smoke daily based on how they answer two key questions: how many cigarettes they smoke each day, and how soon after waking they usually have their first cigarette. Those who smoke more cigarettes per day and have their first cigarette shortly after waking are assigned higher scores, indicating higher dependence.<sup>2</sup>

HSI scores were similar in Wave 2 and Wave 3, with around six in ten landing in the low dependence category and a mean around 2 in both waves.

**Heavy smoking index (HSI)**

<i>Score</i>	<b>W2 total (n=132)</b>	<b>W3 total (n=93)</b>
Low dependence (score 0-2)	63%	56%
Moderate dependence (score 3-4)	33%	38%
High dependence (score 5-6)	5%	6%
<i>Mean</i>	2.08	2.22
<i>Median</i>	2	2

*Base: Smoking daily*

Because the index is calculated only among those who smoke daily, the sample for this metric is small and it is built around a more homogenous group of people than the total sample, precluding sub-group analysis.

<sup>2</sup> D6 How soon after waking first smoke: SCORE: 0 if 61+ minutes; 1 if 31-60 minutes; 2 if 6-30 minutes; 3 if 0-5 minutes  
D6B # cigarettes smoked per day: SCORE: 0 if 1-10 cigarettes; 1 if 11-20 cigarettes; 2 if 21-30 cigarettes; 3 if 31 or more cigarettes.

## 7. Attempts to quit smoking

*Less than half of those who smoked at each wave attempted to quit smoking since the previous survey. Those who still vaped in addition to smoking are more likely to have tried quitting than those who only smoked.*

In each return-to-sample wave of the study, just over half of those smoking say they did not attempt to quit smoking since the previous survey. On average, among those who did attempt to quit, there was an average of three attempts between each wave of the study.

### Attempts to quit smoking

<b>QD8</b> <i>Since you did the previous survey... how many times have you tried to quit smoking?</i>	<b>Wave 2</b> (n=311)	<b>Wave 3</b> (n=170)
I did not try to quit smoking in that timeframe	54%	55%
Once	15%	14%
Net: Two times or more	31%	32%
2	12%	16%
3-5	12%	11%
6-19	6%	4%
20+	1%	1%
Mean (excluding no attempts)	3.36	3.04

*Base: Those who have smoked a cigarette in the past 30 days (Wave 2 n=311, Wave 3 n=170)*

*Note: Wave 1 data was not included as timeframes between Wave 1 and Waves 2 and 3 are not comparable for this question.*

Quit attempts do not vary meaningfully between demographic groups in either survey wave.

By Wave 3, there is one notable difference between vaping and smoking sub-groups:

- Those with alternating use are more likely to report two or more smoking quit attempts (34%) compared to those no longer vaping (15%).



## 8. Longest smoking quit attempt

*Most of those who tried to quit smoking between waves reported that their longest attempt lasted less than one week.*

Those with smoking quit attempts between waves were asked to measure the longest period of time they had gone without smoking during that time frame. Most often, this time was measured in days (i.e., less than a week) in both Wave 2 (57%), and even more so in Wave 3 (68%).

### Longest smoking quit attempts

QD9 <i>Since you did the previous survey... what was the longest time you have gone without smoking?</i>	Wave 2 (n=136)	Wave 3 (n=77)
Days (less than a week)	57%	68%
Weeks (less than a month)	28%	13%
Months (less than a year)	15%	19%

*Base: Those who have attempted to quit smoking since the previous wave (Wave 2 n=136, Wave 3 n=77)*

*Note: Wave 1 data was not included as timeframes between Wave 1 and Waves 2 and 3 are not comparable for this question.*

Note that the sample sizes for those who report smoking quit attempts are quite small, which limits sub-group analysis.

Adults 25+ in particular were more likely to report that their longest quit attempt was less than a week (Wave 2 67%, Wave 3 75%) compared to youth and young adults (Wave 2 39%, Wave 3 48%). Length of attempt did not vary significantly by region or gender.

By Wave 3, those vaping weekly or monthly were more likely to report their longest quit attempt as a matter of weeks (22%) compared to those vaping daily (3%).

## 9. Time without smoking

*Of those who quit smoking between Waves 2 and 3, just under half had gone 6 months without smoking at the time of the Wave 3 survey.*

In Wave 2 and Wave 3, there were small sub-groups of respondents who had quit smoking between study waves. In Wave 2, this sample consisted of just 7 respondents, so results are shown below for Wave 3 only. Among those who quit smoking by Wave 3, about half reported a lengthier time period of six months since they stopped smoking (49%). The rest had quit for a shorter period of time.

### Time since quitting

<b>QD10 How long ago did you quit smoking?</b>	<b>Wave 3 (n=51)</b>
1 month	12%
2 months	6%
3 months	10%
4 months	6%
5 months	18%
6 months	49%

*Base: Those who formerly smoked (Wave 3 n=51)*

*Note: Wave 2 data was not included due to small sample size (n=7)*

The small sample size for this question precludes sub-group analysis.

## 10. Usefulness of vaping for reducing or quitting smoking

About half of respondents felt that vaping was a useful tool for reducing or quitting smoking, across all three waves.

Those with any history of smoking were asked to rate the usefulness of vaping as a smoking cessation aid. Overall, in each wave of the study, half (48% to 52%) rated vaping somewhere in the range of 8 to 10, on a scale where 10 is very useful and 1 is not useful at all. While the mean rating hovered around 7 for all waves, a higher proportion rate vaping as not useful in Wave 3 (19%) compared to previous waves. This may reflect a higher degree of difficulty in quitting smoking over a longer period of time, it may also be that those who find vaping useful for quitting smoking were less likely to return for subsequent waves.

### Usefulness of vaping for quitting smoking

<b>QD11 How useful has vaping been in helping you reduce or quit smoking? Use a scale of 1 to 10, where 1 means not useful at all, and 10 means extremely useful.</b>	<b>W1 total (n=2,895)</b>	<b>W2 total (n=153)</b>	<b>W3 total (n=235)</b>
Net: Useful	52%	50%	48%
10 – Very useful	24%	17%	28%
9	10%	10%	7%
8	17%	22%	13%
Net: Neutral	40%	40%	33%
7	17%	16%	15%
6	11%	10%	6%
5	9%	9%	9%
4	4%	4%	3%
Net: Not useful	9%	10%	19%
3	2%	3%	3%
2	2%	2%	2%
1 – Not useful at all	4%	5%	14%
Mean	7.26	7.00	6.70
Median	8	7	7

Base: Those who currently smoke or who formerly smoked and made a serious attempt at quitting since previous wave (Wave 1 n=2,895, Wave 2 n=153, Wave 3 n=235)

There were a few variations in usefulness ratings between demographic sub-groups:

- In Wave 2, BC residents were less likely to rate vaping as useful for quitting smoking (19%) compared to those in the Prairies (65%), Ontario (54%), and Atlantic Canada (57%). This distinction was not present in Wave 3.
- In Wave 2, young adults were less likely to rate vaping as useful (24%) compared to adults (57%) or youth (70%). This difference did not appear in Wave 3.

There are some intriguing differences between vaping and smoking groups that relate to other findings:

- Those who stopped vaping in Wave 2 and 3 are less likely to say that vaping is useful (Wave 2 15%, Wave 3 15%) compared to those still vaping (Wave 2 51%, Wave 3 54%). This is in line with patterns noted in other results suggesting that people who did not succeed in quitting smoking by vaping hold more negative views than those who quit smoking.
- Daily vaping is also associated with higher ratings for usefulness. In Wave 2 and 3, those who vape daily are more likely to say that vaping is useful (Wave 2 63%, Wave 3 65%) compared to those who vape on an occasional basis (Wave 2 36%, Wave 3 36%).
- Those with longer term smoking cessation in Wave 3 are more likely to say that vaping is useful (61%) compared to those who have newly quit smoking (25%).

### 11. Sources of information on using vaping to quit or reduce smoking

*Those who smoke most often speak with their friends or spouses/partners about using vaping to quit smoking. Those who formerly vaped often do not report discussing this topic with anyone, perhaps reflecting disenchantment with vaping as a quitting method.*

Those who smoke, or smoked in the past, were asked if they had spoken to anyone about using vaping to quit smoking. The proportion who said they spoke to no one is quite a bit higher for Wave 3 (42%) compared to Wave 2 (14%), which may reflect a shorter period of time between Wave 2 and 3. Friends are the most common source of information in both waves (Wave 2 47%, Wave 3 30%) followed by spouse or partner (Wave 2 26%, Wave 3 19%).

#### Sources of information on using vaping to quit or reduce smoking

<b>QD11B Since you did the previous survey... with whom did you talk about using vaping to help you reduce or quit smoking?</b>	<b>Wave 2 (n=153)</b>	<b>Wave 3 (n=235)</b>
Friends	47%	30%
Spouse/partner	26%	19%
Vape shop staff	24%	12%
Healthcare professional (e.g., doctor, nurse, dentist)	22%	16%
Family (excluding spouse/partner)	18%	15%
Counselling or support group (in-person, online, or telephone)	7%	1%
No one	14%	42%

Base: Those who currently smoke or who formerly smoked and made a serious attempt at quitting since previous wave (Wave 2 n=153, Wave 3 n=235)

Note: Wave 1 data for QD11B is not presented as the answer options were changed between waves

There are only a few noteworthy differences where demographic groups are concerned:

- In Wave 2, men are more likely to speak to vape shop staff (29%) compared to women (12%); in fact, for men, this is the second-most common source after friends. In Wave 3 this difference is not noted.

- In Wave 2, a higher proportion of Quebec residents say they spoke to no one (29%) compared to those in the Prairies (3%) and Ontario (6%).
- In Wave 3, those in Atlantic Canada are more likely to seek information from a health care professional (42%) compared to those in all other regions (8% to 19%).

Small sample sizes in vaping and smoking sub-groups limit comparisons between groups:

- In Wave 3, those with past 30 day vaping are more likely to report speaking to friends (34%) compared to those who formerly vaped (10%).
- In Wave 3, a majority of those who formerly vaped say they spoke to no one about using vaping to quit smoking (72%), compared to those with past 30 day vaping (36%). In Wave 2, these numbers were (54% and 11%). This again points to the existence of a cohort with a loss of interest in vaping as a smoking cessation technique.

## 12. Other smoking cessation methods used

*Cold turkey, nicotine gum and reducing cigarettes are the most common methods used by those who attempted to quit smoking between waves, though use of cigarette reduction notably decreased in Wave 3.*

Looking at quit attempts between waves, for Wave 2, nicotine gum (36%), cigarette reduction (23%) and cold turkey (20%) are the methods used most often, and about nine in ten of those with past or current smoking said they had used at least one method (89%). In Wave 3, with a shorter time period to reflect on, only two thirds (64%) had used a method to quit smoking, most often cold turkey (21%) or nicotine gum (17%).

### Sources of information on using vaping to quit or reduce smoking

<b>QD12 Since you did the previous survey... what other methods have you used to help you quit or reduce smoking?</b>	<b>Wave 1* (n=2,895)</b>	<b>Wave 2 total (Since Wave 1) (n=153)</b>	<b>Wave 3 (Since Wave 2) (n=235)</b>
Cold turkey	33%	20%	21%
Nicotine gum	44%	36%	17%
Nicotine patch	32%	19%	13%
Nicotine inhaler	16%	17%	12%
Reducing the number of cigarettes	27%	23%	11%
Nicotine nasal spray	8%	12%	7%
Prescription medication like Zyban, Wellbutrin or Champix	14%	10%	6%
Nicotine lozenge	13%	12%	6%
Nicotine mouth spray	10%	8%	6%
Quit-and-win type contests	0%	4%	2%
A smart phone app	0%	7%	1%
None of these	10%	11%	36%
<b>Net: Mention of any method</b>	<b>90%</b>	<b>89%</b>	<b>64%</b>

Base: Those who currently smoke or who formerly smoked and made a serious attempt at quitting since previous wave (Wave 1 n=2,895, Wave 2 n=153, Wave 3 n=235)

\*Note: In Wave 1 this question was asked to all respondents who had ever made a serious attempt at quitting, without a time parameter. In Waves 2 and 3 this question was only asked to those with a serious attempt between waves. Wave 1 results are shown for informational purposes.

With diminished sample sizes in Wave 2 and 3, there are only a few notable demographic differences:

- In Wave 3, men report going cold turkey (27%) more than women (13%).
- In Wave 2, nicotine gum is used less often by those in Quebec (14%) compared to other regions (27% to 54%).
- Cold turkey is used less often in Atlantic Canada in Wave 2 (7%) than BC (38%) or Ontario (26%).
- Young adults are less likely to use cigarette reduction (7%) in Wave 2 compared to youth (43%) or adults (26%). They are also less likely to go cold turkey (4%) compared to youth (54%) and adults (21%). These distinctions are not noted in Wave 3.

In terms of vaping and smoking sub-groups, where analysis is possible:

- In Wave 3, those who formerly vaped are more likely to use cold turkey (44%) to stop smoking than those with past 30 day vaping (16%). They are less likely to use nicotine gum (8%) compared to those still vaping (18%). These differences were not present in Wave 2.

## E. Vaping transitions, cessation and relapse

### 1. Attempting to quit or reduce vaping

*Across Waves 2 and 3, around half of respondents were trying to reduce their vaping frequency, and 3 in 10 were trying to stop vaping completely.*

Half of those currently vaping in Wave 2 (52%) and Wave 3 (47%) are trying to reduce their vaping, though just three in ten are actively trying to stop vaping (Wave 2 34%, Wave 3 29%).

#### Attempting to quit or reducing vaping

<b>QE1 Are you currently trying...? (Yes)</b>	<b>W2 total (n=572)</b>	<b>W3 total (n=314)</b>
To stop vaping	34%	29%
To reduce your frequency of vaping	52%	47%

*Base: Those who have vaped in the past 30 days (Wave 2 n=572, Wave 3 n=314)*

*Note: Wave 1 respondents were asked about vaping cessation in a different way that is not directly comparable.*

For the most part, demographic groups are similar in their efforts to stop or reduce vaping with few differences:

- In Wave 2, adults 25+ are less likely to say they are trying to stop (29%) compared to youth and young adults (41%). This difference is not present in Wave 3.
- Women are more likely to be trying to reduce their vaping in both waves (Wave 2 63%, Wave 3 56%) compared to men (Wave 2 46%, Wave 3 41%).

While there are no notable differences in Wave 2 between vaping groups, by Wave 3 those who vape daily are less likely to be trying to stop vaping (25%) compared to those vaping weekly (37%).

Where smoking behaviour is concerned, there are some distinctions in both waves:

- In Wave 2, those who formerly smoked are more likely to be trying to reduce vaping (58%) than those with past 30 day smoking (46%). This persists in Wave 3, where vaping reduction is higher for long-term smoking cessation (54%) compared to ongoing smoking (39%).
- Additionally, those who say they have never smoked in Wave 3 are more likely to be reducing their vaping (69%) compared to those who are smoking (40%).



## 2. Number of quit attempts

*Vaping quit attempts are uncommon. Those who tried to quit between waves usually reported more than one attempt during that time period.*

Most of those with past 30 day vaping had not attempted to quit between survey waves (Wave 2 66%, Wave 3 72%), but when quitting was attempted, multiple attempts were more common than single attempts (Wave 2 23%, Wave 3 21%). The mean number of vaping quit attempts between waves is around 3 for both Wave 2 and Wave 3.

**Number of quit attempts**

<b>QE2 How many times have you tried to quit vaping?</b>	<b>Wave 2 (since Wave 1) (n=572)</b>	<b>Wave 3 (since Wave 2) (n=314)</b>
1	12%	8%
<i>Net: 2 or more quit attempts</i>	23%	21%
2	11%	10%
3	6%	3%
4	2%	4%
5+	4%	4%
I did not try to quit vaping in that time frame	66%	72%
<i>Mean</i>	3.3	2.7

*Base: Those who have vaped in the past 30 days (Wave 2 n=572, Wave 3 n=314)*

*Note: Wave 1 data was not included as timeframes between Wave 1 and Waves 2 and 3 are not comparable for this question*

There are few demographic sub-group differences. In Wave 2, adults 25+ are more likely to say they didn't try to quit vaping (71%) compared to youth and young adults (57%). This difference is not present in Wave 3.

Number of vaping quit attempts does not vary meaningfully between vaping or smoking sub-groups.

### 3. Longest vaping quit attempt

*Most with serious vaping quit attempts say the longest they've gone without vaping between survey waves is less than a week.*

Looking at those who attempted to quit vaping between survey waves, two in three say their longest period of time without vaping was less than a week (Wave 2 68%, Wave 3 67%). Even though the time period between waves varied in length, results for Wave 2 and Wave 3 are quite consistent with each other.

#### Longest time without vaping

<b>QE4 What was the longest time you have gone without vaping?</b>	<b>W1 total (n=4,815)*</b>	<b>W2 total (since W1) (n=181)</b>	<b>W3 total (since W2) (n=87)</b>
Days (less than a week)	52%	68%	67%
Weeks (less than a month)	24%	18%	20%
Months (less than a year)	17%	14%	14%
1-10 years	6%	n/a	n/a
11+ years	1%	n/a	n/a

*Base: Wave 1 have made a serious attempt to quit (n=4,815), Wave 2 and Wave 3 have made a serious attempt to quit since the previous wave (Wave 2 n=181, Wave 3 n=87).*

*\*Note: In Wave 1 this question was asked to all respondents who had ever made a serious attempt at quitting, without a time parameter. In Waves 2 and 3 this question was only asked to those with a serious attempt between waves. Wave 1 results are shown for informational purposes.*

Results are generally consistent between demographic groups in Wave 2 and Wave 3.

For vaping and smoking groups, there are not many differences to note:

- Those who vape daily or weekly are more likely to report a longest quit attempt of just days (Wave 2 72%, Wave 3 70%) compared to those vaping monthly (Wave 2 33%, Wave 3 45%).
- In Wave 2, those with past 30 day smoking were far more likely to report a quit length of just days (74%), compared to those who never smoked (49%).

#### 4. Time since quitting

*Most who had quit vaping in Wave 2 and Wave 3 had done so at least 6 months earlier.*

Those who had quit vaping in Wave 2 and Wave 3 were asked how long it had been since they stopped vaping. With approximately eight months between the Baseline Wave 1 study and Wave 2 and four months between Waves 2 and 3, participants were asked to record this time in months.

In both waves, just over half reported that they had quit vaping at least 6 months earlier (Wave 2 54%, Wave 3 55%); despite the difference in timing between waves, this is quite consistent.

##### Time since quitting vaping

<b>QE4B How long ago did you quit vaping?</b>	<b>W2 total (since W1) (n=121)</b>	<b>W3 total (since W2) (n=65)</b>	<b>W3 newly quit vaping (since W2) (n=39)*</b>
Net: Less than 6 months	46%	45%	56%
1 month	15%	11%	10%
2 months	13%	8%	13%
3 to 5 months	18%	26%	33%
Net: 6 months or more	54%	55%	44%
6 to 8 months	15%	22%	21%
9 or more months	39%	34%	23%

Base: Formerly vaped (Wave 2 n=121, Wave 3 n=65)

Note: QE4B was not asked in Wave 1

\*Results should be interpreted with caution due to small sample size.

Due to the small sample size of those who formerly vaped in both Wave 2 and 3, there are no notable differences between key demographic, vaping, or smoking sub-groups.

## 5. Importance of quitting vaping

*Less than 3 in 10 respondents see quitting smoking as an important goal across all three waves.*

Perceived importance of quitting vaping is fairly consistent between waves, despite a range of different experiences among participants with respect to personal vaping behaviours and transitions. Less than 3 in 10 respondents (25% to 29%) see quitting as an important goal in each wave. The mean importance rating in each wave is about 5.7.

### Importance of quitting vaping

<b>QE5</b> <i>How important is stopping vaping to you? Use a scale of 1 to 10, where 1 means stopping smoking is not important at all, and 10 means it is the most important goal of your life?</i>	<b>W1 Total</b> (n=4,815)	<b>W2 total</b> (n=693)	<b>W3 Total</b> (n=379)
Net: Important	28%	29%	25%
10 – Most important goal of my life	7%	10%	7%
9	6%	6%	6%
8	15%	14%	12%
Net: Neutral	49%	48%	55%
7	16%	14%	17%
6	13%	10%	14%
5	14%	17%	17%
4	7%	7%	7%
Net: Not important	23%	22%	20%
3	7%	6%	4%
2	5%	4%	3%
1 – Not important at all	11%	12%	12%
Mean	5.67	5.73	5.70
Median	6	6	6

Base: W1 all respondents (n=4,815), W2 & W3 vaped in the past 30 days or formerly vaped (Wave 2 n=693, Wave 3 n=379)

There were some significant differences between demographic and vaping behaviour sub-groups in their perceptions of the importance of quitting vaping:

- In both Wave 2 and Wave 3, those who had quit vaping were more likely to rate quitting as important, i.e. 8 to 10 (Wave 2 49%, Wave 3 40%) compared to those still vaping (Wave 2 25%, Wave 3 22%).
- In Wave 2, men (33%) were more likely than women (23%) to rate quitting as important. This difference was no longer significant in Wave 3.

## 6. Confidence in quitting vaping for good

*Approximately 4 in 10 respondents are confident that they will eventually quit vaping; this is consistent across all three waves.*

Respondents who still vaped at the time of each survey were asked to indicate how confident they are that they will one day quit vaping for good. The proportion of those still vaping who rated their confidence between 8 and 10 decreased over the course of three waves, declining from 42% in Wave 1 to 30% in Wave 3.

### Confidence in quitting vaping for good

<b>QE6</b> <i>How confident are you that you will quit vaping for good? / How confident are you that you will eventually quit vaping for good?</i>	<b>W1 total</b> (n=4,815)	<b>W2 past 30</b> <b>day vaping</b> (n=572)	<b>W3 past 30</b> <b>day vaping</b> (n=314)
Net: Confident	42%	37%	30%
10 – Extremely confident	17%	11%	12%
9	8%	10%	6%
8	17%	16%	12%
Net: Neutral	46%	53%	57%
7	16%	15%	22%
6	11%	14%	11%
5	13%	16%	19%
4	5%	8%	6%
Net: Not confident	12%	10%	12%
3	4%	3%	6%
2	3%	2%	2%
1 – Not at all confident	5%	6%	4%
Mean	6.69	6.43	6.35
Median	7	7	7

Base: W1 all respondents (n=4,815), W2 & W3 vaped in the past 30 days (Wave 2 n=572, Wave 3 n=314)

In Wave 3, those who had quit vaping were also asked to indicate how confident they felt that they would quit for good. Those who had quit vaping by Wave 3 were much more likely to rate their confidence between 8 and 10 than those who were still vaping (74% vs. 30%).

