

Vapers Online Survey to Measure Attitudes and Behaviours Regarding Vaping Over Time (2019 to 2021)

Final Report

Prepared for Health Canada

Supplier Name: Environics Research

Contract Number: HT372-204361/001/CY Contract Value: \$147,564.71 (including HST)

Award Date: 2021-02-03 Delivery Date: 2021-06-24

PSPC Registration Number: POR 113-20; HCPOR Number: 20-24

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

Ce rapport est aussi disponible en français.



Vapers Online Survey to Measure Attitudes and Behaviours Regarding Vaping Over Time (2019 to 2021)

Final report

Prepared for Health Canada by Environics Research

May 2021

This public opinion research report presents the results of quantitative and qualitative research conducted by Environics Research on behalf of Health Canada. The quantitative research involved a return-to-sample online survey conducted between March 8 and March 25, 2021, among a group of Canadians who identified as Regular Vapers in the original 2019 waves of the Health Canada Vapers Online Survey. The qualitative research, conducted between April 28 and 30, 2021, involved 46 individuals recruited from the quantitative exercise, who participated in a two-day online, moderated bulletin board exercise.

Permission to reproduce

This publication may be reproduced for non-commercial purposes only. Prior written permission must be obtained from Health Canada. For more information on this report, please contact Health Canada at: hc.cpab.por-rop.dgcap.sc@canada.ca

© Her Majesty the Queen in Right of Canada, as represented by the Minister of Health, 2021.

Cat. No. H14-351/2021E-PDF

ISBN 978-0-660-40398-4

Related publications (registration number: POR 113-20):

Catalogue number H14-351/2021F-PDF (Final report, French) ISBN 978-0-660-40399-1

Aussi offert en français sous le titre : Sondage en ligne de vapoteurs visant à mesurer les attitudes et les comportements à l'égard des produits de vapotage-au fil du temps (2019 à 2021).

Table of Contents

Executive summary	i
Background and objectives	i
Methodology	i
Contract value	ii
Key findings	ii
Political neutrality statement and contact information	viii
Introduction	1
Background	1
Research objectives	1
About the report	2
About the report	Error! Bookmark not defined.
I. Quantitative - Detailed findings	3
A. Vaping and Smoking Status	3
B. Vaping Specifics	9
C. Dual Users & Smoking	22
D. Vaping for Smoking Cessation	27
E. Successful Vaping Cessation	32
F. Cannabis Use	39
II. Qualitative - Detailed findings	40
A. Vaping and smoking habits	40
B. Transitions	40
C. Factors influencing transitions	48
D. Feedback from participants	56
Appendix A: Final Vaping and Smoking Dispositions	57
Appendix B: Methodology	59
Target population and sample design	59
Questionnaire design	
Fieldwork	62
Completion results	62
Qualitative research	63
Appendix C: Quantitative Research Instrument	64
Appendix D: Qualitative Research Instrument	87

Executive summary

Background and objectives

The *Tobacco and Vaping Products Act* (TVPA) came into force in May of 2018 and created a new legal framework for regulating vaping products to protect young persons from nicotine addiction and inducements to tobacco use, while allowing adults to legally access vaping products as a less harmful alternative to tobacco.

This 2021 Health Canada Vapers Online study represents the third wave of research conducted to examine the transition between smoking and vaping products occurring at the individual level. It represents a longitudinal study of the changes in vaping and smoking behaviour over time among a group of Canadians who identified as Regular Vapers in the original 2019 research, and then subsequently participated again in 2020.

The main objective of this research was to understand patterns of use over time at the individual level with respect to vaping products. The research also gathered attitudes and behaviours of Canadians who are still Regular Vapers with respect to vaping products. Specific research objectives include, but are not limited to, the following:

- To measure changes in patterns of use among Regular Vapers over time;
- To understand changes in patterns of Dual Users over time;
- To measure Canadian Regular Vapers' level of awareness and knowledge around vaping products;
- To gather information on Canadian Regular Vapers' behaviours with respect to vaping products, including product evolution; and,
- To gather information on the vaping devices and e-liquids currently being used by Canadian vapers.

Methodology

Quantitative. To address the research objectives, a quantitative Return to Sample (RTS) online survey was conducted with Canadians who originally participated in either the February or the June 2019 waves of the Health Canada