#### Formerly Vaped - Confidence in quitting vaping for good

<b>QE6</b> <i>How confident are you that you will quit vaping for good? / How confident are you that you will eventually quit vaping for good?</i>	<b>W3 Formerly vaped (n=65)</b>
Net: Confident	74%
10 – <i>Extremely confident</i>	62%
9	6%
8	6%
Net: Neutral	20%
7	6%
6	2%
5	6%
4	6%
Net: Not confident	6%
3	3%
2	0%
1 – <i>Not at all confident</i>	3%
Mean	8.40
Median	10

Base: W3 Formerly vaped (n=65)

Confidence does not vary significantly between demographic groups of interest. However, there are some noteworthy differences between Wave 3 vaping and smoking behaviour groups in terms of those rating their confidence between 8 and 10:

- Confidence was significantly higher for those who had newly quit vaping in Wave 3 (67% rating 8 to 10) and those who had quit vaping previously (85%), compared to all transition groups who were still vaping in Wave 3 including status quo vaping (27%), reduced (32%), relapsed (38%), and increased (35%).
- Those who had quit vaping but continued to smoke in Wave 3 were significantly more likely than those who still smoked and vaped to feel confident that they would quit vaping for good (70% vs. 27%). This may reflect sentiment among those who used vaping as a smoking cessation aid without success.

## 7. Motivations for quitting vaping

*General health concerns are consistently the top rated motivations for quitting vaping, a sentiment echoed in the qualitative interviews.*

People who vape in each wave were shown the following statement:

*Different people have their own reasons for trying to stop vaping. Even if you're not planning to stop vaping right now, it may be something you think about or hear about from time to time.*

They were then asked to rate a series of statements using a scale of 1 to 10, where 1 is “Not true at all” and 10 is “Very true,” based on their own perspectives on quitting vaping.

The top statement that is most often rated 8 to 10 (i.e., true) for those still vaping is “If I stopped vaping, it would be because I personally believe it is the best thing for my health”, followed closely by “If I stopped vaping, it would be because I want to take responsibility for my own health”. These health-related statements were consistently rated as true by approximately half of respondents, with only a slight (4%-5%) decrease in agreement from Wave 1 to Wave 3.

The proportion of respondents rating each of the other statements as true remained quite steady across all three waves.

In Wave 3, three new statements were added; these were based on common responses and anecdotes shared in the qualitative interviews that took place between Waves 2 and 3.

One theme that emerged in the qualitative interviews was the sense that if strong and reputable research were to be done which showed serious negative health effects of vaping, respondents would be more motivated to quit. Of the three statements added in Wave 3, this idea resonated most strongly with respondents, with 37% rating it as true: “If I stopped vaping, it would be because I saw research that led me to believe it was worse for my health than I thought”.

In the interviews, some participants indicated that if they or someone they knew experienced serious health problems related to vaping, this would motivate them to make a quit attempt. Quantitatively, more than one third (36%) of those vaping in Wave 3 found truth in the statement, “If I stopped vaping, it would be because I experienced a health scare or poor diagnosis.”

Affordability arose as a main motivator for future quit attempts in the qualitative interviews, and quantitatively, over one in four (27%) rated the statement “If I stopped vaping, it would be because I couldn't afford vaping liquids and devices” as true.

## P30D vaping: Specific motivations for quitting vaping are true

<b>QE7 Motivation for quitting vaping is true (score 8-10)</b> <b>"If I stopped vaping, it would be..."</b>	<b>W1 total (n=4,815)</b>	<b>W2 total (n=572)</b>	<b>W3 total (n=314)</b>
...because I personally believe it is the best thing for my health.	54%	49%	49%
...because I feel that I want to take responsibility for my own health.	52%	46%	48%
...because I have carefully thought about it and believe it is very important for many aspects of my life.	44%	41%	41%
I really don't think about stopping vaping.	28%	26%	25%
...because I would feel guilty or ashamed of myself if I vaped.	22%	21%	18%
...because I feel pressure from others to not vape.	22%	25%	19%
...because I experience a health scare or poor diagnosis	n/a	n/a	36%
...because I saw research that led me to believe it was worse for my health than I thought	n/a	n/a	37%
...because I couldn't afford vaping liquids and devices	n/a	n/a	27%
None of the above	22%	23%	20%

Base: W1 all respondents (n=4,815), W2 & W3 vaped in the past 30 days (Wave 2 n=572, Wave 3 n=314)

There are no notable differences between demographic subgroups across Waves 2 and 3. However, looking at Wave 3 there are some significant differences in whether or not participants even think about quitting vaping at all, based on vaping and smoking behaviours:

- In Wave 3, those who vape on a daily basis (30%) were more likely than those who vape only occasionally (20%) to agree with the statement, "I really don't think about quitting vaping."
- Those who formerly smoked (28%) and those who alternate smoking and vaping (26%) are more likely than those who never smoked (10%) to say they do not think about quitting vaping in Wave 3.
- On a similar note, those who formerly smoked in Wave 3 and those who alternated smoking and vaping were more likely to agree with the statement, "If I stopped vaping, it would be because I feel pressure from others not to vape" (18% and 22%, respectively), as compared to those who never smoked (7%).

Those who had quit vaping in Waves 2 and 3 were shown the same statements, but prefaced with "I stopped vaping because..." and asked to rate them on the same scale of 1 to 10, where 1 is "Not true at all" and 10 is "Very true." Taking responsibility for health is the top ranked motivation in both waves (Wave 2 54%, Wave 3 65%), followed by belief that it is best for health (Wave 2 53%, Wave 3 52%).

Interestingly, the new statement "Because I saw research that led me to believe it was worse for my health than I thought" resonated fairly well, with more than one in three seeing this as true (38%).



## Formerly vaped: Motivations for quitting vaping are true

<b>QE7B Motivation for quitting vaping is true (score 8 to 10) "I stopped vaping because..."</b>	<b>W2 total (n=121)</b>	<b>W3 total (n=65)</b>
I wanted to take responsibility for my own health.	54%	65%
I personally believed it was the best thing for my health.	53%	52%
Because I saw research that led me to believe it was worse for my health than I thought	N/A	38%
I believed it was very important for many aspects of my life.	41%	37%
I felt guilty or ashamed of myself because of my vaping.	25%	29%
I felt pressure from others not to vape.	21%	15%
Because I experienced a health scare or poor diagnosis	N/A	14%
Because I couldn't afford vaping liquids and devices	N/A	12%
None of the above	37%	28%

Base: Those who formerly vaped (Wave 2 n=121, Wave 3 n=65)

Note: QE7B was not asked in Wave 1

The small sample size of those who formerly vaped precludes further sub-group analysis.

## 8. Health issues

*Most report experiencing at least one health issue, most often dry cough.*

Respondents were asked to indicate whether they had experienced any of six health issues commonly associated with using nicotine inhalants. Four in ten had not experienced any of the listed symptoms, meaning that a majority had experienced at least one of these issues at some point. Experiences of dry cough were the most common in both waves (Wave 2 30%, Wave 3 23%) followed closely by phlegm (Wave 2 20%, Wave 3 22%).

Based on the age distribution and high incidence of past and current smoking in the survey sample, diagnoses of COPD (Wave 2 4%, Wave 3 6%) and lung cancer (1% to 2%) were in line with the established incidence of these disease among the general Canadian population<sup>3,4</sup>.

<b>QE8 Have you experienced any of the following health issues?</b>	<b>W2 total (n=693)</b>	<b>W3 total (n=379)</b>
Dry cough	30%	23%
Phlegm	20%	22%
Wet cough	17%	15%
Decreased lung capacity/shortness of breath	16%	18%
Chronic obstructive pulmonary disease (COPD)	4%	6%
Lung cancer	1%	2%
Other	<1%	2%
Not sure	7%	8%
None of the above	39%	42%

Base: All respondents (Wave 2 n=693, Wave 1 n=379)

Note: QE8 was not asked in Wave 1.

There were no notable differences in experience of health problems across demographic subgroups. Limited differences between groups based on vaping behaviour were observed:

- In Wave 2, Those who vaped on a daily basis were more likely to have experienced decreased lung capacity or shortness of breath (21%) when compared to those who formerly vaped (10%) or who only vaped occasionally (12%). This difference was no longer significant in Wave 3.
- In Wave 2, those who had vaped in the past 30 days were more likely to report experiencing a wet cough (18%) than those who formerly vaped (9%). This difference no longer existed in Wave 3.

<sup>3</sup> “Chronic Obstructive Pulmonary Disease (COPD) in Canada”, May 2018, Public Health Agency of Canada. [Chronic Obstructive Pulmonary Disease \(COPD\) in Canada - Data Blog - Public Health Infobase | Public Health Agency of Canada](#)

<sup>4</sup> “Lung Cancer in Canada”, 2019, Public Health Agency of Canada. [Lung cancer - Canada.ca](#)

## 9. Perceptions of quitting failure and success

*Just under 6 in 10 believe that failure to quit vaping is their own fault; this belief is commonly held across demographics and regardless of vaping status.*

In Wave 3, a new question was added to measure some perceptions of quitting success and failure; respondents were asked to rate their agreement with three statements, using a scale from 1 (strongly disagree) to 10 (strongly agree). More than half agree with the statement that if they fail at quitting, it is their own fault (56% rating it 8-10 out of 10). Just under half consider reducing vaping as a form of success (44%). Less than a quarter of respondents feel that quitting vaping would be easier if they had less stress in their lives.

<b>QE9 Consider the following statements about quitting vaping and indicate whether you agree or disagree (NET: Agree)</b>	<b>W3 total (n=379)</b>
If I fail at quitting, it's my own fault and I only have myself to blame	56%
Reducing the number of times I vape in a day or a week is success in my mind	44%
I could quit vaping easily if there was less stress in my life	23%

Base: All respondents (Wave 3 n=379).

Note: QE9 was only asked in Wave 3.

These perceptions are generally similar across demographic groups; adults 25+ are less likely to agree that they could quit vaping easily with less stress (21%) compared to young adults (35%).

There were few differences between vaping and smoking groups, but one group in particular showed some interesting results:

- Those who had quit smoking on longer-term basis by Wave 3 (i.e., quit smoking after Wave 1) were more likely to agree (65%) with the statement “If I fail at quitting, it’s my own fault and I only have myself to blame” compared to those who had newly quit smoking (47%) or who were still smoking (51%). While the statement relates to quitting vaping and not smoking, this attitude of self-blame may be influenced by experiences of quitting smoking.
- Those currently smoking in Wave 3 were more likely to agree (27%) with the statement “I could quit vaping easily if there was less stress in my life” compared to those who formerly smoked (18%). This may point to the impact of stress on vaping cessation.

## F. Access and affordability

### 1. Vaping device and liquid sources

*Vape shops are the most common source for vaping devices and liquids.*

Those who vape were asked again in Wave 2 about where they buy vaping products (i.e., devices and liquids). For vaping devices and liquids, in-person vape shops are the most common source of products; about two in three (67%) buy devices, and half (52%) buy liquids in vape shops. Buying products online (Devices 23%, Liquids 22%) and in other types of stores (Devices 19%, Liquids 21%) are also fairly common. These results are consistent with Wave 1.

#### Vaping device sources

<i>QF1A/B From where do you usually get your vaping devices and liquids?</i>	<b>Wave 1 Devices</b>	<b>Wave 1 Liquids</b>	<b>Wave 2 Devices</b>	<b>Wave 2 Liquids</b>
I buy it myself at a vape shop (in person, not online)	70%	55%	67%	52%
I buy it myself online	25%	25%	23%	22%
I buy it myself at a gas station, pharmacy or convenience/grocery store	22%	26%	19%	21%
I gave a friend/family member some money to buy it for me	17%	16%	11%	13%
A friend/family member gives/lends it to me	14%	14%	13%	13%
Other	<1%	1%	<1%	1%
Not sure	3%	5%	4%	7%

Base: Wave 1 all respondents (n=4,815), Wave 2 those who vaped in the past 30 days (n=572).

Note: This question was not asked in Wave 3.

Sources for devices and liquids are generally consistent across demographic groups, noting the following differences:

- Youth and young adults are more likely to get their devices (19%) and liquids (20%) from a friend or family member, compared to adults 25+ (Devices 9%, Liquids 8%).
- Online purchasing is less common in the Prairies (Devices 15%, Liquids 15%) compared to Ontario (Devices 29%, Liquids 27%).

For the most part, sources for vaping products vary little across vaping groups:

- Those who vape daily or weekly in Wave 2 are more likely to buy products online (Devices 25%, Liquids 24%) compared to those who vape monthly (Devices 13%, Liquids 10%).

There are some noteworthy differences between smoking sub-groups:

- While device purchases do not differ from group to group, those who formerly smoked are more likely to buy their liquid at a vape shop (62%) compared to those who are still smoking (44%).
- Those with past 30 day smoking are more likely to buy their devices at another type of retailer (25%) compared to those who formerly smoked (12%). Additionally, they are more likely to buy their liquid this way (28%) compared to both those who formerly (14%) and never smoked (14%). This could be because

it is easier for some to buy vaping products at the same places where they buy cigarettes, rather than seeking them at a specialty outlet or online.

## 2. *Unable to access vape flavours or devices*

*About one in three respondents recalled an instance when they could not access a vape flavour or device they wanted since completing the Wave 1 survey. Those who vape more often were more likely to experience difficulty.*

Among those with past 30 day vaping in Wave 2, nearly one in three recall a recent instance where they were not able to get the vaping flavour or device they wanted. This is somewhat lower compared to Wave 1.

### Unable to access vape flavours or devices

<b>QF2</b> <i>In the last 6 months/since you did the previous survey, was there ever a time you could not get a vape flavour or device you wanted?</i>	<b>Wave 1</b> (n=4,815)	<b>Wave 2</b> (since Wave 1) (n=572)
Yes	43%	31%
No	57%	69%

*Base: Wave 1 all respondents (n=4,815), Wave 2 those who vaped in the past 30 days (n=572)*

*Note: This question was not asked in the Wave 3 survey.*

Difficulty accessing devices or flavours was more common in Ontario (39%) compared to BC (23%) or Quebec (25%), but similar across age and gender lines.

Those who vape daily were more likely to encounter difficulty (39%) compared to those vaping weekly or monthly (21%). Those with past 30 day smoking were also more likely to encounter this sort of barrier (36%) compared to those who formerly smoked (25%).

### 3. Reason for not being able to access vaping devices or flavours

*Those who reported difficulties most often had trouble accessing their preferred flavour, usually because it was out of stock or because the store was temporarily closed.*

Those who could not get devices or flavours they wanted were asked a few questions to elaborate on their experiences.

Most commonly, these respondents encountered difficulty accessing their preferred flavour (58%). When flavour was the issue, this was usually a matter of the item being out of stock (58%), as opposed to the flavour being entirely discontinued (26%) or no longer legal for purchase (19%). The most common solution for those who could not get a flavour is to simply switch to a different flavour (65%). Buying online (16%) or getting the flavour from someone else (16%) are distant second options.

Store closures (26%) were the second most common reason for not being able to get a device or flavour. Results for this question were in line with Wave 1.

#### Reason for not being able to access vaping devices or flavours

<b>QF3</b> What was the reason you couldn't get the vape flavour or device you wanted?	<b>W1 total (n=2,392)</b>	<b>W2 total (n=171)</b>
My favourite flavour was no longer available	51%	58%
Store closed temporarily (e.g., COVID-19-related lockdown)	29%	26%
Too expensive/couldn't afford it	22%	19%
My favourite device was not available*	15%	17%
Store closed permanently	14%	16%
Out of stock (non-specific)	2%	0%
Government control/ban	1%	0%
My age (I was too young)	1%	1%
Other	1%	2%
Not sure	2%	0%

Base: Those who could not get a flavour or device they wanted (Wave 1 n=2,392, Wave 2 n=171).

Note: This was not asked in the Wave 3 survey.

\*Question wording changed in Wave 2.

## Reason for favourite flavour not being available

<b>QF3B</b> <i>There are many reasons why a flavour is not available. According to your situation, why do you think your favourite flavour was not available?</i>	<b>W2 total (n=99)</b>
The vendor didn't have the flavour in stock at that time	82%
The manufacturer stopped making that flavour	18%
My favourite flavour is no longer permitted for sale	10%
Other	3%
Not sure	4%

Base: Those whose favourite flavour was not available in QF3 (Wave 2 n=99)

Note: This was not asked in the Wave 3 survey.

<b>QF3C</b> <i>When the vape flavour you wanted was not available, how did you adjust?</i>	<b>W2 total (n=171)</b>
Switched to a flavour that was available for my device	42%
Shopped online	21%
Found a store in another province	20%
Bought from someone else	17%
Found another store in my province	16%
Reduced/quit vaping	13%
Switched to another device that could provide the flavour I wanted	9%
Replaced with cigarette use	5%
Replaced with another substance (e.g. alcohol, cannabis)	5%
Made my own flavour(s)	1%
Other	2%
Not sure	3%

Base: Those who could not get a flavour or device they wanted (Wave 2 n=171)

Note: This was not asked in the Wave 3 survey.

The small sample size for these questions limits analysis of sub-groups:

- Adults 25+ are more likely to name expense or affordability as a reason for not getting a product (26%) compared to youth and young adults (11%).
- A permanent store closure was a barrier for those who vape daily (20%) more often than for those vaping weekly or monthly (7%).
- Unavailability of a preferred flavour was a greater barrier for those who had never smoked (88%) compared to those smoking in the past 30 days in Wave 2 (46%).
- Those with past 30 day smoking were more affected by temporary store closures (39%), affordability (27%), and permanent store closures (22%) compared to those who never smoked (10%, 3%, 5%, respectively).

#### 4. *Type of device*

*Reusable devices are used more than disposable devices, and reusable devices with refillable cartridges are more popular than those with pre-filled cartridges.*

Reusable devices are most common among those with past 30 day vaping, used by about two in three (Wave 2 69%, Wave 3 64%). Of those who vape with reusable devices, refillable cartridge devices are used most often (Wave 2 63%, Wave 3 67%).

##### Type of device

<b>QF4B What type of vaping device do you currently use?</b>	<b>W2 total (n=572)</b>	<b>W3 total (n=314)</b>
Disposable	37%	41%
Reusable	69%	64%
Other	0%	1%

Base: Those who have vaped in the past 30 days (Wave 2 n=572, Wave 3 n=314).

##### Type of reusable device

<b>QF4C What type of reusable vaping device do you currently use?</b>	<b>W2 total (n=395)</b>	<b>W3 total (n=202)</b>
Uses pre-filled cartridges/pods	41%	39%
Refillable cartridge/pod & parts of the atomizer are customizable	63%	67%
Other	1%	1%

Base: Those who use a reusable vape device (Wave 2 n=395, Wave 3 n=202).



In Wave 2 and 3 there are some notable differences between demographic sub-groups:

- In Wave 2, disposable devices are used more often by those in Ontario (46%), compared to BC (25%), prairies (29%), and Atlantic Canada (26%). Quebec (42%) is also higher than BC for disposable devices. These differences do not persist in Wave 3.
- Adults 25+ are more likely to use reusable devices (75%) compared to youth and young adults (58%) in Wave 2. This difference is not present in Wave 3.
- In Wave 3, among those who vape with reusable devices, refillable cartridge devices are used more often by those in Atlantic Canada (93%) compared to BC (67%), prairies (61%), and Ontario (55%). Quebec (77%) is also higher for refillable cartridges compared to Ontario. Similar directional differences are noted in Wave 2 but they are not statistically significant.

For vaping and smoking behaviour sub-groups, device choices are fairly consistent between groups, noting a few differences:

- In Wave 3, those who vape daily are more likely to use reusable devices (72%) compared to those vaping weekly or monthly (53%). There is a directional difference noted in Wave 2 that is not statistically significant. Reusable devices may be a more practical and economical choice for those vaping more often.
- Those who formerly smoked are more likely to use reusable devices in Wave 2 (79%) compared to those with past 30 day smoking (66%) and those who never smoked (56%). This difference persists to some extent in Wave 3, where those who stopped smoking on a longer term basis are more likely to vape with reusable devices (76%) compared to those who quit more recently (51%), those who are new to smoking (43%), and those with ongoing smoking (63%). This could be because those using vaping for smoking cessation choose to invest in devices meant for longer-term use.
- Looking at refillable or pre-filled cartridges, those who with past 30 day smoking are more likely to use pre-filled cartridges compared to those who formerly smoked (29%) in Wave 3; this difference is not present in Wave 2.

## 5. Monthly spend on vaping products

*Average past-month spending on vaping products was just under \$70 for those who vape.*

In Wave 2 and 3, those who vape were asked how much they spent on different vaping components in the past month. In total, for both waves, the average past-month spend was \$68, with most spending up to \$50 a month.

### Total Monthly Spend

	On reusable devices sold with flavour(s) in replaceable cartridges	
<i>Sum of QF6C-D How much did you spend in the past month on...</i>	<b>Wave 2 (n=572)</b>	<b>Wave 3 (n=314)</b>
Up to \$50	60%	63%
\$50.01 to \$100	20%	16%
\$100.01 to \$200	15%	13%
Over \$200	5%	8%
<i>Mean</i>	\$68.43	\$67.55
<i>Median</i>	\$40.00	\$33.50

*Base: Those who have vaped in the past 30 days (Wave 2 n=572, Wave 3 n=314).*

*Note: Monthly spend was asked differently in Wave 1.*

While average spend varies across different demographic sub-groups, statistically significant differences in the mean between sub-groups are uncommon:

- Those who vape monthly in Wave 2 and 3 spend less (Wave 2 \$29, Wave 3 \$42) than those vaping daily (Wave 2 \$71, Wave 3 \$83) or weekly (Wave 2 \$77, Wave 3 \$47).
- In both waves, those who reduced their vaping spent less (Wave 2 \$43, Wave 3 \$51) than those whose vaping was steady (Wave 2 \$73, Wave 3 \$74).

Monthly spend for various components is broken out in more detail in the tables below.

**Monthly spend on vaping devices**

<i>QF6A-B How much did you spend in the past month on ...?</i>	<b>Wave 2</b>		<b>Wave 3</b>	
	<b>Reusable Devices (n=395)</b>	<b>Disposable devices (n=212)</b>	<b>Reusable devices (n=202)</b>	<b>Disposable devices (n=128)</b>
\$0	29%	3%	39%	2%
\$25 or less	12%	22%	10%	21%
\$25.01-\$50	14%	20%	10%	19%
\$50.01-\$75	7%	5%	2%	9%
\$75.01-100	3%	11%	5%	7%
More than \$100	4%	11%	5%	10%
<i>Mean</i>	\$34.07	\$75.51	\$27.63	\$63.22
<i>Median including \$0 spend</i>	\$20.00	\$35.00	\$0.00	\$40.00

*Base: Those who vape with disposable (wave 2 n=212, Wave 3 n=128) and reusable (Wave 2 n=395, Wave 3 n=202) devices  
 Note: Monthly spend was not broken down by device and liquid type in Wave 1*

## Monthly spend on pods or e-liquids

QF6C-D How much did you spend in the past month on...	Wave 2		Wave 3	
	Replaceable e-liquid cartridges or pods (n=172)	Liquid bottles for refilling cartridges or pods (n=243)	Replaceable e-liquid cartridges or pods (n=78)	Liquid bottles for refilling cartridges or pods (n=135)
\$0	5%	7%	5%	11%
\$25 or less	21%	19%	15%	13%
\$25.01-\$50	22%	21%	23%	24%
\$50.01-\$75	13%	9%	10%	9%
\$75.01-100	2%	5%	6%	5%
More than \$100	9%	3%	12%	10%
Mean	\$65.29	\$43.46	\$66.50	\$51.48
Median including \$0 spend	\$40.00	\$30.00	\$40.00	\$37.50

Base: Those who use replaceable cartridges (Wave 2 n=172, Wave 3 n=78) and flavour bottles (Wave 2 n=243, Wave 3 n=135)

Note: Monthly spend was not broken down by device and liquid type in Wave 1

## Monthly spend on reusable devices with flavour (i.e., kits)

QF6E-F How much did you spend in the past month on...	Wave 2		Wave 3	
	On reusable devices sold with flavour(s) in replaceable cartridges (n=158)	On reusable devices sold with flavour(s) in bottles (n=241)	On reusable devices sold with flavour(s) in replaceable cartridges (n=78)	On reusable devices sold with flavour(s) in bottles (n=135)
\$0	32%	36%	33%	46%
\$25 or less	11%	8%	5%	1%
\$25.01-\$50	11%	8%	8%	11%
\$50.01-\$75	7%	1%	3%	2%
\$75.01-100	1%	2%	4%	3%
More than \$100	3%	1%	0%	3%
Mean	\$26.08	\$13.25	\$17.90	\$25.07
Median including \$0 spend	\$7.00	\$0.00	\$0.00	\$0.00

Base: Those who use reusable devices with flavour cartridges (Wave 2 n=172, Wave 3 n=78) and with flavour bottles (Wave 2 n=241, Wave 3 n=135)

Note: Monthly spend was not broken down by device and liquid type in Wave 1

## 6. Perception of affordability of vaping

*Most of those who vape do not hold strong opinions on the affordability of vaping. Those who did were more likely to see it as affordable than unaffordable.*

In each wave, a majority of those who vape are neutral about the affordability of vaping, with six in ten (59% to 61%) rating it between 4 and 7 on a ten point scale, where 10 is very affordable, and 1 is not at all affordable. Very few find vaping to be unaffordable.

### Perceived affordability of vaping

<b>QF7 How affordable are the vaping devices and liquids you buy? Use a scale of 1 to 10, where 1 means very unaffordable, and 10 means very affordable?</b>	<b>W1 total (n=4,815)</b>	<b>W2 total (n=572)</b>	<b>W3 total (n=314)</b>
Affordable (8-10)	33%	31%	27%
Neutral (4-7)	59%	61%	59%
Unaffordable (1-3)	8%	8%	14%
<i>Mean</i>	6.52	6.43	5.95
<i>Median</i>	7	7	6

Base: W1 all respondents (n=4,815), W2 & W3 vaped in the past 30 days (Wave 2 n=572, Wave 3 n=314)

There are a couple of demographic sub-group differences to note in Wave 2, but not Wave 3:

- Men are more likely to find vaping affordable (35%) compared to women (25%).
- Adults 25+ find vaping to be more affordable (36%) compared to youth and young adults (23%).

Looking at vaping and smoking sub-groups, there are very few notable differences:

- Those who vape daily or weekly are more likely to find vaping to be affordable (Wave 2 33%, Wave 3 28%) compared to those vaping monthly (Wave 2 17%, Wave 3 14%).
- Those with past 30 day smoking in Wave 2 are more likely to find vaping affordable (37%) compared to those who never smoked (21%). A directional difference is also noted in Wave 3, but it is not statistically significant.

## 7. Vape price perceptions

*Half of Wave 3 respondents had noticed an increase in the price of vaping products since Wave 2.*

Half of respondents in Wave 3 (50%) say they noticed a price increase in vaping products since Wave 2; unsurprisingly this is concentrated among those with past 30 day vaping (55%), as opposed to those who are no longer vaping in Wave 3 (25%).

### Vape price perceptions

<b>QF8 Have you noticed if prices of vaping devices and liquids have increased, decreased, or remained the same since you took the last survey in December 2022?</b>	<b>W3 total (n=379)</b>	<b>Past 30 day vaping (n=314)</b>	<b>Former vaping (n=65)</b>
Increased	50%	55%	25%
Decreased	11%	13%	3%
Stayed the same	22%	24%	15%
Don't know	17%	8%	57%

*Base: All respondents (Wave 3 n=379).*

*Note: QB9 was only asked in Wave 3.*

Those in Atlantic Canada are more likely to notice increases (70%) compared to BC (42%), Ontario (46%), and Quebec (50%). There are no significant differences between age and gender groups.

As already noted, those still vaping are more sensitive to price increases than those not vaping. There are some other distinctions among vaping and smoking sub-groups:

- Those who vape daily in Wave 3 are more likely to see increases (63%) compared to those vaping weekly or monthly (44%).
- Those who stopped smoking on a longer term basis (61%) are more likely to say that prices have increased compared to those who have newly quit smoking (37%), are new to smoking (35%), have never smoked (41%), or are smoking on an ongoing basis (48%).

**8. Impact of Inflation**

*Among those vaping in Wave 3, two in three find price increases on other goods are impacting their ability to afford vaping; this is widely consistent across demographic, vaping, and smoking groups.*

Those with past 30 day vaping in Wave 3 were asked if price increases for other goods and necessities had impacted their ability to afford vaping products. Two out of three indicated that they were somewhat or very much impacted by inflation (67%).

**Inflation impact on ability to afford vaping products**

<b><i>QF10. How much have increases in prices for food, gas, and other necessities impacted your ability to afford vaping products?</i></b>	<b>P30 day vaping (n=314)</b>
Net: Very much / somewhat	67%
Very much	22%
Somewhat	46%
Not very much	19%
Not at all	14%

*Base: Those who vaped in the past 30 days (Wave 3 n=314)  
Note: QB10 was only asked in W3*

The impact is fairly uniform across age, gender, region, vaping, and smoking sub-groups. Those in the lowest household income bracket (under \$40K) are more likely to be very much or somewhat impacted (77%) compared to those in the highest income bracket (60%).

## 9. Budgeting for Vaping

*The most common strategies for fitting vaping into the budget were general budgeting or cutting back, making discount or bulk purchases, and reducing or quitting vaping, but those who vape most often said they don't do anything to fit it into their budget.*

Those currently vaping were asked an open-ended question about how they fit vaping into their budget. General budgeting and cutting back (12%) and discount or bulk purchases (12%) are the most common strategies, followed by reducing or quitting vaping (10%), but most often, those who vape say they don't do anything to fit it into their budget (30%). Smaller proportions say they cut back on luxuries (7%) or even on essentials (3%) in order to make room in the budget for vaping. For some (3%), vaping is a budgeting solution used in place of cigarettes.

<b>QF11. How do you fit vaping into your budget?</b>	<b>Wave 3 (n=314)</b>
General budgeting or cutting back	12%
Discount or bulk purchases	12%
Reducing or quitting vaping	10%
Cutting back on luxuries	7%
Cutting back on essentials	3%
Vaping IS the budgeting solution to smoking	3%
Vaping as a treat or splurge when there is money	2%
Debt or borrowing money	2%
Other	7%
Not doing anything	30%
No response	9%
Don't know	4%

*Base: Those who vaped in past 30 days (Wave 3 n=314).*

Across demographic lines, there is only one significant difference to note, which is that women are more likely to try discount or bulk purchases (17%) compared to men (9%).

There were also very few notable differences among vaping and smoking sub-groups. Those with longer term smoking cessation were more likely to try discount or bulk purchases (19%) compared to those who had newly quit smoking (2%) or were smoking on an ongoing basis between survey waves (8%).



## 10. Disposal of Vaping products

*Of those who have completely used up or otherwise replaced their vaping products, proper disposal is uncommon. While the most common form of disposal is in the garbage, a significant portion of respondents also recycle their vaping products; few make regular use of specialized waste facilities or retail return programs.*

Various global environmental groups and agencies have identified vape and e-cigarette devices and their cartridges as potentially harmful to the environment, with components requiring specific caution around disposal. Like other electronic devices such as cellphone and laptop computers, vaping products contain electronic circuitry, and lithium batteries that pose fire and explosion risks, and should not be disposed of in the regular garbage. Moreover, vaping devices contain a number of other potentially harmful compounds, including plastics, metals, and nicotine, that can leach into soil and cause water contamination, making them unsuitable for everyday garbage or recycling<sup>5</sup>.

To better understand knowledge and perceptions around vaping product waste disposal, the Wave 3 survey asked respondents who had finished or replaced a vaping product how they dispose of devices and components. The results show that only a minority dispose of their vaping products properly through hazardous waste facilities or retail return programs. As many as half throw their liquid cartridges and disposable vapes in the garbage, just under half dispose of their e-liquid bottles in the garbage, and over one third do the same with their reusable devices, most or all of the time.

Recycling is another popular yet incorrect means of disposal, with 4 in 10 using recycling as their primary means for disposing of e-liquid bottles, and more than 1 in 3 using it as their primary means of disposing of batteries. What's more, a plurality reported washing their liquid cartridges (35%) and bottles (42%) before disposing of them. Perhaps due to a lack of awareness, a sizable proportion simply did not dispose of their vaping paraphernalia after they had finished using it, with 30% hanging onto their reusable vapes and 32% holding onto their used batteries most or all of the time.

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<sup>5</sup> "A Review of Environmental Pollution from the Use and Disposal of Cigarettes and Electronic Cigarettes: Contaminants, Sources, and Impacts." November 2021, Sustainability. <https://www.mdpi.com/2071-1050/13/23/12994>

Proper disposal of vaping products and their components at a hazardous waste facility or through a retail return program was relatively rare. Participants appeared somewhat aware that batteries are considered hazardous waste; just under half reported disposing of them at a hazardous waste facility most or all of the time, and just under a quarter returned them to a retailer. However, fewer than one quarter of respondents disposed of all other vaping products at dedicated waste facilities, and less than one in five made use of retail-return programs.

Almost half do return batteries to appropriate facilities (47%) which could indicate that many who vape are simply unaware that their vaping products should be disposed of in a similar fashion.

**Vaping Product Disposal Occurrence**

<b>Vaping product disposal occurrence</b>	<b>QF12A. Have you finished a disposable vape? (n=379)</b>	<b>QF13A. Have you finished a reusable vape device? (n=379)</b>	<b>QF14A. Have you replaced any of the prefilled cartridges in a reusable vape device? (n=350)</b>	<b>QF15A. Have you refilled the pods or cartridges in a reusable vape device with e-liquid from a bottle? (n=350)</b>	<b>QF16A. Have you ever removed a battery from any of your vaping devices? (n=379)</b>
Yes	53%	41%	44%	49%	24%
No	23%	51%	56%	51%	76%
N/A	23%	8%	-	-	-

Base: All respondents (Wave 3 n=379)

Note: QF12-QF16 were only asked in Wave 3

**Vaping product disposal preparation**

<b>Before you disposed of it, did you...</b>	<b>QF14C. Did you rinse the prefilled cartridge first?</b>	<b>QF15C. Did you rinse the bottle first?</b>
Yes	35%	42%
No	65%	58%

Base: Those who have disposed of a pre-filled cartridge (Wave 3 n=133) or a flavour bottle (Wave 3 n=156)

Note: QF14C and F15C were only asked in Wave 3.

## Ways of disposing of vaping products

<b>% Disposed always / most of the time (among those who needed to dispose of item)</b>	<b>Disposable vape (n=202)</b>	<b>Reusable vape device (n=156)</b>	<b>Prefilled cartridges (n=153)</b>	<b>E-liquid bottles (n=170)</b>	<b>Batteries (n=91)</b>
In the garbage	51%	34%	51%	47%	21%
In the recycling bin	19%	27%	27%	39%	35%
On the ground	8%	13%	12%	9%	16%
At a specialized facility (e.g. municipal drop-off location for electronic devices or hazardous waste facility)	19%	23%	16%	15%	47%
Returned it to a retailer	19%	16%	17%	12%	24%
I have not disposed of it (e.g., left it in my place, car, bag; it wasn't mine, etc.)	13%	30%	15%	8%	32%
I gave it to someone else	10%	18%	14%	10%	18%
I lost or misplaced it	10%	15%	16%	8%	19%
Other	33%	23%	11%	4%	30%

Demographic and vaping behaviour subgroups for the disposal questions were too small to report on further subgroup analyses for these questions.

## G. Cannabis, alcohol and relative harm perceptions

### A. Frequency of use of cannabis

*Cannabis use is fairly common among those who vape or who formerly vaped, with as many as half smoking cannabis at least once in the past 30 days, and just under half vaping it in the same time period. Edibles are a less common form of cannabis consumption.*

Cannabis use is common among respondents. Smoking is the most common form of cannabis consumption with around half having smoked cannabis in the past 30 days in each wave. Vaping follows closely behind with 47% of respondents having used it in the past 30 days in both waves. The proportion of respondents smoking or vaping cannabis on a daily basis hovered around 15% across both waves. Edibles are a less common consumption method, with just under four in ten having used them in the last month, and as few as 1 in 20 using them daily.

#### Wave 2: Frequency of use of cannabis

QG2 In the past 30 days, how often did you use cannabis?	NET: Used in past 30 days	Daily	Less than daily, but at least once a week	Less than once a week, but at least once in the past month	Not at all
Vaping	47%	16%	21%	10%	53%
Smoking	49%	16%	20%	13%	51%
Edibles	38%	5%	16%	17%	62%

Base: W2 all respondents (N=693)

#### Wave 3: Frequency of use of cannabis

QG2 In the past 30 days, how often did you use cannabis?	NET: Used in past 30 days	Daily	Less than daily, but at least once a week	Less than once a week, but at least once in the past month	Not at all
Vaping	47%	15%	20%	11%	53%
Smoking	51%	17%	19%	15%	49%
Edibles	39%	7%	15%	17%	61%

Base: W3 all respondents (N= 379)

#### Cannabis use comparison table

QG2 In the past 30 days, how often did you use cannabis? (NET: used in past 30 days)	Wave 2 (n=693)	Wave 3 (n=379)
Vaping	47%	47%
Smoking	49%	51%
Edibles	38%	39%

Base: All respondents (wave 2 n=693, Wave 3 n=379)

Note that Wave 1 cannabis use data is not presented as the base sizes used in Wave 1 are not comparable.

Differences of interest between demographic groups as well as between those who have either quit or continued vaping are outlined below:

- In Wave 2, those who still vaped were more likely than those who formerly vaped to have consumed cannabis via vaping (55% vs. 13%), smoking (55% vs. 21%), and edibles (44% vs. 13%) in the past 30 days.
  - This pattern continues through Wave 3 where those who still vaped were more likely to have consumed cannabis via vaping (54% vs. 9%), smoking (56% vs. 28%), and edibles (45% vs. 12%) than those who formerly vaped.
- In Wave 3, men were more likely than women to have consumed cannabis in all forms in the past 30 days (Vaping - 54% vs. 37%; Smoking – 57% vs. 44%; Edibles – 44% vs. 33%).

**Frequency of use of alcohol**

*Three quarters of respondents have had at least one alcoholic drink in the past 30 days, and four in ten drink at least once a week.*

In Waves 2 and 3, all respondents were asked how often they had consumed alcohol in the past 30 days. Drinking behaviour is fairly consistent over the two waves, with three quarters having consumed alcohol in the past month, and approximately 1 in 10 drinking on a daily basis.

**Frequency of use of alcohol**

<b>QG4 In the past 30 days, how often did you drink at least one alcoholic beverage?</b>	<b>W2 total (n=693)</b>	<b>W3 total (n=379)</b>
NET: 30 days	77%	75%
Daily	10%	12%
Less than daily but at least once a week	41%	41%
Less than once a week, but at least once in the past month	26%	21%
Not at all	23%	25%

*Base: All respondents (Wave 2 n=693, Wave 3 n=379)*

*Note that Wave 1 alcohol use data is not presented as the base sizes used in Wave 1 are not comparable.*

A few differences in drinking behaviour were identified between demographic subgroups. Notably, patterns of alcohol consumption were also identified based on vaping behaviour.

- Those who had vaped in the past 30 days in Wave 2 were more likely to have drunk alcohol in that same time period than those who had formerly vaped (81% vs. 55%). This difference remains significant in Wave 3 (78% vs. 62%).
- Those who vaped on a daily basis in Wave 2 were more likely to also be drinking daily (16%) than those who formerly vaped (6%) or only vaped occasionally (3%). This difference continues through to Wave 3, where those who vaped daily (16%) were still significantly more likely to be drinking daily than those who vaped occasionally (8%). However, the difference between those who vaped daily and those who had quit vaping with regards to daily drinking was no longer statistically significant.
- In Wave 2, young adults aged 20-24 were more likely to have consumed alcohol in the past 30 days (87%) than youth aged 15-19 (64%) and adults 25+ (77%). This difference still exists but is no longer significant in Wave 3.

- In Wave 3, men were more likely than women to drink alcohol in the past 30 days (81% vs. 67%) and to be drinking at least weekly (62% vs. 43%).
- Also in Wave 3, those with an income above \$80,000 were more likely to have consumed alcohol in the past 30 days (86%) than those with an income below \$80,000 (70%).

### Perception of relative harms

*Of a list of six substances, smoking cigarettes is most likely to be rated as harmful, with approximately 7 in 10 consistently rating it as harmful across all three waves.*

In each wave, respondents were presented with a list of six activities and asked to rate how harmful they consider them to be, using a scale of 1 to 10, where 1 is “Not at all harmful” and 10 is “Extremely harmful.” Smoking cigarettes is consistently perceived to be the most harmful out of a list of six substance-related activities, with around 7 in 10 rating it as harmful across all three waves. There was no distinct runner-up, as rankings of the other five activities varied across waves, with ‘harmful’ ratings hovering around 4 in 10 for each activity.

It should be noted that in all three waves, vaping with nicotine and vaping with cannabis were consistently the least likely to be perceived as harmful.

#### Perception of relative harm of behaviours

<b>QG6 How harmful do you feel each of the following is, if done on a regular basis? Use a scale from 1 to 10 where 1 means “Not harmful at all” and 10 means “Extremely harmful.” NET harmful (8-10)</b>	<b>W1 total (n=4,815)</b>	<b>W2 total (n=693)</b>	<b>W3 total (n=379)</b>
Smoking cigarettes	68%	70%	69%
Drinking alcohol	39%	38%	39%
Eating junk food	37%	42%	41%
Smoking cannabis	35%	39%	43%
Vaping with nicotine (excluding cannabis)	34%	35%	34%
Vaping cannabis	33%	36%	39%

Base: All respondents (Wave 1 n=4,815, Wave 2 n=693, Wave 3 n=379)

No notable subgroup differences remained significant across Wave 2 and Wave 3. However, perceptions of harm differed according to vaping status. Those who formerly vaped were more likely to perceive all inhalants as harmful when compared to those who still vape.

- Smoking cigarettes (Wave 2: 83% vs. 67%) (Wave 3: 80% vs. 67%)
- Smoking cannabis (Wave 2: 57% vs. 35%)
- Vaping with cannabis (Wave 2: 55% vs. 32%) (Wave 3: 51% vs. 37%)
- Vaping with nicotine (Wave 2: 63% vs. 29%) (Wave 3: 62% vs. 28%)

## II. Detailed Findings – Qualitative IDIs

### A. IDI context and objectives

Following the Wave 2 survey, participants were asked if they would be willing to participate in an in-depth interview. From those who opted in, 125 were invited to participate in interviews, 45 scheduled interviews, and 39 completed interviews between January 4th and January 26th, 2023. The objective of the interviews was to develop an understanding of factors driving changes in vaping status, including quit attempts and cessation, and cigarette use, including starting or quitting smoking.

### B. Demographic / vaping behaviour of participants

At the time of the interviews, 12 participants had reduced their vaping (including four who had stopped), 5 had increased their vaping, and the other 22 stayed about the same from Wave 1 to Wave 2.

Most vaped with nicotine. Only a few participants vaped without nicotine, and some mentioned vaping with other compounds such as cannabis (with varying concentrations of CBD and/or THC).<sup>6</sup>

In explaining their vaping habits, participants described fairly regular breaks throughout the day when they would vape. Often, vaping was associated with specific situations such as following a meal, a break at work, driving, after work, and before bed. Usually, those still vaping were trying to reduce either their vaping frequency or the nicotine content in the vaping products they used.

Twelve participants alternated vaping and smoking, meaning they smoked as well as vaped. However, many more of the participants had formerly smoked either simultaneously or prior to their vaping, and at the time of the interview, only vaped.

A breakdown of participant demographics and vaping/smoking is below:

<b>Age</b>	
Youth (15-19)	0
Young Adult (20-24)	1
Adult (25+)	38
<b>Gender</b>	
Male	22
Female	17
<b>Region</b>	
BC/Territories	6
AB/SK/MB	5
Ontario	18
Quebec	9
Atlantic	1
<b>Wave 1 Vaping status</b>	
Daily	25

<sup>6</sup>These are two specific compounds found in cannabis products, cannabidiol (CBD) and tetrahydrocannabinol (THC).

Less than daily but at least once a week	14
<b>Wave 2 Vaping Status</b>	
Daily	23
Less than daily but at least once a week	8
Less than once a week but at least once in the past month	4
Not at all	4
<b>Wave 2 Smoking Status</b>	
Smoked at least once in the past month	17
Formerly smoked	17
Never smoked	5

### C. Life status and recent changes

Participants were asked to describe any significant changes in their lives. The majority were in relatively stable living situations, mentioning small day-to-day challenges such as finances, work stress, family issues, and adjusting to changes related to the pandemic.

*“I mean the biggest change was the pandemic, but since then it’s been getting smoother and smoother.”*

*“Nothing drastic, looking for alternate ways to supplement my income. But other than that it’s pretty much been the same old stuff.”*

A handful had recently experienced significant life events or negative changes such as family health issues or the death of friends or family. One person noted recent major, but positive changes in their life.

*“Actually, my dad just went through a minor operation. That was a little bit stressful because it’s been ongoing.”*

*“I’m currently unemployed so that kind of sucks.”*

### D. Role of vaping in life

Most interview participants were still vaping at the time of their interview, with only four participants having quit, and very few with serious intentions of quitting in the future. When asked what vaping means to them or what role vaping plays in their lives, participants brought up several common themes including stress relief, smoking cessation, habit, and pleasure.

The main role of vaping in participants’ lives was stress relief and relaxation. Participants noted that vaping gave them a sense of ease, has a calming effect, and was something to look forward to throughout the day.

*“It’s this smooth, comforting feeling that whether it’s nicotine or something more, it’s this calm, positive feeling that I get.”*

*“It allows me to feel comfortable with myself, just a way to escape life. It’s a little bonus time, it’s hard to describe, like a little prize at the end of the day, something to look forward to.”*



*“While I’m vaping it keeps me calm, keeps me centred, and lets me feel relaxed.”*

*“I guess it’s just a way to relax and deal with stress. I always find myself wanting to vape when I’m stressed.”*

Vaping was also a key factor in many participants’ journey to quit or reduce smoking. While they acknowledged that vaping is not harmless, they often saw it as “a lesser of two evils” when compared to smoking. Some participants intentionally switched from smoking to vaping as a means of quitting, while a few used vaping as an alternative when smoking was not convenient or permitted. Some also appreciated the ability to control their nicotine intake through vaping liquids with lower nicotine concentration, often reducing to lower levels than they would get with smoking.

*“To me, it’s a healthier than cigarettes. I don’t cough as much.”*

*“It was my avenue out of smoking.”*

Some participants described vaping as habitual or part of their daily routine. They either vaped throughout the day whenever they felt the urge or at specific times that became a pattern. Often, when discussing vaping as a habit, they mentioned how the rituals involved in vaping, such as having a daily vape with their morning coffee, reinforced the habit. A few mentioned regularly vaping for boredom relief or as “something to do.”

*“First half hour after waking up, before I go to work, then after work, after supper, and before bed.”*

*“It’s become a habit or a ritual because it feeds into all parts of my day. It can be used as stress relief, relaxation, but most times it’s a break between different parts of the day.”*

*“It’s something to do. I think my habit has a lot to do with boredom.”*

A handful of participants explicitly stated that they simply enjoyed vaping and did it for pleasure. Two noted they were especially interested in trying new devices and new flavours for a sense of novelty.

*“I enjoy it ... Just the motion of it and the mechanics of it. I guess I find it kind of relaxing.”*

*“It’s become a hobby. I’m interested in trying the new devices, the new flavours. As it continues to evolve ... There are innovative things they’re coming out with.”*

*“Aware that it’s very addicting. But at the same time, it relaxes me, it’s a ritual, I enjoy the flavours.”*

## **E. Smoking, alcohol and cannabis**

In addition to discussing vaping habits, participants were asked to discuss their experiences with smoking, alcohol and cannabis in general, and how those behaviours related to their smoking.

### **Smoking**

At the time of their interviews, most participants either currently smoked cigarettes, or they had previously quit. From the survey data, five participants were noted to have never smoked, but in one-on-one conversation just one participant said that they had never smoked cigarettes.

Respondents largely reported that vaping impacted the amount that they smoke, mainly because they are using vaping as a smoking cessation method. Most said they had reduced or quit smoking entirely, with eventual plans to quit vaping and be nicotine-free. However, some participants worried they would return to smoking due to nicotine cravings, if they tried to give up vaping. Note that of the four participants who were no longer vaping at the time of the interview, two of them had returned to smoking.

*"I'm hoping to quit smoking through vaping, then hoping to quit vaping the next year."*

*"Well, to me, [vaping is] healthier than cigarettes. I don't cough as much off of it. Like when I was smoking, cigarettes, I choked all the time ...I'm hoping I'm going to eventually not vape either."*

*"I'm just worried, I don't want to get back there. I don't want to get back to a point where I lose myself, physically, mentally, and emotionally. And I feel like if I don't have a grasp on my nicotine use during the day, then it will take me. So I have to be mindful of it... I'm afraid I'm going to start smoking and I don't want to."*

## Alcohol and Cannabis

Among participants who said they drink alcohol, there were mixed associations with vaping. Often, vaping and drinking alcohol went hand-in-hand, particularly in social situations, but for some who only drank rarely, there was no connection. Most of those who smoked cannabis did not see it as related to their vaping.

*"It used to be that there was that association but not so much now. They operate independently now. I don't find I need to vape when I'm drinking. I don't have the association."*

*"I usually drink one or two times a week... If I visit a friend and we have some wine, we sit with our vapes and chat and I vape more in those situations."*

*"One or the other."*

## F. Quitting considerations and attempts

Quitting vaping was not top of mind for most interview participants, and a significant portion did not consider quitting vaping to be a long-term goal. Often, they relied on vaping to keep them away from smoking, and viewed vaping as a less harmful alternative with fewer significant negative effects.

Whether or not they expressed an interest in quitting, perceptions of a successful quit attempt ranged from complete abstinence from vaping, to only vaping in social situations, or slowly transitioning to nicotine-free vaping products.

Participants were asked to discuss their views of quitting, and what success might look like when it comes to quitting vaping. This portion of the interviews elicited a wide range of responses. For some, quitting vaping was not a consideration at all. These participants saw vaping as a fixture in their lives, and expected to continue vaping for the foreseeable future.

*"Quitting for me is not the solution. I think it would be how to repurpose in a better way, so maybe trying to cut out nicotine."*

*"I don't seriously think about quitting at this point."*

*"I have considered in the past cutting down and when it was really big in the media about negative health effects, I thought about quitting. But I seem to be past those for now. I don't know what the future brings but for now I have no intentions to quit."*

*"I honestly have not ever really thought about quitting vaping. I don't know why, but I haven't."*

Of those who expressed at least some interest in eventually quitting, definitions of success varied. For some, it looked like complete abstinence from nicotine or from vaping, but for others it just meant reducing the amount they vape.

Those who saw reduction as the end goal hoped for a time when vaping was no longer part of their daily routine and perhaps just something they could do occasionally, in social settings. Many of those who saw quitting as a distant goal held this perspective.

*“Success would be after a few drinks having a vape, but not having it as routine. Either just in social settings or not at all.”*

Several participants defined quitting in terms of complete abstinence from vaping, or being nicotine-free, but still vaping non-nicotine liquids, at least on occasion. These individuals defined quitting success in objective terms as a vape-free or nicotine-free life.

*“End of the story of cigarettes and nicotine. It’ll be the end forever.”*

*We’ll keep on lowering it and then hopefully it will be no nicotine and we’ll just get off of it.”*

Some, especially those who saw quitting as a more active goal, saw successful quitting as an end to cravings, improved health, and simply living life without thinking about vaping at all on a day-to-day basis.

*“Success means to me; I take care of myself. I put my health as priority, and my family as priority. I don’t have to hide anymore, don’t have to hide money to vape.”*

*“It means I can go through social, stressful situations without having a craving. If craving is there, I can ignore and postpone.”*

*“Success means not even coming to my mind.”*

*“Not smoking or vaping anything. When I don’t crave it.”*

## **No Intention to Quit**

Most interview participants said they had never made a serious attempt to quit vaping, and just a handful had tried reducing either their vaping frequency or nicotine levels. Some elaborated to say they had not attempted to quit vaping because they were using vaping as a smoking cessation aid.

*“I’ve cut down. I was vaping more initially. Using it more like a smoking cessation device.”*

*“[I haven’t tried to quit yet]. I tried to reduce concentration. Right now I’m at 16 mg, but I started at 20-22.”*

## **Previous Quit Attempts**

Among those with quit attempts, experiences ranged widely with some finding quitting easy and beneficial, and others surprised to encounter real difficulty with it.

*“Breathing did get better.”*

*“The addiction. I didn’t think I would be triggered so much. I thought if I could quit cigarettes, I can quit vaping.”*

## **G. Motivations for quitting**

Although most participants did not have immediate plans to quit vaping, they saw health risks and affordability as possible future motivators for quitting.

When asked what could motivate them to quit, health risks emerged as a common theme among participants. Some mentioned that if they or someone they are close with experienced a health scare related to vaping, it might motivate them to try quitting.

*“Maybe if I had another heart attack or was diagnosed with lung cancer or emphysema or COPD. Another big health scare would make me think of quitting.”*

*“My brother-in-law was diagnosed with lung cancer, I decided then. By end of this year want to totally quit. I’ve read more articles about how vaping is harmful to the body.”*

*“Health is the biggest motivation to quit.”*

*“There are times I want to cut down. I sometimes get a nosebleed that I think is related to vaping.”*

Others indicated they might consider quitting if they heard evidence of negative health effects of vaping. Many participants were fairly convinced that vaping is much less harmful than smoking, and some did not see it as harmful at all.

*“Somebody telling me what the health risks are. If it’s shown to be harmful, I would be more inclined to quit.”*

*“The number one thing is if there is a clear, concise message out there based on facts and science that it was harmful to your health and that there was a link to direct health consequences. There’s still so much grey area in the media. I don’t want to give up something unless there really is going to be a true consequence.”*

*“Unless I hear something drastic about health risks, like cancer, there is no need for me to consider quitting. I enjoy it and don’t see the harm.”*

Affordability was another factor that might motivate participants to quit vaping. Often, they compared it to increases in the cost of cigarettes and stated that similar price increases might bring them closer to quitting vaping.

*“Maybe if it gets really expensive.”*

*“If the price of vaping devices or juices skyrocketed like they did with cigarettes, I’d probably look for a different alternative.”*

*“I would say the cost with these taxes being added to the vape liquids, all the juices. I stocked up before that tax came into effect. Depending on how that tax ends up looking in the long term, the cost may make me consider quitting.”*

*“The cost would be the most influential factor.”*

*“If they increase the price any further, that will deter me from wanting to continue.”*

## H. Quitting intentions and methods

Those trying to reduce or quit mentioned a variety of strategies for putting off urges, such as exercise and meditation. Because very few participants had actually attempted to quit vaping, there were no consistent themes around quitting methods or cessation aids.

Those who were still vaping were asked what methods they would consider using to try to quit or reduce vaping. Most often, participants said they would rely on will power or determination to go “cold-turkey,” or they would try some form of nicotine replacement therapy. Gradually reducing the concentration of nicotine in their vaping was another strategy mentioned by some.

*“It would just probably have to be sheer willpower... If I were to ever really try to quit seriously, I would probably just try to taper off.”*

*“If I really decided to quit, I would not replace it with something else. If I have to do it, I'll do it.”*

*“Cold turkey. I've tried moderation, cutting down, and it's slow and doesn't stop.”*

*“I don't think I could go cold turkey, might need gum or patch.”*

Among those who had quit vaping, a “mind over matter” approach was seen as important because the mental and psychological dependency was what made quitting most difficult. In these circumstances, quitting was a matter of focusing on other things and not thinking about vaping. Though quitting was not necessarily easy, for those participants who had quit, there was a high degree of confidence that they would not return to vaping.

*“Keeping busy and having things to think about. Not being bored, having places to go, hanging out with friends.”*

*“Personal motivation. Something just clicked.”*

## **I. Support to quit vaping**

Participants widely saw quitting as a personal decision, mainly driven by their own motivation. Seeking support to quit vaping, either professional or otherwise, was not a strong consideration. Some felt that family members and spouses would generally be supportive of their efforts to quit, but other types of support like counselling or speaking to a doctor just didn't register as necessary.

*“I strongly believe that quitting a habit is personal, an individual decision. You need support but at the end of the day, it's you. You should empower yourself.”*

*“I've heard about hypnosis and acupuncture. I might go into that if I'm finding it too difficult. If I'm struggling, I might investigate those other alternatives.”*

*“I would seek support if I needed. someone to tell you the craving will pass, and that you can do it.”*

With the interviews taking place in January 2023, a question was included about the role of New Years resolutions and quitting vaping. Quitting as a New Years resolution held very little interest for any participants, who generally did not see any value in New Years resolutions, or as a useful tool for quitting.

*“No, no that's the one thing I refuse to do is this new year new me stuff.”*

*“It's totally irrational. I mean there's nothing about New Year's Eve different than Friday night, right?”*

## J. Drivers of continued vaping

When asked to consider the main reason they are still vaping, participants most often mentioned enjoyment, habit or addiction, stress relief, and smoking cessation. Some described a cognitive dissonance wherein they do not know why they continue other than habit, because they know it is bad for their health.

*“Because I haven't found a way to totally give up cigarettes.”*

*“It's mostly habit... a way to relax. It's my time even if only a couple of minutes.”*

*“There are times when the vaping stops me from feeling irritable. It takes the edge off a situation. I look forward to it, it lowers my anxiety.”*

*“Just because it's enjoyable... it's down to pleasure of it... A sense of well-being and relaxation.”*

*“I couldn't even tell you, it makes no sense. This thing is \$20. I don't have money to be spending on this.”*

## K. Accessing vaping products

Participants mentioned several ways they would adapt if they were unable to get vaping devices or liquids, but most felt that they would be able to find some way of accessing the products, such as borrowing from a friend, driving a longer distance to purchase, ordering online, or buying illegally. A few said they would use such a circumstance as an opportunity to quit, or they would simply wait until products became available again. Other nicotine sources like the patch or gum were mentioned by some participants, and several said they would return to smoking cigarettes if they couldn't vape.

*“If had trouble, I'd probably go back to black market.”*

*“That would be a tough one. Possibly would go back to smoking as much as I don't want to. I would try my best not to.”*

*“That would be a good time to stop.”*

*“I don't even know. I'd have to go to other means of getting nicotine.”*

*“I'm not going to go through much effort to get vaping devices. I'll just quit. I wouldn't be willing to make the effort.”*

## L. Final Thoughts

At the end of the interview, participants were asked if they had any final thoughts that they felt Health Canada should know about vaping. Often, participants were torn between wanting Health Canada to understand the value they see in vaping as a smoking cessation aid, and wanting Health Canada to protect young people from picking up the habit. Several participants felt strongly that the government should not ban, tax or restrict access to devices or flavours which had been effective tools for them to quit or reduce their smoking, yet they felt it was important to deter youth from vaping. Suggested strategies for this included increasing youth-targeted advertising, and focusing on finding out how youths are accessing vape liquids and devices, to find more effective means of restricting youth from accessing vaping products without keeping them away from adults using them to quit smoking.

*“The biggest thing I would want them to know is it is an extremely effective way to get people to stay away from cigarettes... I think that kids will experiment...I think the age limits on it, I think that’s something effective. But you know I don’t think vaping is the bad guy here, I think cigarettes are.”*

*“Well, I know that it helped me to quit smoking...I think for me it’s more the kids that I’m worried about. They’re just starting vaping because they think it’s cool, not because they’ve ever smoked a cigarette in their life.”*

*“I think there should be stricter regulations with the vaping, especially with minors. I find that sometimes even looking at the school kids I’m surprised at the grade or the age that I see them vaping and I wonder how they would have gotten it. So I think maybe Health Canada can provide stricter regulations, enforced.”*

*“I know that young people seem to have a problem with it, people starting. But I don’t see anything wrong with a 70-year-old former smoker that wants to vape.”*

A few also called for the government to sponsor more research to discover any potential negative effects of vaping, often noting that they were confused or unsure about how bad vaping really is for health.

*“Right now, personally, I’m not entirely sure where the truth is. Maybe if they could put some really good research out there for people to know, yes, they think it is better than cigarettes but probably worse than not vaping, right?”*

*“Maybe I guess more research because I know for cigarettes, it’s the tar that sticks to the lungs and maybe constricts blood vessels. That’s why I had the heart attack and then vaping there’s no tar. So what are the dangers of vaping? I guess, more research.”*

## Appendix A: Quantitative Methodology

### 1. *Sample design and weighting*

The quantitative portion of this research study consisted of two return-to-sample surveys:

1. **Wave 2 return-to-sample survey:** A quantitative online return to sample (RTS) survey of 693 Canadians drawn from the 2022 baseline survey (Wave 1) of 4,815 Canadians aged 15 or older who vaped at the time of the original study. This survey was conducted from December 15, 2022, to January 22, 2023.
2. **Wave 3 return-to-sample survey:** A second quantitative online RTS survey of 379 Canadians drawn from Wave 2 participants. This survey was conducted from April 6 to June 1, 2023.

The original baseline vaping survey (Wave 1) conducted in spring of 2022 consisted of a national online survey of 4,815 Canadians aged 15 or over who vaped regularly at the time of the survey. The sample from the previous baseline survey forms the basis of the quantitative research in this study.

Waves 2 and 3 used an RTS approach, attempting to recontact all participants from the previous wave (i.e., Wave 2 is drawn from Wave 1, Wave 3 is drawn from Wave 2). Note that the original sample was designed to (a) be as representative as possible of the current vaping population by age, gender, and province, and (b) to maximize the subsample of youth (15-19 years) and young adult (20-24 years) who vape, for adequate analysis in subsequent waves (despite expected attrition).

To allow for the inclusion of youth under 18 years of age, the invitation was sent to panellists who were profiled as parents of children aged 15-17. They were then asked to provide consent for their child's participation before having their child complete the survey. This step was included in every wave, to ensure renewed parental consent every time. Note that respondent ages in each survey wave are based on the age first recorded in the baseline study in 2022.

Wave 2 data was weighted by age, gender, and region to reflect the vaping population in CTNS 2020. Wave 3 data was not weighted due to the small sample size, to avoid distorting individual responses. The main effect of the decision to not weight the Wave 3 sample was an increase in the proportion of respondents in the 25+ age bracket, a corresponding decline in the 15 to 19 bracket, and a shift in the gender ratio with women being somewhat overrepresented in Wave 3.

The full demographic profile at the beginning of the report indicates that on most variables including region, the samples for Wave 2 and Wave 3 were similar.



The following completions were achieved for Wave 2:

Age	2020 Population	Current vaping incidence (CTNS 2020)	Proportion of vaping population	Unweighted sample size	Proportion of total sample	Weighted sample size*
15-19	2,102,402	9.0%	17%	56	8%	121
20-24	2,484,313	8.7%	20%	134	19%	136
25+	27,408,756	2.5%	63%	503	73%	437
<b>Total</b>	<b>31,995,471</b>	<b>3.4%</b>	<b>100%</b>	<b>693</b>	<b>100%</b>	<b>693</b>

Wave 2 sample demographics:

Demographic group	Unweighted sample size	Unweighted proportion	Weighted proportion
<b>Region</b>			
Atlantic	46	7%	8%
Quebec	207	30%	26%
Ontario	228	33%	30%
MB/SK/AB	108	16%	20%
BC/Territories	104	15%	15%
<b>Age group</b>			
15-19	56	8%	17%
20-24	134	19%	20%
25+	503	73%	63%
<b>Gender</b>			
Male	355	66%	51%
Female	336	34%	48%
Gender diverse	2	<1%	<1%

The following completions were achieved for Wave 3:

Age	2020 Population	Current vaping incidence (CTNS 2020)	Proportion of vaping population	Unweighted sample size	Proportion of total sample	Weighted sample size*
15-19	2,102,402	9.0%	17%	26	7%	N/A
20-24	2,484,313	8.7%	20%	75	20%	N/A
25+	27,408,756	2.5%	63%	278	73%	N/A
<b>Total</b>	<b>31,995,471</b>	<b>3.4%</b>	<b>100%</b>	<b>379</b>	<b>100%</b>	<b>N/A</b>

## Wave 3 sample demographics

Demographic group	Unweighted sample size	Unweighted proportion	Weighted proportion
<b>Region</b>			
Atlantic	27	7%	N/A
Quebec	113	30%	N/A
Ontario	119	31%	N/A
MB/SK/AB	61	16%	N/A
BC/Territories	59	16%	N/A
<b>Age group</b>			
15-19	26	7%	N/A
20-24	75	20%	N/A
25+	278	73%	N/A
<b>Gender</b>			
Male	210	55%	N/A
Female	169	45%	N/A
Gender diverse	0	0%	N/A

To note: the incidence of current vaping among Canadians 15+ is 3.4 percent nationally (per Canadian Tobacco and Nicotine Survey [CTNS] 2020 data). As this online survey used 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.

## 2. Questionnaire design

Environics worked with Health Canada to develop questionnaires that ensured the research objectives were met and all questions were appropriately worded, and that they adhered to federal government standards for public opinion research. Upon approval from Health Canada, the questionnaires were translated into French. The final Wave 2 questionnaire is included in Appendix C, and the final Wave 3 questionnaire is included in Appendix D.

## 3. Pre-test

Prior to the launch of the Wave 2 and Wave 3 surveys, Environics provided test links to Health Canada for both language versions of the surveys and changes were made based on their comments. Then Environics arranged to conduct pretests in both official languages. For the pretests Environics selected a limited number of records and conducted a “soft launch” in each language. These preliminary surveys included standard Government of Canada pretest probing questions at the end, to ascertain the survey length and language was appropriate. The Wave 2 pretest took place on December 15, 2022 and achieved 105 responses (102 English and 3 French). The Wave 3 pretest took place on April 6, 2023 and achieved 40 responses (38 English and 2 French). No changes were required as a result of the pretests.

## 4. Fieldwork

The Wave 2 online survey was conducted from December 15, 2022, to January 22, 2023. The final average survey length for Wave 2 was 15.10 minutes. The Wave 3 survey was conducted from April 6 to June 1, 2023, and the final average survey length for Wave 3 was 16.33 minutes. The surveys were conducted by Environics

using a secure, fully featured web-based survey environment. Environics' data analysts programmed the questionnaires then performed thorough testing to ensure accuracy in set-up and data collection. This validation ensured that the data entry process conformed to the surveys' basic logic. The data collection system handles sampling invitations, quotas and questionnaire completion (skip patterns, branching, and valid ranges). The sample was sourced from a trusted panel provider, Maru. Additionally, some respondents from Wave 1 who were no longer part of the Maru panel were contacted directly, having provided an email address and consent to be re-contacted in the previous survey.

Environics assumed overall responsibility for all aspects of the survey fieldwork. The surveys were conducted according to the following steps:

- Environics programmed and hosted the online surveys on a secure server. All data were stored on Canadian servers and Canadian back-up servers located and only accessible in Canada, and physically independent from all other databases, directly or indirectly, that are located outside Canada.
- Invitations including a unique URL link (to ensure only one version of the survey is accepted per respondent) were sent to panel members. Non-responders were sent periodic reminders to encourage participation.
- Technical support was provided to online survey respondents as required. Steps were taken to assure (and also guarantee) complete confidentiality and anonymity of survey responses.
- All survey responses were electronically captured as they were submitted and combined into an electronic data file that was coded and analyzed (including open-ended responses).

All respondents were offered the opportunity to complete the surveys in their official language of choice. All survey respondents were informed of Government of Canada's sponsorship of the research, that their participation was voluntary, and that information collected was protected under the authority of privacy legislation.

Survey respondents, who were drawn from panels of individuals who have agreed to participate in online surveys, were rewarded for taking part in the survey per the panel's incentive program. The reward was structured to reflect the length of survey and the nature of the sample.

All research work was conducted according to best practices in the industry, such as the Standards for the Conduct of Government of Canada Public Opinion Research – Online Surveys (<http://www.tpsgc-pwgsc.gc.ca/rop-por/enligne-online-eng.html>) as well as applicable federal legislation (Personal Information Protection and Electronic Documents Act, or PIPEDA). Environics is a founding member of the Canadian Research Insights Council (CRIC) and registered the survey with CRIC's Research Verification System, which permits the public to verify a survey call, inform themselves about the industry and/or register a complaint. For more information about CRIC: <https://www.canadianresearchinsightscouncil.ca/>

**Non-response error** results from not being able to interview people who are eligible to take the survey. In this case, non-response bias is the difference in responses of those qualified participants who are invited to participate and those who complete the survey. Environics made every effort to minimize non-response error by ensuring a balanced sample of smokers were invited to the survey and by using quotas.

**Measurement error** is error or bias that occurs when surveys do not measure what they are intended to measure. This type of error results from flaws in the instrument, question wording, translation issues, question order, timing, question response options, etc. Environics and Health Canada designed a questionnaire that minimized this type of error.

**Accessibility considerations for the online survey.** There is a diverse scope of individuals who participate in research, and Environics has worked toward formatting surveys to enable a user-friendly experience for all participants. We set up our online surveys so screen readers can deliver a better experience to those with disabilities. We extensively test our online surveys using industry-standard techniques and screen readers. Environics ensures its online surveys meet Web Content Accessibility Guidelines (WCAG).

## 5. *Data coding and tabulation*

Following data collection and prior to analysis, data analysts performed a data-cleaning and validation process, in accordance with the highest industry standards. Open-ended question data were coded and Environics designed banner tables in consultation with the project authority. Data tables were submitted in CSV format.

The data from the Wave 2 survey are statistically weighted by age, gender and region to ensure the sample is as representative of this population as possible according to the most recently available Government of Canada information (current vaping incidence from CTNS 2020). In consultation with Health Canada project authorities, the data in Wave 3 are not weighted.

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 exclusive sub-groups, and not on differences compared to the total on in overlapping groups.

The nature of RTS sampling presents some complications when analyzing data across waves, including where sub-group differences are concerned. Due to the diminishing sample sizes from wave to wave, and changes in behaviour among respondents, some associations are present in one wave but not another. Regardless of their presence in one wave or the other, statistical differences between sub-groups are noted where they are interpreted to be important and relevant to the analysis.

## 6. *Completion results*

The completion results for survey are presented in the following table.

**Wave 2: Online survey contact disposition**

<b>Disposition</b>	<b>N</b>
Broadcasts delivered (c)	4815
Completed (d)	693
Qualified respondent break-off (e)	44
Disqualified (f)	0
Did not respond (g)	4078
Quota filled (h)	0
<b>Contact rate (d+e+f+h)/c</b>	<b>15.31</b>
<b>Participation rate (d+f+h)/c</b>	<b>14.39</b>

**Wave 3: Online survey contact disposition**

<b>Disposition</b>	<b>N</b>
Broadcasts delivered (c)	693
Completed (d)	379
Qualified respondent break-off (e)	17
Disqualified (f)	0
Did not respond (g)	297
Quota filled (h)	0
<b>Contact rate (d+e+f+h)/c</b>	<b>57.14</b>
<b>Participation rate (d+f+h)/c</b>	<b>54.69</b>

## Appendix B: Qualitative Methodology

The qualitative interviews were conducted from January 4 to February 1, 2023. The objective of the qualitative research was to develop an understanding of factors driving changes in vaping status, including quit attempts and cessation, as well as the relationship between vaping and smoking. Given the potentially sensitive nature of the subject matter at hand, IDIs were chosen to permit more in-depth exploration of smoking behaviour among individuals in an environment that promotes trust and candid discussion. IDI participants were selected from Wave 2 survey respondents, as screening for the IDIs first took place within the quantitative survey instrument. The screener is attached to this report at the end of the Wave 2 questionnaire in Appendix C.

### 1. *Sample design*

A total of 39 interviews were conducted, 35 in English and 4 in French. In order to identify factors that were associated with a successful quit attempt compared to an unsuccessful quit attempt, the goal was to complete half with those increased their vaping with nicotine, and the other half are with those that decreased their vaping with nicotine. Because vaping habits were fairly stable between waves, it was not possible to entirely exclude those who did not increase or reduce their vaping. Every effort was made to prioritize invitations to those who had reduced or increased vaping. Among those who complete interviews, 12 had reduced their vaping, 5 had increased their vaping, and the other 22 stayed the same from Wave 1 to Wave 2. No other quotas were set.

To encourage participation, an incentive of \$125 per participant was paid to all those who completed the exercise.

### 2. *Recruiting*

Interview participants were recruited via the Wave 2 online survey. To recruit participants, the Wave 2 quantitative survey included a qualitative screener which invited participants to the interviews. The screener was designed with standard questions to ensure that participants were qualified to participate in accordance with Government of Canada requirements, specifically:

- Participants met all the requirements specified for the study, i.e. they vaped regularly in the Baseline survey.
- No participant (nor anyone in their immediate family or household) worked in an occupation that has anything to do with the research topic area, in related government departments/agencies, nor in advertising, marketing research, public relations or the media (radio, television, newspaper, film/video production, etc.). Those who worked in these areas in the past 5 years will also be excluded.
- Since the research consisted of IDIs and participants were drawn from a survey sample, personal acquaintances between participants were not relevant.
- No participant was recruited who had attended a qualitative research session within the past six months.
- No participant was recruited who had attended five or more qualitative research sessions in the past five years.

Data from survey respondents who qualified and opted-in to the qualitative research were extracted into a data file containing contact information, basic demographics, and answers to key survey questions to determine quit attempts, and screener responses. This file was used by the Environics research team to recruit qualified participants to interviews.

Using the file extracted from the initial survey, qualified respondents were invited by email to participate in an interview. Invitations were sent directly from Environics Research. Invitation wording included critical details about the study to help overcome hesitance, and assurances that confidentiality would be preserved.

Respondents were invited on a priority basis, based on target quotas for region, language and quit attempts. Ultimately, 125 respondents were invited to participate in interviews, 45 scheduled interviews, and 39 completed interviews.

### **3. Interviewing**

In total, 39 interviews were conducted between January 4 and February 1. Interviews were scheduled to be less than 30 minutes, but the discussions often extended past the allotted time.

Environics drafted a discussion guide for review and approval by Health Canada. Topics covered throughout the guide included factors driving changes in vaping (e.g. stress, smoking cessation) and barriers to change. Participants were interviewed in an online platform called Recollective, where they could schedule their own interviews at times that were convenient for them. Interviews were offered in both English and French.

At the outset of each interview, the facilitator confirmed the participant's consent to proceed and verified the participant's identity and qualification to participate. Sessions were recorded with participants' consent, and transcribed automatically by the Recollective platform. All resulting data was stored securely on servers located in Canada. Immediately following each session, the recordings were transcribed and then deleted. Transcriptions have been provided to Health Canada with personally identifying details removed.

## Appendix C: Wave 2 Questionnaire

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Health Canada  
Fall 2022/Spring 2023 Longitudinal Vaping Survey  
**Wave 2 Questionnaire**

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### LANDING PAGE

Please select your preferred language for completion the survey / Veuillez sélectionner la langue de votre choix pour remplir le sondage.

- a) 01–English / Anglais
  - b) 02–Français / French
- 

### Background information

#### INVITATION FOR PARENTS AND LEGAL GUARDIANS OF 15-17 YEAR OLDS

Earlier this year, you gave permission for your 15, 16 or 17-year old teenager to participate in an important survey for Health Canada about vaping. We very much appreciate their participation and would like to get further opinions from them on this topic.

As before, it is a short 15-minute survey. The feedback will be used by Health Canada to develop regulations related to vaping and to design public education materials.



Since privacy is important while respondents answer this survey, we request that your teen be able to complete the survey in a setting where his/her answers will not be seen by others. All answers will remain anonymous and confidential.

**How does the online survey work?**

- Your child is being asked to give their opinions about vaping.
- Your child's participation is completely voluntary.
- Your decision on whether or not to allow your child to participate will not affect any dealings you may have with the Government of Canada.

**What about your child's personal information?**

- The personal information your child will provide to Health Canada is governed in accordance with the *Privacy Act* and is being collected under the authority of section 4 of the Department of Health Act in accordance with the *Treasury Board Directive on Privacy Practices*. We only collect the information we need to conduct the research project.
- **Purpose of collection:** We require your child's personal information such as demographics (e.g., age, gender) to better understand the topic of the research. However, your child's responses are always combined with the responses of others for analysis and reporting; your child will never be identified.
- **For more information:** This personal information collection is described in the standard personal information bank Public Communications – PSU 914, in Info Source, available online at [infosource.gc.ca](http://infosource.gc.ca).
- **Your child's rights under the *Privacy Act*:** In addition to protecting your child's personal information, the *Privacy Act* gives your child the right to request access to and correction of their personal information. Your child's personal information will be collected, used, retained and disclosed by Environics in accordance with the applicable provincial privacy legislation or the Personal Information Protection and Electronic Documents Act (PIPEDA). Please click [here](#) to review Environics' privacy policy.
- Your child's survey answers will remain anonymous and will not be attributed to him/her in any way.

**What happens after the survey?**

- The final report written by Environics will be available to the public from Library and Archives Canada (<http://www.bac-lac.gc.ca/>).

If you have any questions about the survey, please contact Environics at [stephanie.coulter@environics.ca](mailto:stephanie.coulter@environics.ca).

If you agree to allow your child to participate in this survey, please provide the survey link to him/her. Your teen can also access the survey by copying the following URL into his/her browser:

Thank you for your support of this important research.

**[LINK GOES TO "INTRODUCTION FOR ALL RESPONDENTS" BELOW](#)**

**ALL RESPONDENTS**

Earlier this year, you participated in a survey for Health Canada about vaping. We thank you for your input and would like to get further opinions from you on this topic, regardless of whether you currently vape.

As before, this a short **15-minute** survey being conducted by Environics, a Canadian public opinion research firm, on behalf of Health Canada. The feedback will be used by Health Canada to develop regulations related to vaping and to design public education materials.

Some of these questions are similar or identical to the ones you have answered before. Please answer them based on **what you think or do right now** without thinking about your previous answers.

**15-17-YEAR-OLDS ONLY:** As we did earlier this year, we asked your parent or legal guardian for permission for you to participate in this very important study. Your participation is voluntary, so it is up to you to decide whether you are willing to answer, but we hope you do! You can do the survey on your computer, laptop, tablet or phone. You can stop at any time if you feel uncomfortable or choose not to answer certain questions. Your answers will not be shown to your parent(s), legal guardian(s), teachers or anyone else, so please be as honest as you can.

**How does the online survey work?**

- You are being asked to give your opinions about vaping.
- Your participation is completely voluntary.
- Your decision whether or not to participate will not affect any dealings you may have with the Government of Canada.

**What about your personal information?**

- The personal information you provide to Health Canada is governed in accordance with the *Privacy Act* and is being collected under the authority of section 4 of the Department of Health Act in accordance with the *Treasury Board Directive on Privacy Practices*. We only collect the information we need to conduct the research project.
- **Purpose of collection:** We require your personal information such as demographics (e.g. age, gender) to better understand the topic of the research. However, your responses are always combined with the responses of others for analysis and reporting; you will never be identified.
- **For more information:** This personal information collection is described in the standard personal information bank Public Communications – PSU 914, in Info Source, available online at [infosource.gc.ca](http://infosource.gc.ca).
- **Your rights under the *Privacy Act*:** In addition to protecting your personal information, the *Privacy Act* gives you the right to request access to and correction of your personal information. Your personal information will be collected, used, retained and disclosed by Environics in accordance with the applicable provincial privacy legislation or the Personal Information Protection and Electronic Documents Act (PIPEDA). Please click [here](#) to review Environics' privacy policy.
- Your survey answers will remain anonymous and will not be attributed to you in any way.

**What happens after the survey?**

- The final report written by Environics will be available to the public from Library and Archives Canada (<http://www.bac-lac.gc.ca/>).

If you have any questions about the survey, please contact Environics at [stephanie.coulter@environics.ca](mailto:stephanie.coulter@environics.ca).

[CONTINUE TO SCREENING]

< PROGRAMMING NOTE: All questions are mandatory.>

**Eligibility/Screening**

- S1. [REMOVED; APPEND WAVE 1]
- S2. [REMOVED – APPEND WAVE 1]
- S3. [REMOVED; calculate with postal code, APPEND WAVE 1 AS SEPARATE VARIABLE]

**A. Vaping status**

Vaping products are a diverse group of products containing a heating element that produces an aerosol from a liquid that can be inhaled via a mouthpiece and include a range of devices such as “cig-a-likes,” vape tank systems, and vape mods.

- A1. [REMOVED]
- A2. During the past 30 days, how often have you used a vaping product **with or without** nicotine? (Please exclude vaping cannabis.) Was it:
  - 01 – Daily
  - 02 – Less than daily, but at least once a week
  - 03 – Less than once a week, but at least once in the past month
  - 04 – Not at all

[NOTE:

- PAST-30-DAY (P30D) VAPING: A2=1,2,3
- REGULAR VAPING: A2=1,2
- OCCASIONAL VAPING: A2=2,3
- FORMERLY VAPED: A2=4]

PROGRAMMING CREATE VARIABLE FOR WAVE 2 TRANSITIONS AS BELOW

Wave 1	Wave 2 Transitions	Wave 3 Transitions
Regular Vaping	Status Quo (Regular Vaping)	Status Quo (Regular Vaping)
		Reduced (Occasional Vaping)
		Quit Vaping (Formerly Vaped)
	Reduced (Occasional Vaping)	Status Quo (Occasional Vaping)
		Relapsed (Regular Vaping)
		Quit Vaping (Formerly Vaped)
	Quit Vaping (Formerly Vaped)	Status Quo (Formerly Vaped)
		Relapsed (Regular Vaping)
		Relapsed (Occasional Vaping)

A2b. [IF A2=2,3] On how many days of the past 30 days did you vape with or without nicotine? (Please exclude vaping cannabis.)

\_\_\_ days [RANGE 1-30]

A2c. [PAST 30D VAPING] Thinking of the past 30 days, did you only vape by yourself or only with others or somewhere in between?

- 01 – Only on my own
- 02 – Mostly on my own but sometimes with others
- 03 – About equally on my own and with others
- 04 – Sometimes on my own but mostly with others
- 05 – Only with others

A2d. [IF A2c=02-05] While **vaping with others** in the past 30 days, where did you vape? Select all that apply.

- 01 - At work (excluding working at home)
- 02 - At school (excluding studying at home)
- 03 - At home
- 04 - In a car
- 05 - At a friend's place
- 06 - At a public location (e.g., park, restaurant, sidewalk)
- 88 - Other, please specify

A2e. [IF A2c=01-04] While **vaping on your own** in the past 30 days, where did you vape? Select all that apply.

- 01 - At work (excluding working at home)
- 02 - At school (excluding studying at home)
- 03 - At home
- 04 - In a car
- 05 - At a friend's place
- 06 - At a public location (e.g., park, restaurant, sidewalk)
- 07 - Other, please specify

A3. [ASK ALL] Using a scale of 0 to 10, where 0 means "Very dissatisfied" and 10 means "Very satisfied", how do you feel about your life as a whole right now?

- 0 Very dissatisfied
- 10 Very satisfied

[NEW SCREEN]

[QUESTIONS FOR P30D VAPING A2=1,2,3]

**NOTE:** The following questions about your vaping habits and preferences refer only to vape liquids with/without nicotine and not cannabis/marijuana/THC.

**B. Frequency, history, and heaviness of use**

B1. Which of the following best describes how often you vaped liquids **with nicotine** in the past 30 days? (Please exclude vaping cannabis.)

- 01 – I vaped them every day
- 02 – I vaped them at least once a week, but not daily
- 03 – I vaped them less than weekly, but at least once in the past 30 days
- 04 – Not at all

B2. Which of the following best describes how often you vaped liquids **without nicotine** in the past 30 days? (Please exclude vaping cannabis.)

- 01 – I vaped them every day
- 02 – I vaped them at least once a week, but not daily
- 03 – I vaped them less than weekly, but at least once in the past 30 days
- 04 – Not at all

B3. Which of the following best describes how often you vaped liquids you weren't sure contained nicotine or not in the past 30 days? (Please exclude vaping cannabis.)

- 01 – I vaped them every day
- 02 – I vaped them at least once a week, but not daily
- 03 – I vaped them less than weekly, but at least once in the past 30 days
- 04 – Not at all

[PROGRAMMING – NO TERMINATE HERE]

B4. [IF 01-03 AT QB1] How soon after you wake up do you usually have your first vape **with nicotine**?

- 01 - Less than 5 minutes
- 02 - 6 to 30 minutes
- 03 - 31 minutes to 1 hour
- 04 - More than 1 hour

B5. On days you use them, please estimate how many separate times per day you usually vape ...?

[GRID, SELECT ONE ONLY FOR EACH]

- a. With nicotine? [HIDE IF B1=4]
- b. Without nicotine? [HIDE IF B2=4]
- c. When you're not sure if it contains nicotine? [HIDE IF B3=4]

- 01 - 5 or less times per day
- 02 - 6–10 times per day
- 03 - 11–15 times per day
- 04 - 16–20 times per day
- 05 - 21–25 times per day
- 06 - 26-30 times per day
- 07 - 31 or more times per day

08 - I vape continuously throughout the day

B5b. [IF B1=1-3] How much nicotine did the e-cigarettes, cartridges, pods or e-liquids you used contain? If you used different concentrations of nicotine, please select the one used most frequently.

- 01 - Up to 5.0 mg/ml (or 0.10 to 0.50%)
- 02 - 5.1 to 10.0 mg/ml (or 0.51 to 1.00%)
- 03 - 10.1 to 15.0 mg/ml (or 1.01 to 1.50%)
- 04 - 15.1 to 20.0 mg/ml (or 1.51 to 2.00%)
- 05 - Over 20 mg/ml (or over 2.00%)
- 99 - Not sure

B6. [REMOVED]

[NOTE: HEAVINESS OF VAPING WITH NICOTINE INDEX TO BE CALCULATED IN BACK END]

B7. We recognize your preferred flavour may or may not be the same as the one you most often vape. What flavour do you **most often** vape...?

[GRID, SELECT ONE ONLY FOR EACH]

- a. With nicotine? [HIDE IF B1=4]
- b. Without nicotine? [HIDE IF B2=4]
- c. When you're not sure if it contains nicotine? [HIDE IF B3=4]

[RANDOMIZE LIST IN GRID]

- 01 - Fruit
- 02 - Candy
- 03 - Coffee/tea
- 04 - Dessert
- 05 - Mint
- 06 - Menthol
- 07 - Tobacco flavour
- 08 - Alcohol flavour
- 09 - Flavourless/no flavour in descriptor
- 97 - Other [ANCHOR]
- 99 - Not sure [ANCHOR AT BOTTOM, SINGLE PUNCH]

B7i. What is your **preferred** flavour to vape...?  
*Same options as B7.*

B8. [REMOVED]

ENTER AGE IN YEARS, MUST BE =< RESPONDENT AGE

**C. Drivers to use, cognitive dissonance, stigma, barriers to change, quality of life**

C1. [ASK ALL] How many of the following people in your life vape?

A)	None	Some	Most or all	Not applicable	Not sure
a. Friends					
b. Classmates / co-workers					
c. Family members					
d. Parents/guardians					

C1b. [ASK ALL] Do the following people in your life vape?

B)	Yes	No	Not applicable	Not sure	
d. Spouse / partner					

C2. [P30D VAPING] Consider the following reasons why people might vape and rank your top three main reasons for vaping:

- 01 - To quit smoking
- 02 - To reduce the number of cigarettes I smoke
- 02b - Avoid returning to smoking
- 03 - I vape where smoking is restricted/not allowed
- 20 - Can vape discretely/without it being noticed
- 04 - I vape in certain social settings where it is more socially acceptable than smoking
- 05 - It's less harmful to my health than smoking
- 06 - It's less harmful to others/family/children than smoking
- 07 - It's cheaper than smoking
- 08 - I like the flavours and/or smell
- 22 - Helps me relax/cope
- 09 - It is fun and exciting
- 12 - I vape when it is offered to me
- 13 - It gives me a break from work/school/home
- 14 - It passes the time/boredom
- 15 - Habit/ritual
- 16 - For the "buzz"/as an alternate source of nicotine
- 17 - It's easier to buy/get than cigarettes
- 19 - As a social activity with friends or family
- 97 - Other (Specify)
- 99 - Not sure



- C3. [ASK ALL] The following statements are things that some people might say or think about vaping. For each one, indicate how much you agree with the statement, using a scale of 1 to 10 where 1 means you don't agree at all, and 10 means you strongly agree.

[GRID, RANDOMIZE]

- a) I enjoy vaping when having coffee or tea.
- b) The medical evidence that vaping is harmful is exaggerated.
- c) Vaping is an important part of my life.
- d) Vaping calms me down when I am stressed or upset.
- e) I enjoy vaping when I'm with other people who vape.
- f) Vaping helps me control my weight.

01 – Don't agree at all

10 – Strongly agree

#### D. Smoking status and questions for alternating use

The next few questions are about smoking cigarettes.

[PROGRAMMING NOTE – APPEND WAVE 1 SMOKING STATUS QUESTIONS TO DATA]

[KEY SMOKING STATUS QUESTION]

- D1. Since you did the previous survey in April 2022, did you smoke a whole cigarette?

01 - Yes

02 - No

99 - Don't know/prefer not to say

[KEY SMOKING STATUS QUESTION]

- D2. [IF D1=1] In the past 30 days, how often did you smoke cigarettes?

01 - Every day

02 - Less than daily, but at least once a week

03 - Less than once a week, but at least once in the past month

04 - Not at all

99 - Don't know/prefer not to say

[KEY SMOKING STATUS QUESTION]

D3. [PROGRAMMING NOTE – DIFFERENT SETS OF PEOPLE NEED TO BE ASKED THIS, SEE BELOW]

[WAVE 1 BaseLINE D1=1 AND WAVE 2 D1=1] ← in Wave 1 they say they've smoked a whole cigarette in their life; wave 2 they say they have smoked a whole cigarette since the previous survey.

[WAVE 1 BaseLINE D3=02,99 AND WAVE 2 D1=1] <- In Wave 1, they say they have not smoked 100 cigarettes in their life (or don't know) and in wave 2 they say they have smoked a whole cigarette since the previous survey.

[DO NOT ASK IF W\_1 D3=01]

Have you smoked at least 100 cigarettes in your life?

01 - Yes

02 - No

99 - Don't know/prefer not to say

[NON-SMOKING: D1=02,99]

[P30D SMOKING: D2=01,02,03]

[ALTERNATING USE: P30D VAPING AND P30D SMOKING]

[OLD DEFINITION FOR DUAL USE: REGULAR VAPING AND P30D SMOKING]

[FORMERLY SMOKED: D2=04 AND D3=01]

D3b. [P30D SMOKING] How old were you when you first tried smoking?

\_\_\_\_\_ ENTER AGE (≤ CURRENT AGE) [RANGE 5-99]

D3C. [P30D SMOKING] How long have you been smoking at your current rate?

01 - Less than one month

02 - 1 month to < 2 months

03 - 2 months to < 5 months

04 - 5 months or more

D3D. [P30D SMOKING] How often do you get strong urges to smoke?

01 – Never

02 – Less than daily

03 – Daily

04 – Several times a day

05 – Hourly or more often

99 – Not sure

D4. [REMOVED]

D5. [ALTERNATING USE] Which of the following best describes the main reason you smoke in addition to vaping?

[RANDOMIZE]

01 – Addiction/can't give it up/hard to quit

02 – Habit

03 – Like the feeling after smoking/vaping does not give the same feeling

- 04 – Craving nicotine/tobacco
- 05 – Still enjoy smoking
- 08 – Smoke with other smokers/with a drink/it's a social thing
- 10 – Smoke when I am stressed/anxious
- 12 – Like the taste of cigarettes better
- 94 - Trying to quit smoking gradually
- 97 – Other (Specify)
- 99 – Not sure

D6. [IF D2=01] On average, how many cigarettes do you smoke per day?  
[IF D2=02,03] On the days that you smoke, about how many cigarettes do you smoke?  
\_\_\_\_ Cigarettes per day (NUMERICAL RESPONSE)

D6b. [P30D SMOKING] How soon after you wake up do you usually have your first cigarette?  
01 - Less than 5 minutes  
02 - 6 to 30 minutes  
03 - 31 minutes to 1 hour  
04 - More than 1 hour

D7. [REMOVED]

D8. [D2=01,02,03 Since you did the previous survey in April 2022, how many times have you tried to quit smoking?  
\_\_\_\_ times [RANGE 1-999]  
99 - I did not try to quit smoking in that timeframe. [SKIP TO SECTION E]

D9. [IF D8<>99] Since you did the previous survey in April 2022, what was the longest time you have gone without smoking?  
\_\_\_\_ days [RANGE 1-6] OR \_\_\_\_ weeks [RANGE 1-3] OR \_\_\_\_ months [RANGE 1-11]

D10. [IF P30D SMOKING @ BaseLINE AND FORMERLY SMOKED @ W2] How long ago did you quit smoking?  
\_\_\_\_ months [RANGE 1-11]

D11. [D2=01,02,03 OR FORMERLY SMOKED] How useful has vaping been in helping you reduce or quit smoking?  
Use a scale of 1 to 10, where 1 means not useful at all, and 10 means extremely useful.

- 01 Not useful at all
- 10 Very useful

D11b. [D2=01,02,03 OR FORMERLY SMOKED] Since you did the previous survey in April 2022, with whom did you talk about using vaping to help you reduce or quit smoking? Select all that apply.

- 01 – Health care professional (e.g., doctor, nurse, dentist)
- 02 – Vape shop staff
- 03 – Friends
- 06 – Spouse/partner
- 07 – Family (excluding spouse/partner)
- 08 – Counselling or support group (in-person, online, or telephone)
- 04 – Other, please specify
- 05 – No one [UNIQUE SELECTION]

D12. [D2=01,02,03 OR FORMERLY SMOKED] Since you did the previous survey in April 2022, what other methods have you used to help you quit or reduce smoking?  
*Select all that apply.*

- 01 - Nicotine patch
- 02 - Nicotine gum
- 03 - Nicotine inhaler
- 04 - Nicotine nasal spray
- 05 - Nicotine lozenge
- 06 - Nicotine mouth spray
- 07 - Prescription medication like Zyban, Wellbutrin or Champix
- 09 - Reducing the number of cigarettes
- 10 - Cold turkey
- 13 – A smart phone app
- 14 – Quit-and-win type contests
- 11 - Other, please specify
- 12 – None of these [UNIQUE SELECTION]

### **E. Transitions, cessation and relapse: History, predicting, why and how**

E1. [P30D VAPING] Are you currently trying...?

GRID - SHOW IN ORDER

- a - To stop vaping
- b - To reduce your frequency of vaping

- 01 - Yes
- 02 - No

E2. [P30D VAPING] Since you did the previous survey in April 2022, how many times have you tried to quit vaping?

\_\_\_ times [RANGE 1-999]

99 - I did not try to quit vaping in that timeframe.

E3. [REMOVED]

E4. [IF E2<>99] Since you did the previous survey in April 2022, what was the longest time you have gone without vaping?

\_\_\_ days [RANGE 1-6] OR \_\_\_ weeks [RANGE 1-3] OR \_\_\_ months [RANGE 1-11]

[IF NEW FORMERLY VAPED] How long ago did you quit vaping?

\_\_\_ months [RANGE 1-11]

E5. [P30D VAPING OR FORMERLY VAPED] How important is stopping vaping to you? Use a scale of 1 to 10, where 1 means stopping vaping is not important at all, and 10 means it is the most important goal of your life.

01 – Not important at all

10 – Most important goal of my life

E6. [ASK IF E1A=01] How confident are you that you will quit vaping for good?

[ASK IF E1A=02] How confident are you that you will eventually quit vaping for good?

Use a scale of 1 to 10, where 1 means not confident at all, and 10 means extremely confident.

01 – Not at all confident

10 – Extremely confident

E7. [P30D VAPING] Different people have their own reasons for trying to stop vaping. Even if you're not planning to stop vaping right now, it may be something you think about or hear about from time to time.

Consider the following statements about why people might try to stop vaping, and indicate how true or not true each one is for you, on a scale of 1 to 10, where 1 means "not true at all" and 10 means "very true."

01 – Not true at all

10 – Very true

[GRID, RANDOMIZE BUT SHOW F LAST]

[SHOW WITH A TO E] If I stopped vaping, it would be...

- a. Because I feel that I want to take responsibility for my own health.
- b. Because I would feel guilty or ashamed of myself if I vaped.
- c. Because I personally believe it is the best thing for my health.
- d. Because I have carefully thought about it and believe it is very important for many aspects of my life.
- e. Because I feel pressure from others to not vape.
- f. [ALWAYS SHOW LAST, DO NOT SHOW "If I stopped vaping..."] I really don't think about stopping vaping.

E7b. [FORMERLY VAPED] Different people have their own reasons for stopping vaping.

Consider the following statements about why people might stop vaping, and indicate how true or not true each one is for you, on a scale of 1 to 10, where 1 means “not true at all” and 10 means “very true.”

01 – Not true at all

10 – Very true

[GRID, RANDOMIZE]

[SHOW WITH A TO E] I stopped vaping because...

- a) I wanted to take responsibility for my own health.
- b) I felt guilty or ashamed of myself because of my vaping.
- c) I personally believed it was the best thing for my health.
- d) I believed it was very important for many aspects of my life.
- e) I felt pressure from others to not vape.

E8. [ASK ALL] Have you experienced any of the following health issues? Select all that apply.

01 – Dry cough

02 – Wet cough

03 – Phlegm

04 – Decreased lung capacity/shortness of breath

05 – Chronic obstructive pulmonary disease (COPD)

06 – Lung cancer

97 – None of the above

98 – Other *please specify*

99 – Not sure

**F. Access**

- F1. [P30D VAPING] Since you did the previous survey in April 2022, from where do you **usually** get your vaping devices and liquids?  
*Select all that apply.*

	Vaping devices A)	Vaping liquids B)
I buy it myself at a vape shop (in person, not online)	01	01
I buy it myself at a gas station, pharmacy or convenience/grocery store	02	02
I buy it myself online	04	04
I gave a friend/family member some money to buy it for me	05	05
A friend/family member gives/lends it to me	08	08
Other (SPECIFY)	97	97
Not sure	99	99

- F2. [P30D VAPING] Since you did the previous survey in April 2022, was there ever a time you could not get a vape flavour or device you wanted?

01-Yes  
02-No

- F3. [IF F2=01] What was the reason you couldn't get the vape flavour or device you wanted?  
*Select all that apply.*

01-Store closed permanently  
02-Store closed temporarily (e.g., COVID-19-related lockdown)  
03-Too expensive/couldn't afford it  
04-My favourite flavour was not available  
05-My favourite device was not available  
06-My age (I was too young) [HIDE IF AGE > 25]  
98-Other (please specify)  
99-Not sure

- F3b. [IF F3=04] There are many reasons why a flavour is not available. According to your situation, why do you think your favourite flavour was not available? Select all that apply.

01-The vendor did not have the flavour in stock at that time  
02-The manufacturer stopped making that flavour  
03 – My favourite flavour is no longer permitted for sale  
04-Other (please specify)  
99-Not sure

- F3c. [IF F2=01] When the vape flavour you wanted was not available, how did you adjust? Select all that apply

[RANDOMIZE]

- 01 – Shopped online
- 02 – Found another store in my province
- 03 – Found a store in another province
- 04 – Bought from someone else
- 05 – Reduced/quit vaping
- 06 – Switched to a flavour that was available for my device
- 09 – Switched to another device that could provide the flavour I wanted
- 07 – Replaced with cigarette use
- 08 – Replaced with another substance (e.g., alcohol, cannabis)
- 10 – Made my own flavour(s)
- 98 – Other (please specify)
- 99 – Not sure

F4. [REMOVED]

F4b [P30D VAPING] What type of vaping device do you currently use? Please select all that apply.

- 01 – Disposable – intended for single use until either the battery or flavour cartridge depletes fully.
- 02 – Reusable – intended for longer-term use. The battery can be recharged and parts are detachable and/or replaceable.
- 05 – Other, please specify

F4c [IF F4b=02] What type of reusable vaping device do you currently use? Please select all that apply.

- 01 – It uses pre-filled e-liquid cartridges or pods. The cartridge/pod can be replaced with a new prefilled one; it cannot be manually refilled.
- 02 – Its cartridge or pod can be manually refilled with e-liquid. Parts of the atomizer, such as coils and filler materials, can be customized.
- 05 – Other, please specify

F5. [REMOVED]

F6. [P30D VAPING] How much did you spend in the past month on vaping devices and on pods or e-liquids? If you bought the device and flavours as part of a package (e.g., starter kit), please enter those separately.  
ENTER NUMBER

*Vape devices or flavours sold separately (e.g., not as part of a kit):*

[IF F4b=1] On disposable devices \$ \_\_\_\_\_ [RANGE \$0-\$700]

99 - I don't know

[IF F4b=2] On reusable devices \$ \_\_\_\_\_ [RANGE \$0-\$700]

99 - I don't know

[IF F4c=1] On replaceable e-liquid cartridges or pods \$ \_\_\_\_\_ [RANGE \$0-\$700]

99 - I don't know



[IF F4c=2] On e-liquid bottles that are used to refill cartridges or pods \$\_\_\_\_\_ [RANGE \$0-\$700]

99 - I don't know

*Vape devices and flavours sold as part of a kit (e.g., "starter kit"):*

[IF F4c=1] On reusable devices sold with flavour(s) in replaceable cartridges \$\_\_\_\_\_ [RANGE \$0-\$700]

99 - I don't know

[IF F4c=2] On reusable devices sold with flavour(s) in bottles (e.g., for refillable cartridges) \$\_\_\_\_\_ [RANGE \$0-\$700]

99 - I don't know

[IF RESPONDENT SELECTS 99 I don't know TO ALL AVAILABLE, SKIP F6A]

F6A. [P30D VAPING &F6<>99] To confirm, you spent about [SUM OF F6] on vaping products. Is that correct?

01 – Yes [PROCEED]

02 – No [SEE INSTRUCTION BELOW]

[IF NO – SHOW FOLLOWING AND SKIP BACK TO F6]

Please review the dollar amounts you entered for each item and correct as needed.

F7. [P30D VAPING] How affordable are the vaping devices and liquids you buy? Use a scale of 1 to 10, where 1 means very unaffordable, and 10 means very affordable.

01 – Very unaffordable

10 – Very affordable

**G. Cannabis, Alcohol, and Relative Harm Perceptions**

The following questions are about cannabis and alcohol.

For the purpose of this survey, "cannabis" also refers to the terms marijuana, pot, or hashish.

G1. [REMOVED]

G2. [ASK ALL]-In the past 30 days, how often did you use cannabis?

	Daily (01)	Less than daily, but at least once a week (02)	Less than once a week, but at least once in the past month (03)	Not at all (04)
a. Vaping				

b. Smoking				
c. Edibles				

G2b. [REMOVED]

G2c. [REMOVED]

Next, we have a few questions about drinking alcohol.

G3. [REMOVED]

G4. ~~[ASK IF G3=YES]~~ In the past 30 days, how often did you drink at least one alcoholic beverage?

01 - Daily

02 - Less than daily, but at least once a week

03 - Less than once a week, but at least once in the past month

04 - Not at all

G5. [REMOVED]

G6. [ASK ALL] How harmful do you feel each of the following is, *if done on a regular basis*? Use a scale from 1 to 10 where 1 means "Not harmful at all" and 10 means "Extremely harmful." [GRID, RANDOMIZE]

a) Vaping with nicotine (excluding cannabis)

b) Smoking cigarettes

c) Vaping cannabis

d) Smoking cannabis

e) Drinking alcohol

f) Eating junk food

01 – Not harmful at all

10 – Extremely harmful

## H. Respondent characteristics

The following are a few questions about you and your household, for statistical purposes only. Please be assured all of your answers will remain completely anonymous.

H1. [REMOVED]

[PROGRAMMING NOTE – PLEASE APPEND FROM WAVE 1]

H2. What is your current marital status?

- 01 - Never legally married nor lived with a common-law partner
- 02 - Legally married (and not separated)
- 03 - Living with a common-law partner
- 04 - Separated, but still legally married
- 05 - Divorced
- 06 - Widowed
- 99 – Prefer not to say

H3. [REMOVED]

[PROGRAMMING NOTE – PLEASE APPEND FROM WAVE 1]

H4. Do you identify as either of the following?

*Select one response for each*

- c) Someone living with a physical disability
- d) Someone living with a mental illness

- 01 - Yes
- 02 - No
- 99 – Prefer not to say

[PROGRAMMING NOTE – PLEASE APPEND LGBTQ AND VISIBLE MINORITY STATUS FROM WAVE 1]

H5. What is the highest level of formal education you have completed?

*Select one only*

- 01–Less than a high school diploma or equivalent
- 02–High school diploma or equivalent
- 03–Registered Apprenticeship or other trades certificate or diploma
- 04–College, CEGEP or other non-university certificate or diploma
- 05–University certificate or diploma below bachelor’s level
- 06–Bachelor’s degree
- 07–Postgraduate degree above bachelor’s level
- 99–Prefer not to say

H6. Which of the following categories best describes your current employment status?

*Select one only*

01 - Working full-time, that is, 35 or more hours per week

02 - Working part-time, that is, less than 35 hours per week

03 - Self-employed

04 - Unemployed, but looking for work

05 - A student attending school full-time/part-time

06 - Retired

07 - Not in the workforce (full-time homemaker, unemployed and not looking for work)

97 - Other [DO NOT SPECIFY]

99 - Prefer not to say

H7. [IF H6=04 ASK] Have you been unemployed for more than a year?

01 – Yes

02 – No

99 – Prefer not to say

H8. [REMOVED]

H9. [IF H6=01, 02, 03] Which of the following categories best describes your *main* occupation?

[IF H7=02] Which of the following categories best describes your *most recent* occupation?

01 - Senior and middle management

- (Examples: President, Vice-President, CEO, CFO, COO, Principal, Dean, Registrar, DM, ADM, DG, Director, Manager)

02- Professional

- (Examples: Lawyer, Doctor, Nurse, Dentist, Professor, Engineer, Accountant, Veterinarians, Optometrists, Teachers, Social Workers, Policy Research Analysts, Journalists)

03 - Technical/Paraprofessional

- (Examples: Paralegal, Early Childhood Educator, Instructor, Inspectors, Enforcement Officers, Opticians, Creative Design)

04 - Sales and Service

- (Examples: Retail and Wholesale Salesperson, Clerk, Agent)

05 - Administrative, clerical and office support

- (Examples: Administrative, Office, Medical assistants; data entry, receptionist)

06 - Industrial, electrical and construction trades

- (Examples: Electrician, Plumber, Pipefitter, Carpenter, Boilermaker)

07 - Maintenance and equipment operation trades, installers, repairers, and material handlers

- (Examples: Truck or Transit Driver, Crane operator, Train Crew; Mechanical, Transport or Heating mechanic; longshore worker)

08 - Processing, manufacturing and utilities machine operators and assemblers

09 - Construction, agricultural, forestry, fishing, landscaping labourer/general worker

99 - Prefer not to say

H10. [ASK 16+ ONLY] Which of the following best describes your total household income for 2021, before taxes, from all sources for all household members?

*Select one only*

- 01—Under \$20,000
- 02—\$20,000 to just under \$40,000
- 03—\$40,000 to just under \$60,000
- 04—\$60,000 to just under \$80,000
- 05—\$80,000 to just under \$100,000
- 06—\$100,000 to just under \$150,000
- 07—\$150,000 and above
- 99—Prefer not to say

H11. [REMOVED]

H12. [ASK 18+ ONLY] Are there any children under 18 years of age living in your household?

- 01 – Yes
- 02 – No
- 99 – Prefer not to say

H12b. What are the first three digits of your postal code? This will not be used to identify you.

- \_\_\_ [text response]
- 99 – Prefer not to say

H12c. [If WAVE 1 BaseLINE S1=17-20] Are you currently...

- 17 years old
- 18 years old
- 19 years old
- 20 years old
- 21 years old
- Prefer not to say

H12d. Do you have insurance that covers all or part of your prescription medications?

- 01 – Yes
- 02 – No
- 99 – Prefer not to say

[Applicable panels: Request for follow up email for subsequent waves]

H13. We would like to get your email to follow up with you, to learn about how your vaping may change over time. If you consent to us re-contacting you, please provide your email address below. It will not be used for any other purpose. This request has been approved by your research panel. Your participation will continue to be absolutely voluntary.

\_\_\_\_\_ Please enter your email -PROMPT FOR VALID EMAIL FORMAT

99–Prefer not to provide

**IDI SCREENING / OPT-IN**

1. In the text box below, please describe what you consider to be the **luckiest thing** that ever happened to you. **Please be as specific and detailed as possible**, and explain not just what happened, but how you felt.

77 – Text box: [SET MIN 50 CHARS]\

2. On a scale of 1 to 10, how well do the following statements express your feelings. A score of 10 means the statement describes your feelings extremely well, a score of 1 means that the statement does not describe your feelings at all, or you can use any number in between.

1 < DOESN'T DESCRIBE ----- DESCRIBES WELL > 10

a. If asked to describe something, I can usually do so in detail:

1    2    3    4    5    6    7    8    9    10

b. I'm comfortable expressing my feelings online:

1    2    3    4    5    6    7    8    9    10

c. My friends often ask my opinions of things:

1    2    3    4    5    6    7    8    9    10

d. I generally have an opinion or point-of-view on topics or issues:

1    2    3    4    5    6    7    8    9    10

e. I enjoy exchanging ideas with people on a wide variety of things:

1    2    3    4    5    6    7    8    9    10

f. People tell me I'm creative:

1    2    3    4    5    6    7    8    9    10

g. I will share my ideas, even if other people have different points of view:

1    2    3    4    5    6    7    8    9    10

· ALL RESPONDENTS MUST HAVE 4 OR MORE STATEMENTS CIRCLED A "7", "8", "9", OR "10". IF NOT AND QUALIFY ON ALL OTHER FRONTS, HOLD RESPONDENT.

QUAL1. We will be conducting follow-up qualitative research to more deeply understand your experience with vaping. This would involve a more in-depth one-on-one discussion for [vapers / former vapers] like yourself.

**Participants will receive an honorarium of \$125 as a thank you for your time.**

The discussions would be conducted by Environics Research (<https://environicsresearch.com/>) on behalf of the Government of Canada.

The discussions will happen in the next few weeks. Participation would involve a one-on-one interview that would last for approximately 15 minutes. The interview will be conducted by a highly trained researcher from Environics Research who will ask questions about your experience with vaping.

All data gathered will be securely stored on Environics Research servers in Toronto for approximately 12 months for documentation and insight generation purposes only. Environics Research will take reasonable steps to retain Personal Information only for as long as needed to complete the research. For more information, please see Environics Research's privacy policy: <https://environicsresearch.com/privacy-policy/>

Taking part in these interviews is completely voluntary. If you are interested, you will need to provide your first name, last name and a telephone number you can be reached at. Please note that this information (name and phone number) will only be used to invite you to participate, should you be selected, and will be kept separate from your responses in the interview.

Are you interested in participating?

- Yes
- No

[IF QUAL1=YES] QUAL2. Your participation in these interviews would be anonymous – the interviewer will only have access to your first name and some basic demographic information (age, gender, region, vaping status). The information you provide will not be linked with your name on any written document. The interviewer may record the conversations to aid them in analyzing the results, so we ask that you do not disclose your last name and/or any identifiable information about yourself.

Do you agree to these terms of participation?

- Yes
- No

[IF QUAL2=YES] QUAL3: Please provide us with the following contact information so we can send you details about the interviews if you are selected to participate:

First name	
Last name	
Email address	
Telephone number	

I am not willing to provide my contact information (you will not be invited to participate).

This completes the survey. On behalf of Health Canada, thank you for your valuable input. In the coming months, the results of this survey will be available on the Library and Archives Canada website.

[PROGRAMMING NOTE: ADD PRE-TEST QUESTIONS]



## Appendix D: Wave 3 Questionnaire

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Health Canada  
Fall 2022/Spring 2023 Longitudinal Vaping Survey  
**Wave 3 Questionnaire**

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### LANDING PAGE

Please select your preferred language for completion the survey / Veuillez sélectionner la langue de votre choix pour remplir le sondage.

01–English / Anglais

02–Français / French

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### Background information

#### INVITATION FOR PARENTS AND LEGAL GUARDIANS OF 15-17 YEAR OLDS

Last year, you gave permission for your 15, 16 or 17-year old teenager to participate in an important survey for Health Canada about vaping and second follow-up survey on the same topic. We very much appreciate their participation and would like to get further opinions from them on this topic. This is the third and final wave of this study.

As before, it is a short 15-minute survey. The feedback will be used by Health Canada to develop regulations related to vaping and to design public education materials.

Since privacy is important while respondents answer this survey, we request that your teen be able to complete the survey in a setting where his/her answers will not be seen by others. All answers will remain anonymous and confidential.

**How does the online survey work?**

- Your child is being asked to give their opinions about vaping.
- Your child's participation is completely voluntary.
- Your decision on whether or not to allow your child to participate will not affect any dealings you may have with the Government of Canada.

**What about your child's personal information?**

- The personal information your child will provide to Health Canada is governed in accordance with the *Privacy Act* and is being collected under the authority of section 4 of the Department of Health Act in accordance with the *Treasury Board Directive on Privacy Practices*. We only collect the information we need to conduct the research project.
- **Purpose of collection:** We require your child's personal information such as demographics (e.g., age, gender) to better understand the topic of the research. However, your child's responses are always combined with the responses of others for analysis and reporting; your child will never be identified.
- **For more information:** This personal information collection is described in the standard personal information bank Public Communications – PSU 914, in Info Source, available online at [infosource.gc.ca](http://infosource.gc.ca).
- **Your child's rights under the *Privacy Act*:** In addition to protecting your child's personal information, the *Privacy Act* gives your child the right to request access to and correction of their personal information. Your child's personal information will be collected, used, retained and disclosed by Environics in accordance with the applicable provincial privacy legislation or the Personal Information Protection and Electronic Documents Act (PIPEDA). Please click [here](#) to review Environics' privacy policy.
- Your child's survey answers will remain anonymous and will not be attributed to him/her in any way.

**What happens after the survey?**

- The final report written by Environics will be available to the public from Library and Archives Canada (<http://www.bac-lac.gc.ca/>).

If you have any questions about the survey, please contact Environics at [stephanie.coulter@environics.ca](mailto:stephanie.coulter@environics.ca).

If you agree to allow your child to participate in this survey, please provide the survey link to him/her. Your teen can also access the survey by copying the following URL into his/her browser:

Thank you for your support of this important research.

**[LINK GOES TO "INTRODUCTION FOR ALL RESPONDENTS" BELOW](#)**

**ALL RESPONDENTS**

Last year, you participated in a survey for Health Canada about vaping and a follow-up survey on the same topic. We thank you for your input on both surveys and would like to get further opinions from you on this topic, regardless of whether you currently vape. This will be the third and final wave of this study.

As before, this a short **15-minute** survey being conducted by Environics, a Canadian public opinion research firm, on behalf of Health Canada. The feedback will be used by Health Canada to develop regulations related to vaping and to design public education materials.

Some of these questions are similar or identical to the ones you have answered before. Please answer them based on **what you think or do right now** without thinking about your previous answers.

**15-17-YEAR-OLDS ONLY:** As we did in previous surveys last year, we asked your parent or legal guardian for permission for you to participate in this very important study. Your participation is voluntary, so it is up to you to decide whether you are willing to answer, but we hope you do! You can do the survey on your computer, laptop, tablet or phone. You can stop at any time if you feel uncomfortable or choose not to answer certain questions. Your answers will not be shown to your parent(s), legal guardian(s), teachers or anyone else, so please be as honest as you can.

**How does the online survey work?**

- You are being asked to give your opinions about vaping.
- Your participation is completely voluntary.
- Your decision whether or not to participate will not affect any dealings you may have with the Government of Canada.

**What about your personal information?**

- The personal information you provide to Health Canada is governed in accordance with the *Privacy Act* and is being collected under the authority of section 4 of the Department of Health Act in accordance with the *Treasury Board Directive on Privacy Practices*. We only collect the information we need to conduct the research project.
- **Purpose of collection:** We require your personal information such as demographics (e.g. age, gender) to better understand the topic of the research. However, your responses are always combined with the responses of others for analysis and reporting; you will never be identified.
- **For more information:** This personal information collection is described in the standard personal information bank Public Communications – PSU 914, in Info Source, available online at [infosource.gc.ca](http://infosource.gc.ca).
- **Your rights under the *Privacy Act*:** In addition to protecting your personal information, the *Privacy Act* gives you the right to request access to and correction of your personal information. Your personal information will be collected, used, retained and disclosed by Environics in accordance with the applicable provincial privacy legislation or the Personal Information Protection and Electronic Documents Act (PIPEDA). Please click [here](#) to review Environics' privacy policy.
- Your survey answers will remain anonymous and will not be attributed to you in any way.

**What happens after the survey?**

- The final report written by Environics will be available to the public from Library and Archives Canada (<http://www.bac-lac.gc.ca/>).

If you have any questions about the survey, please contact Environics at [stephanie.coulter@environics.ca](mailto:stephanie.coulter@environics.ca).

[CONTINUE TO SCREENING]

< PROGRAMMING NOTE: All questions are mandatory.>

**Eligibility/Screening**

- S1. [REMOVED; APPEND WAVE 1]
- S2. [REMOVED – APPEND WAVE 1]
- S3. [REMOVED; calculate with postal code, APPEND WAVE 1 AS SEPARATE VARIABLE]

**A. Vaping status**

Vaping products are a diverse group of products containing a heating element that produces an aerosol from a liquid that can be inhaled via a mouthpiece and include a range of devices such as “cig-a-likes,” vape tank systems, and vape mods.

- A1. [REMOVED]
- A2. During the past 30 days, how often have you used a vaping product **with or without** nicotine? (Please exclude vaping cannabis.) Was it:
  - 01 – Daily
  - 02 – Less than daily, but at least once a week
  - 03 – Less than once a week, but at least once in the past month
  - 04 – Not at all

[NOTE: DEFINITIONS BaseD ON W3 RESPONSE:

- PAST-30-DAY (P30D) VAPING: A2=1,2,3
- REGULAR VAPING: A2=1,2
- OCCASIONAL VAPING: A2=2,3
- FORMERLY VAPED: A2=4]

[NOTE: DEFINITON REQUIRES PAST WAVE DATA:

- RELAPSED: W2\_A2=4 AND W3\_A2 < 4]]

PROGRAMMING CREATE VARIABLE FOR WAVE 3 TRANSITIONS AS BELOW

Wave 1	Wave 2 Transitions	Wave 3 Transitions	
Regular Vaping	Status Quo (Regular Vaping)	Status Quo (Regular Vaping)	
		Reduced (Occasional Vaping)	
		Quit Vaping (Formerly Vaped)	
	Reduced (Occasional Vaping)	Status Quo (Occasional Vaping)	
		Relapsed (Regular Vaping)	
		Quit Vaping (Formerly Vaped)	
	Quit Vaping (Formerly Vaped)	Quit Vaping (Formerly Vaped)	Status Quo (Formerly Vaped)
			Relapsed (Regular Vaping)

		Relapsed (Occasional Vaping)
--	--	------------------------------

A2b. [IF A2=2,3] On how many days of the past 30 days did you vape with or without nicotine? (Please exclude vaping cannabis.)

\_\_\_ days [RANGE 1-30]

A2c. [PAST 30D VAPING] Thinking of the past 30 days, did you only vape by yourself or only with others or somewhere in between?

- 01 – Only on my own
- 02 – Mostly on my own but sometimes with others
- 03 – About equally on my own and with others
- 04 – Sometimes on my own but mostly with others
- 05 – Only with others

A2d. [IF A2c=02-05] While **vaping with others** in the past 30 days, where did you vape? Select all that apply.

- 01 - At work (excluding working at home)
- 02 - At school (excluding studying at home)
- 03 - At home
- 04 - In a car
- 05 - At a friend's place
- 06 - At a public location (e.g., park, restaurant, sidewalk)
- 88 - Other, please specify

A2e. [IF A2c=01-04] While **vaping on your own** in the past 30 days, where did you vape? Select all that apply.

- 01 - At work (excluding working at home)
- 02 - At school (excluding studying at home)
- 03 - At home
- 04 - In a car
- 05 - At a friend's place
- 06 - At a public location (e.g., park, restaurant, sidewalk)
- 07 - Other, please specify

A3. [ASK ALL] Using a scale of 0 to 10, where 0 means "Very dissatisfied" and 10 means "Very satisfied", how do you feel about your life as a whole right now?

- 0 Very dissatisfied
- 10 Very satisfied

A4. [ASK ALL] How often do you need to have someone help you when you read instructions, pamphlets, or other written material from your doctor or pharmacy? [NEW QUESTION]

- 01 - Never
- 02 - Rarely
- 03 - Sometimes
- 04 - Most of the time
- 05 - Always
- Not applicable

Don't know / Prefer not to say

[NEW SCREEN]

[ALL SECTION B QUESTIONS FOR P30D VAPING A2=1,2,3]

**NOTE:** The following questions about your vaping habits and preferences refer only to vape liquids with/without nicotine and not cannabis/marijuana/THC.

## B. Frequency, history, and heaviness of use

B1. Which of the following best describes how often you vaped liquids **with nicotine** in the past 30 days? (Please exclude vaping cannabis.)

01 – I vaped them every day

02 – I vaped them at least once a week, but not daily

03 – I vaped them less than weekly, but at least once in the past 30 days

04 – Not at all

B2. Which of the following best describes how often you vaped liquids **without nicotine** in the past 30 days? (Please exclude vaping cannabis.)

01 – I vaped them every day

02 – I vaped them at least once a week, but not daily

03 – I vaped them less than weekly, but at least once in the past 30 days

04 – Not at all

B3. Which of the following best describes how often you vaped liquids you weren't sure contained nicotine or not in the past 30 days? (Please exclude vaping cannabis.)

01 – I vaped them every day

02 – I vaped them at least once a week, but not daily

03 – I vaped them less than weekly, but at least once in the past 30 days

04 – Not at all

B4. [IF 01-03 AT QB1] How soon after you wake up do you usually have your first vape **with nicotine**?

01 - Less than 5 minutes

02 - 6 to 30 minutes

03 - 31 minutes to 1 hour

04 - More than 1 hour

B5. On days you use them, please estimate how many separate times per day you usually vape ...?

[GRID, SELECT ONE ONLY FOR EACH]

a. With nicotine? [HIDE IF B1=4]

b. Without nicotine? [HIDE IF B2=4]

c. When you're not sure if it contains nicotine? [HIDE IF B3=4]

- 01 - 5 or less times per day
- 02 - 6–10 times per day
- 03 - 11–15 times per day
- 04 - 16–20 times per day
- 05 - 21–25 times per day
- 06 - 26-30 times per day
- 07 - 31 or more times per day
- 08 - I vape continuously throughout the day

B5b. [IF B1=1-3] How much nicotine did the e-cigarettes, cartridges, pods or e-liquids you used contain? If you used different concentrations of nicotine, please select the one used most frequently.

- 01 - Up to 5.0 mg/ml (or 0.10 to 0.50%)
- 02 - 5.1 to 10.0 mg/ml (or 0.51 to 1.00%)
- 03 - 10.1 to 15.0 mg/ml (or 1.01 to 1.50%)
- 04 - 15.1 to 20.0 mg/ml (or 1.51 to 2.00%)
- 05 - Over 20 mg/ml (or over 2.00%)
- 99 - Not sure

B6. [REMOVED]

[NOTE: HEAVINESS OF VAPING WITH NICOTINE INDEX TO BE CALCULATED IN BACK END]

B7. We recognize your preferred flavour may or may not be the same as the one you most often vape. What flavour do you **most often** vape...?

[GRID, SELECT ONE ONLY FOR EACH]

- a. With nicotine? [HIDE IF B1=4]
- b. Without nicotine? [HIDE IF B2=4]
- c. When you're not sure if it contains nicotine? [HIDE IF B3=4]

[RANDOMIZE LIST IN GRID]

- 01 - Fruit
- 02 - Candy
- 03 - Coffee/tea
- 04 - Dessert
- 05 - Mint
- 06 - Menthol
- 07 - Tobacco flavour
- 08 - Alcohol flavour
- 09 - Flavourless/no flavour in descriptor
- 97 - Other [ANCHOR]
- 99 - Not sure [ANCHOR AT BOTTOM, SINGLE PUNCH]

B7i. What is your **preferred** flavour to vape...?

*Same options as B7.*



B8. [REMOVED]

### C. Drivers to use, cognitive dissonance, stigma, barriers to change, quality of life

C1. [REMOVED]

C1b. [REMOVED]

C2. [P30D VAPING] Consider the following reasons why people might vape and rank your top three main reasons for vaping:

- 01 - To quit smoking
- 02 - To reduce the number of cigarettes I smoke
- 02b - Avoid returning to smoking
- 03 - I vape where smoking is restricted/not allowed
- 20 - Can vape discretely/without it being noticed
- 04 - I vape in certain social settings where it is more socially acceptable than smoking
- 05 - It's less harmful to my health than smoking
- 06 - It's less harmful to others/family/children than smoking
- 07 - It's cheaper than smoking
- 08 - I like the flavours and/or smell
- 22 - Helps me relax/cope
- 09 - It is fun and exciting
- 12 - I vape when it is offered to me
- 13 - It gives me a break from work/school/home
- 14 - It passes the time/boredom
- 15 - Habit/ritual
- 16 - For the "buzz"/as an alternate source of nicotine
- 17 - It's easier to buy/get than cigarettes
- 19 - As a social activity with friends or family
- 97 - Other (Specify)
- 99 - Not sure

C3. [ASK ALL] The following statements are things that some people might say or think about vaping. For each one, indicate how much you agree with the statement, using a scale of 1 to 10 where 1 means you don't agree at all, and 10 means you strongly agree.

[GRID, RANDOMIZE]

- a) I enjoy vaping when having coffee or tea.
- b) The medical evidence that vaping is harmful is exaggerated.
- c) Vaping is an important part of my life.
- d) Vaping calms me down when I am stressed or upset.
- e) I enjoy vaping when I'm with other people who vape.
- f) Vaping helps me control my weight.

01 – Don't agree at all

10 – Strongly agree

C3a. [RELAPSED] In December 2022, you indicated you had not vaped in a while. Your responses now indicate you have vaped in the past 30 days. Was there anything that triggered you to vape? Check all that apply. [RANDOMIZE]

*This may be different to how strongly you agreed or disagreed with statements in the previous question.*

- 01 – Stress at work
- 02 – Stress at home
- 03 – A major event happened in my life
- 04 – Could not resist the cravings
- 05 – I decided it would be easier to quit another time
- 06 – People around me were vaping and it was hard to resist
- 07 – I was gaining weight
- 97 – Other (*Specify*)
- 99 – Not sure

C4. [ASK ALL] People experience different sensations when they vape. Use the slider to indicate what vaping feels like to you. [NEW QUESTION]

Vaping feels...

[7-point SLIDING SCALE WITH EACH PAIR AS ANCHORS, MID-POINT AS NEITHER]

EXAMPLE -- > 1 2 3 4 5 6 7  
Harsh Neither Smooth

- a) Harsh / Neither / Smooth
- b) Clean / Neither / Dirty
- c) Light / Neither / Heavy
- d) Healthy / Neither / Unhealthy
- e) Natural / Neither / Chemical

#### **D. Smoking status and questions for alternating use**

The next few questions are about smoking cigarettes.

[PROGRAMMING NOTE – APPEND WAVE 2 SMOKING STATUS QUESTIONS TO DATA]

[KEY SMOKING STATUS QUESTION]

D1. Since you did the previous survey in December 2022, did you smoke a whole cigarette?

- 01 - Yes
- 02 - No
- 99 - Don't know/prefer not to say

[KEY SMOKING STATUS QUESTION]

D2. [IF D1=1] In the past 30 days, how often did you smoke cigarettes?

- 01 - Every day
- 02 - Less than daily, but at least once a week
- 03 - Less than once a week, but at least once in the past month
- 04 - Not at all
- 99 - Don't know/prefer not to say

[KEY SMOKING STATUS QUESTION]

D3. [PROGRAMMING NOTE – DIFFERENT SETS OF PEOPLE NEED TO BE ASKED THIS, SEE BELOW]

[ASK IF SPSS D3\_SKIP=0]

Have you smoked at least 100 cigarettes in your life?

- 01 - Yes
- 02 - No
- 99 - Don't know/prefer not to say

[NOTE: DEFINITIONS BASED ON W3 RESPONSE:

- NON-SMOKING: D1=02,99
- P30D SMOKING: D2=01,02,03
- ALTERNATING USE: P30D VAPING AND P30D SMOKING]

[NOTE: DEFINITIONS REQUIRE PAST WAVE DATA:

- FORMERLY SMOKED:
  - SPSS W2\_SMOKE\_STATUS=(1 OR 2) AND D1=02 OR 99.
- NEWLY QUIT SMOKING:
  - SPSS W2\_SMOKE\_STATUS=1 AND D1=02 OR 99.
- RELAPSED SMOKING:
  - SPSS W2\_SMOKE\_STATUS=2 AND D1=1.
- NEW SMOKING:
  - SPSS W2\_SMOKE\_STATUS=3 AND D1=1 AND D2=(1,2,3) AND D3=1.
- NEVER SMOKED:
  - SPSS W2\_SMOKE\_STATUS=3 AND D1=02 OR 99.

D3b. [NEW SMOKING] How old were you when you first tried smoking?

\_\_\_\_\_ ENTER AGE (≤ CURRENT AGE) [RANGE 5-99]

D3C. [P30D SMOKING] How long have you been smoking at your current rate?

- 01 - Less than one month
- 02 - 1 month to < 2 months
- 03 - 2 months to < 5 months
- 04 - 5 months or more

D3D. [P30D SMOKING] How often do you get strong urges to smoke?

- 01 – Never
- 02 – Less than daily
- 03 – Daily
- 04 – Several times a day
- 05 – Hourly or more often
- 99 – Not sure

D4. [REMOVED]

D5. [ALTERNATING USE] Which of the following best describes the main reason you smoke in addition to vaping?

[RANDOMIZE]

- 01 – Addiction/can't give it up/hard to quit
- 02 – Habit
- 03 – Like the feeling after smoking/vaping does not give the same feeling
- 04 – Craving nicotine/tobacco
- 05 – Still enjoy smoking
- 08 – Smoke with other smokers/with a drink/it's a social thing
- 10 – Smoke when I am stressed/anxious
- 12 – Like the taste of cigarettes better
- 94 - Trying to quit smoking gradually
- 97 – Other (Specify)
- 99 – Not sure

D6. [IF D2=01] On average, how many cigarettes do you smoke per day?

[IF D2=02,03] On the days that you smoke, about how many cigarettes do you smoke?

\_\_\_\_ Cigarettes per day (NUMERICAL RESPONSE)

D6b. [P30D SMOKING] How soon after you wake up do you usually have your first cigarette?

- 01 - Less than 5 minutes
- 02 - 6 to 30 minutes
- 03 - 31 minutes to 1 hour
- 04 - More than 1 hour

D7. [REMOVED]

D8. [D2=01,02,03] Since you did the previous survey in December 2022, how many times have you tried to quit smoking?

\_\_\_\_ times [RANGE 1-999]

99 - I did not try to quit smoking in that timeframe. [SKIP TO SECTION E]

D9. [IF D8<>99] Since you did the previous survey in December 2022, what was the longest time you have gone without smoking?

\_\_\_ days [RANGE 1-6] OR \_\_\_ weeks [RANGE 1-3] OR \_\_\_ months [RANGE 1-11]

D10. [NEWLY QUIT SMOKING – SEE DEFINITION ABOVE] How long ago did you quit smoking?

\_\_\_ months [RANGE 1-6]

D11. [D2=01,02,03 OR FORMERLY SMOKED] How useful has vaping been in helping you reduce or quit smoking? Use a scale of 1 to 10, where 1 means not useful at all, and 10 means extremely useful.

01 Not useful at all  
10 Very useful

D11b. [D2=01,02,03 OR FORMERLY SMOKED] Since you did the previous survey in December 2022, with whom did you talk about using vaping to help you reduce or quit smoking? Select all that apply.

01 – Health care professional (e.g., doctor, nurse, dentist)  
02 – Vape shop staff  
03 – Friends  
06 – Spouse/partner  
07 – Family (excluding spouse/partner)  
08 – Counselling or support group (in-person, online, or telephone)  
04 – Other, please specify  
05 – No one [UNIQUE SELECTION]

D12. [D2=01,02,03 OR FORMERLY SMOKED] Since you did the previous survey in December 2022, what other methods have you used to help you quit or reduce smoking?

*Select all that apply.*

01 - Nicotine patch  
02 - Nicotine gum  
03 - Nicotine inhaler  
04 - Nicotine nasal spray  
05 - Nicotine lozenge  
06 - Nicotine mouth spray  
07 - Prescription medication like Zyban, Wellbutrin or Champix  
09 - Reducing the number of cigarettes  
10 - Cold turkey  
13 – A smart phone app  
14 – Quit-and-win type contests  
11 - Other, please specify  
12 – None of these [UNIQUE SELECTION]

**E. Transitions, cessation and relapse: History, predicting, why and how**

E1. [P30D VAPING] Are you currently trying...?

GRID - SHOW IN ORDER

a - To stop vaping

b - To reduce your frequency of vaping

01 - Yes

02 - No

E2. [P30D VAPING] Since you did the previous survey in December 2022, how many times have you tried to quit vaping?

\_\_\_ times [RANGE 1-999]

99 - I did not try to quit vaping in that timeframe.

E3. [REMOVED]

E4. [IF E2<>99] Since you did the previous survey in December 2022, what was the longest time you have gone without vaping?

\_\_\_ days [RANGE 1-6] OR \_\_\_ weeks [RANGE 1-3] OR \_\_\_ months [RANGE 1-11]

[IF NEW FORMERLY VAPED] How long ago did you quit vaping?

\_\_\_ months [RANGE 1-11]

E5. [P30D VAPING OR FORMERLY VAPED] How important is stopping vaping to you? Use a scale of 1 to 10, where 1 means stopping vaping is not important at all, and 10 means it is the most important goal of your life.

01 – Not important at all

10 – Most important goal of my life

E6. [ASK IF E1A=01] How confident are you that you will quit vaping for good?

[ASK IF E1A=02] How confident are you that you will eventually quit vaping for good?

Use a scale of 1 to 10, where 1 means not confident at all, and 10 means extremely confident.

01 – Not at all confident

10 – Extremely confident

E7. [P30D VAPING] Different people have their own reasons for trying to stop vaping. Even if you're not planning to stop vaping right now, it may be something you think about or hear about from time to time.

Consider the following statements about why people might try to stop vaping, and indicate how true or not true each one is for you, on a scale of 1 to 10, where 1 means "not true at all" and 10 means "very true."

01 – Not true at all

10 – Very true

[GRID, RANDOMIZE BUT SHOW F LAST]

[SHOW WITH A TO H] If I stopped vaping, it would be...

- c) Because I feel that I want to take responsibility for my own health.
- d) Because I would feel guilty or ashamed of myself if I vaped.
- e) Because I personally believe it is the best thing for my health.
- f) Because I have carefully thought about it and believe it is very important for many aspects of my life.
- g) Because I feel pressure from others to not vape.
- h) Because I experience a health scare or poor diagnosis
- i) Because I saw research that led me to believe it was worse for my health than I thought
- j) Because I couldn't afford vaping liquids and devices
- k) [ALWAYS SHOW LAST, DO NOT SHOW "If I stopped vaping..."] I really don't think about stopping vaping.

E7b. [FORMERLY VAPED] Different people have their own reasons for stopping vaping.

Consider the following statements about why people might stop vaping, and indicate how true or not true each one is for you, on a scale of 1 to 10, where 1 means "not true at all" and 10 means "very true."

01 – Not true at all

10 – Very true

[GRID, RANDOMIZE]

[SHOW WITH A TO E] I stopped vaping because...

- f) I wanted to take responsibility for my own health.
- g) I felt guilty or ashamed of myself because of my vaping.
- h) I personally believed it was the best thing for my health.
- i) I believed it was very important for many aspects of my life.
- j) I felt pressure from others to not vape.
- k) I experienced a health scare or poor diagnosis
- l) I saw research that led me to believe it was worse for my health than I thought
- m) I could no longer afford vaping liquids or devices

E8. [ASK ALL] Have you experienced any of the following health issues? Select all that apply.

01 – Dry cough

02 – Wet cough

03 – Phlegm

04 – Decreased lung capacity/shortness of breath

05 – Chronic obstructive pulmonary disease (COPD)

06 – Lung cancer

97 – None of the above

98 – Other *please specify*

a) 99 – Not sure

E9. Consider the following statements about quitting vaping and indicate whether you agree or disagree:  
[NEW QUESTION]

01 – Not true at all

10 – Very true

- a) If I fail at quitting, it's my own fault and I only have myself to blame.
- b) Reducing the number of times I vape in a day or a week is success in my mind.
- c) I could quit vaping easily if there was less stress in my life.



**F. Access**

F1. REMOVED

F2. REMOVED

F3. REMOVED

F3b. REMOVED

F3c. REMOVED

F4. [REMOVED]

F4b [P30D VAPING] What type of vaping device do you currently use? Please select all that apply.

01 – Disposable – intended for single use until either the battery or flavour cartridge depletes fully.

02 – Reusable – intended for longer-term use. The battery can be recharged and parts are detachable and/or replaceable.

05 – Other, please specify

F4c [IF F4b=02] What type of reusable vaping device do you currently use? Please select all that apply.

01 – It uses pre-filled e-liquid cartridges or pods. The cartridge/pod can be replaced with a new prefilled one; it cannot be manually refilled.

02 – Its cartridge, pod, or tank can be manually refilled with e-liquid. Parts of the atomizer, such as coils and filler materials, can be customized.

05 – Other, please specify

F5. [REMOVED]

F6. [P30D VAPING] How much did you spend in the past month on vaping devices and on pods or e-liquids? If you bought the device and flavours as part of a package (e.g., starter kit), please enter those separately.  
ENTER NUMBER*Vape devices or flavours sold separately (e.g., not as part of a kit):*

[IF F4b=1] On disposable devices \$\_\_\_\_\_ [RANGE \$0-\$700]

99 - I don't know

[IF F4b=2] On reusable devices \$\_\_\_\_\_ [RANGE \$0-\$700]

99 - I don't know

[IF F4c=1] On replaceable e-liquid cartridges, pods, or tanks \$\_\_\_\_\_ [RANGE \$0-\$700]

99 - I don't know

[IF F4c=2] On e-liquid bottles that are used to refill cartridges, pods, or tanks \$\_\_\_\_\_ [RANGE \$0-\$700]

99 - I don't know

*Vape devices and flavours sold as part of a kit (e.g., "starter kit"):*

[IF F4c=1] On reusable devices sold with flavour(s) in replaceable cartridges \$\_\_\_\_\_ [RANGE \$0-\$700]

99 - I don't know

[IF F4c=2] On reusable devices sold with flavour(s) in bottles (e.g., for refillable cartridges) \$\_\_\_\_\_ [RANGE \$0-\$700]

99 - I don't know

[IF RESPONDENT SELECTS 99 I don't know TO ALL AVAILABLE, SKIP F6A]

F6A. [P30D VAPING &F6<>99] To confirm, you spent about [SUM OF F6] on vaping products. Is that correct?

01 – Yes [PROCEED]

02 – No [SEE INSTRUCTION BELOW]

[IF NO – SHOW FOLLOWING AND SKIP BACK TO F6]

Please review the dollar amounts you entered for each item and correct as needed.

F7. [P30D VAPING] How affordable are the vaping devices and liquids you buy? Use a scale of 1 to 10, where 1 means very unaffordable, and 10 means very affordable.

01 – Very unaffordable

10 – Very affordable

F8. Have you noticed if prices of vaping devices and liquids have increased, decreased, or remained the same since you took the last survey in December 2022? [NEW QUESTION]

01 – Increased

02 – Decreased

03 – Remained the same

04 – Don't know

F9. [P30D VAPING] How much have increases in prices for food, gas, and other necessities impacted your ability to afford vaping products? [NEW QUESTION]

01 – Very much

02 – Somewhat

03 – Not very much

04 – Not at all

F11. [P30D VAPING] How do you fit vaping into your budget? For example, have you cut other things from your budget to make room for vaping liquids and devices, do you look for where to find the cheapest liquids and devices, have you reduced how often you use your vape, etc. [NEW QUESTION] [OPEN END]

F12A. Have you finished a disposable vape? In other words, have you used it until the e-liquid ran out or the battery died? [NEW QUESTION]

- 1 – Yes
- 2 – No
- 3 – [HIDE IF F4b=1] I have never used a disposable vape

F12B. [IF F12A=YES] There are different ways to dispose of the vape. How often have you disposed of it in any of the following ways? [NEW QUESTION]

		Never	Rarely	Sometimes	Most of the time	Always	I don't know / Not applicable
1	In the garbage						
2	In the recycling bin						
3	On the ground						
4	At a specialized facility (e.g., municipal drop-off location for electronic devices or hazardous waste facility)						
5	Returned it to a retailer						
6	I have not disposed of it (e.g., left it in my place, car, bag; it wasn't mine, etc.)						
7	I gave it to someone else						
8	I lost or misplaced it						
9	Other (please specify)						

F13A. Have you finished a reusable vape device? For instance, lost interest, bought a second device, etc. Please only include the physical device, not the cartridges, pods, or e-liquids. [NEW QUESTION]

- 1 – Yes
- 2 – No
- 3 – [HIDE IF F4b=2] I have never used a reusable vape

F13B. [IF F13A=1] There are different ways to dispose of a reusable vape device. How often have you disposed of it in any of the following ways?

[SAME OPTIONS AS F12B]

F14A. [SKIP IF F13A=3] Have you replaced any of the prefilled cartridges in a reusable vape device?

1 – Yes

2 – No

F14B. [IF F14A=1] There are different ways to dispose of a prefilled cartridge. How often have you disposed of it in any of the following ways?

[SAME OPTIONS AS F12B]

F14C. [IF F14B=1 OR 2, i.e. garbage or recycling] Did you rinse the prefilled cartridge first?

1 – Yes

2 – No

F15A. [SKIP IF F13A=3] Have you refilled the pods or cartridges in a reusable vape device with e-liquid from a bottle?

1 – Yes

2 – No

F15B. [IF F15A=1] There are different ways to dispose of an e-liquid bottle. How often have you disposed of it in any of the following ways?

[SAME OPTIONS AS F12B]

F15C. [IF F15B=1 OR 2, i.e. garbage or recycling] Did you rinse the bottle first?

1 – Yes

3 – No

F16A. Have you ever removed a battery from any of your vaping devices?

1 – Yes

2 – No

F16B. [IF F16A=1] How did you dispose of the battery?

[SAME OPTIONS AS F12B]

**G. Cannabis, Alcohol, and Relative Harm Perceptions**

The following questions are about cannabis and alcohol.

For the purpose of this survey, "cannabis" also refers to the terms marijuana, pot, or hashish.

G1. [REMOVED]

G2. [ASK ALL]-In the past 30 days, how often did you use cannabis?

	Daily (01)	Less than daily, but at least once a week (02)	Less than once a week, but at least once in the past month (03)	Not at all (04)
d. Vaping				
e. Smoking				
f. Edibles				

G2b. [REMOVED]

G2c. [REMOVED]

[INTRO SENTENCE REMOVED]

G3. [REMOVED]

G4. In the past 30 days, how often did you drink at least one alcoholic beverage?

01 - Daily

02 - Less than daily, but at least once a week

03 - Less than once a week, but at least once in the past month

04 - Not at all

G5. [REMOVED]

G6. [ASK ALL] How harmful do you feel each of the following is, *if done on a regular basis*? Use a scale from 1 to 10 where 1 means “Not harmful at all” and 10 means “Extremely harmful.” [GRID, RANDOMIZE]

- g) Vaping with nicotine (excluding cannabis)
- h) Smoking cigarettes
- i) Vaping cannabis
- j) Smoking cannabis
- k) Drinking alcohol
- l) Eating junk food

01 – Not harmful at all

10 – Extremely harmful

## H. Respondent characteristics

The following are a few questions about you and your household, for statistical purposes only. Please be assured all of your answers will remain completely anonymous.

H1. [REMOVED]

[PROGRAMMING NOTE – PLEASE APPEND FROM WAVE 1]

H2. What is your current marital status?

01 - Never legally married nor lived with a common-law partner

02 - Legally married (and not separated)

03 - Living with a common-law partner

04 - Separated, but still legally married

05 - Divorced

06 - Widowed

99 – Prefer not to say

H3. [REMOVED]

[PROGRAMMING NOTE – PLEASE APPEND FROM WAVE 1]

H4. Do you identify as either of the following?

*Select one response for each*

- c) Someone living with a physical disability
- d) Someone living with a mental illness

01 - Yes

02 - No

99 – Prefer not to say

[PROGRAMMING NOTE – PLEASE APPEND LGBTQ AND VISIBLE MINORITY STATUS FROM WAVE 1]

H5. What is the highest level of formal education you have completed?

*Select one only*

- 01–Less than a high school diploma or equivalent
- 02–High school diploma or equivalent
- 03–Registered Apprenticeship or other trades certificate or diploma
- 04–College, CEGEP or other non-university certificate or diploma
- 05–University certificate or diploma below bachelor’s level
- 06–Bachelor’s degree
- 07–Postgraduate degree above bachelor’s level
- 99–Prefer not to say

H6. Which of the following categories best describes your current employment status?

*Select one only*

- 01 - Working full-time, that is, 35 or more hours per week
- 02 - Working part-time, that is, less than 35 hours per week
- 03 - Self-employed
- 04 - Unemployed, but looking for work
- 05 - A student attending school full-time/part-time
- 06 - Retired
- 07 - Not in the workforce (full-time homemaker, unemployed and not looking for work)
- 97 - Other [DO NOT SPECIFY]
- 99 - Prefer not to say

H7. [IF H6=04 ASK] Have you been unemployed for more than a year?

01 – Yes

02 – No

99 – Prefer not to say

H8. [REMOVED]

H9. [IF H6=01, 02, 03] Which of the following categories best describes your *main* occupation?  
[IF H7=02] Which of the following categories best describes your *most recent* occupation?

01 - Senior and middle management

- (Examples: President, Vice-President, CEO, CFO, COO, Principal, Dean, Registrar, DM, ADM, DG, Director, Manager)

02- Professional

- (Examples: Lawyer, Doctor, Nurse, Dentist, Professor, Engineer, Accountant, Veterinarians, Optometrists, Teachers, Social Workers, Policy Research Analysts, Journalists)

03 - Technical/Paraprofessional

- (Examples: Paralegal, Early Childhood Educator, Instructor, Inspectors, Enforcement Officers, Opticians, Creative Design)

04 - Sales and Service

- (Examples: Retail and Wholesale Salesperson, Clerk, Agent)

05 - Administrative, clerical and office support

- (Examples: Administrative, Office, Medical assistants; data entry, receptionist)

06 - Industrial, electrical and construction trades

- (Examples: Electrician, Plumber, Pipefitter, Carpenter, Boilermaker)

07 - Maintenance and equipment operation trades, installers, repairers, and material handlers

- (Examples: Truck or Transit Driver, Crane operator, Train Crew; Mechanical, Transport or Heating mechanic; longshore worker)

08 - Processing, manufacturing and utilities machine operators and assemblers

09 - Construction, agricultural, forestry, fishing, landscaping labourer/general worker

99 - Prefer not to say

H10. [ASK 16+ ONLY] Which of the following best describes your total household income for 2021, before taxes, from all sources for all household members?

*Select one only*

01—Under \$20,000

02—\$20,000 to just under \$40,000

03—\$40,000 to just under \$60,000

04—\$60,000 to just under \$80,000

05—\$80,000 to just under \$100,000

06—\$100,000 to just under \$150,000

07—\$150,000 and above

99—Prefer not to say

H11. [REMOVED]

H12. [ASK 18+ ONLY] Are there any children under 18 years of age living in your household?

01 – Yes

02 – No

99 – Prefer not to say

H12b. What are the first three digits of your postal code? This will not be used to identify you.



\_\_\_ [text response]  
99 – Prefer not to say

H12c. [If WAVE 1 BaseLINE S1=17-20] Are you currently...

- 17 years old
- 18 years old
- 19 years old
- 20 years old
- 21 years old
- Prefer not to say

H12d. Do you have insurance that covers all or part of your prescription medications?

01 – Yes  
02 – No  
99 – Prefer not to say

[PROGRAMMING NOTE: ADD PRE-TEST QUESTIONS]

## Appendix E: IDI Discussion Guide

Health Canada  
Fall 2022/Spring 2023 Longitudinal Vaping IDIs  
*Interview Guide*

December 20, 2022

Participant Name:

Date:

Interviewer:

	<b>Quotas:</b>
<input type="checkbox"/>	Successfully quit vaping (target 20n). Quit vaping between W1 and W2
<input type="checkbox"/>	Unsuccessful quit attempt (target 20n). P30 day vaping and had made a serious quit attempt between W1 and W2
<input type="checkbox"/>	No quit attempt – only recruiting these participants if we need to

### Introduction (2 minutes)

Hello, my name is \_\_\_\_\_ from Environics Research. Thanks for joining me today.

We are conducting interviews on behalf of Health Canada about vaping and changes in habits over time. We would like you to share your thoughts and experiences as openly as possible.

The interview will take approximately 15 minutes to complete.

Some of the questions might feel quite personal, because they are about your daily habits and your lifestyle. I would like to assure you that your responses will not be linked to your name in our reporting and your responses will be only reported in aggregate with other respondents.

This interview is voluntary. We are interested in learning about your experiences for research purposes and it's important to us that you feel comfortable and safe. If there is anything you don't wish to answer, that is okay. You can also choose to end the interview at any time.

I will be recording the interview for note-taking purposes. Transcripts from this interview will be provided to Health Canada with identifying details removed. The recording will only be used for analysis and will not be shared. Do I have your permission to record this interview?

Do you have any questions before we begin?

### Participant Introduction (3 minutes)

1. Before we start talking about vaping, tell me a bit about yourself and your life right now. How are you doing?
2. Have you had any big changes in your life lately? Good or bad? *Probe: Some examples of big life changes might be moving, starting a new job, the end of a relationship, a new baby, or an illness in the family.*
3. Are you currently vaping?

*Probe: With nicotine? Without?*

4. Do you also smoke cigarettes? Have you smoked cigarettes in the past?

### **Vaping / Quitting (5 minutes)**

5. Over the past few months, you have completed a couple of surveys about vaping. What does (or did) vaping mean to you? How has that changed over time?

6. When you think about quitting vaping, what does success mean to you?

7. How many times have you tried to quit vaping?

[PROBE IF NEVER ATTEMPTED TO QUIT] What do you think, if anything, could drive your first quit attempt?

[PROBE IF ATTEMPTED TO QUIT] What's the most surprising thing so far you've encountered about quitting? What was its impact on your quitting?

[PROBE IF ATTEMPTED TO QUIT BUT CURRENTLY VAPING] What do you think, if anything, could drive your next quit attempt?

[PROBE IF ATTEMPTED TO QUIT BUT CURRENTLY VAPING] I know you're vaping now, but have you ever had success quitting for a period of time in the past? How did that go? Why did you start again?

8. [IF THEY ARE PAST OR CURRENT SMOKERS] Does vaping impact the amount you smoke, or vice versa?

*Probe: Are you worried that quitting vaping might lead you back to smoking?*

*Probe: Is there anything else, like cost or health, that impacts the amount you smoke?*

9. How often do you drink alcohol?

- a. [IF THEY DRINK ALCOHOL] Do you think that using alcohol affects your ability to quit vaping? Does drinking make it more or less difficult to quit?

10. Do you ever use cannabis?

- b. [IF THEY USE CANNABIS] Do you think that using cannabis affects your ability to quit vaping? Does it make it more or less difficult to quit?

### **Questions for those trying to quit vaping (2 minutes)**

11. What methods, if any, have you found to be helpful with quitting or reducing your vaping?

*PROBE: nicotine replacement that requires a prescription, nicotine replacement that doesn't require a prescription, cold turkey, a reward, etc.*

12. Have you had support from others while you try to quit vaping?

*PROBE: Family / spouse, friends, coworkers, doctor / medical practitioner, therapist, etc.*

- a. How does support affect your ability to quit vaping?

#### **Questions for those who have stopped vaping (2 minutes)**

13. Now that you have stopped vaping, what do you think was the most important factor that helped you quit?
14. [IF THIS WAS NOT THEIR FIRST ATTEMPT] What was different about this quit attempt than previous attempts (i.e., why was this one successful? What was happening in your life when you quit this time, what if any supports (insurance, quit services, free NRT))?
15. How are you feeling after quitting vaping? Probe: physical, mental, emotional, energy, sleep, etc.
16. Did anything make it difficult to quit vaping? How do you cope instead of vaping? How reliant are you on those alternatives?
17. How confident are you that you won't start vaping again in the future? Why do you say that?

#### **Questions for those still vaping (2 minutes)**

18. What do you think is the main reason you are still vaping?
19. Is there anything that has made it difficult to quit?

*Probe: What types of situations make you want to vape? Do you have triggers?*

20. What methods, if any, will you try to quit or reduce your vaping?

*PROBE: nicotine replacement that requires a prescription, nicotine replacement that doesn't require a prescription, cold turkey, a reward, etc.*

21. Using a scale of 0 meaning not at all likely to 10 meaning extremely likely, how likely are you to seek support from others to quit vaping?
22. What do you think you would need (free NRT, vaping products, counselling) to stop vaping?
23. If you had trouble getting vaping devices or liquids, what would you do? How would you adapt?

#### **Wrap Up (2 minutes)**

24. It's common for people to make New Years resolutions to quit vaping. Is this something you've been thinking about? Have you felt pressure from others to make a resolution to quit?

25. We are conducting this research on behalf of Health Canada, because they are trying to better understand why people vape and how people quit vaping. Is there anything else, based on your experience, that you think they should know about vaping?
26. Thank you for taking time today to talk to me. We'll be in touch in the coming days to pay you for your time and contribution to the research.

## Appendix F: IDI Screener

December 2022

Environics Research Group  
Health Canada Smoking / Vaping  
Screener for IDIs

**PARTICIPANTS ARE BEING STREAMED IN FROM SURVEY.**

**INVITATION LETTER WORDING:**

Hi {fname},

My name is Stephanie Coulter, I am a Senior Research Associate at Environics Research.

You recently completed a survey about {smoking / vaping}, where you indicated you are interested in participating in a 15 minute follow-up interview.

We'd like to invite you to schedule an interview with us. During the interview we will ask you some follow-up questions about {smoking / vaping}. Participation is voluntary, and your responses will be confidential.

A recording of the session will be produced for research purposes. The recording will be used only by the research professional to assist in preparing transcripts and a report on the research findings. Transcripts will be anonymized and shared with Health Canada, while all recordings will be destroyed once the report is completed. All information collected, used and/or disclosed will be used for research purposes only and administered as per the requirements of the Privacy Act. Environics Research has a privacy policy which can be consulted at <https://environicsresearch.com/privacy-policy/>.

Participants who complete an interview will receive \$125 in appreciation of your time and contribution.

Clicking the link below will take you to a site called Recollective. Please follow the instructions to confirm your eligibility and select a meeting time that works for you between {interviews start} and {interviews end}. The time slots are for half an hour, but the interviews usually only take about 15 minutes.

Environics is a member of the Canadian Research Insights Council (CRIC) and adheres to all its standards; the project is registered with the CRIC with the number XXXXXXXXXXXXXXXXXXXX.

If you have any questions about scheduling and the interview process, you can contact me through the Recollective portal, or email me directly.

Thank you for participating in this important research.

Stephanie Coulter  
Senior Research Associate  
Environics Research  
[stephanie.coulter@environics.ca](mailto:stephanie.coulter@environics.ca)

**ELIGIBILITY SCREENER**

We are conducting this research project for Health Canada, to help the department gain a better understanding of the factors that influence {smoking / vaping} behaviour. Before you schedule an interview, we have a few questions about you.

1. Are you or is any member of your household or your immediate family employed in:

Type	No	Yes
A market research, communications or public relations firm, or an advertising agency	1	2
Media (Radio, Television, Newspapers, Magazines, etc.)	1	2
Health Canada or the Public Health Agency of Canada	1	2
Combustible tobacco (cigarettes, cigars, etc.) and/or vaping industry	1	2

**IF YES TO ANY OF THE ABOVE – THANK AND TERMINATE**

**TERMINATE LANGUAGE:**

*Thank you for your interest in this research. Unfortunately, you are not eligible to participate in an interview at this time.*

2. Have you **ever** attended a focus group or a one-to-one discussion for which you have received a sum of money, here or elsewhere?

- Yes 1
- No 2 -> **(SKIP TO Q.14)**

3. **[IF YES TO Q2]** When did you last attend one of these discussions?

\_\_\_\_\_

**[TERMINATE IF IN THE PAST 6 MONTHS]**

4. How many focus groups or one-to-one discussions have you attended in the past 5 years?

\_\_\_\_\_(SPECIFY)

**IF 5 OR MORE, TERMINATE**

**ASK ALL**

5. This interview will require participants to join a conference call in Recollective using a computer, tablet, or mobile phone. You will need internet access in a private and quiet location to take part in the study. We cannot provide this technology for you. Will you be able to access the Internet for a 15 minute discussion?

Yes	1	<b>CONTINUE</b>
No	2	<b>TERMINATE</b>

**ASK ALL**

6. The session will last about 15 minutes, but we are asking that all participants log into Recollective 5 minutes prior to the start of the session. Are you able to log-in about 5 minutes prior to the start time?

Yes	1	
No	2	<b>TERMINATE</b>

7. The Recollective platform may send you email to remind you of your session, and we may also follow-up with you directly if there is important information to share. Do we have your consent to contact you, either through Recollective, or directly by email?

Yes	1	
No	2	<b>TERMINATE</b>

8. Could you please confirm your email address so we can contact you about your interview?

E-mail address: \_\_\_\_\_

Thank you for completing these questions. Please follow the next set of instructions to select a date and time for your interview.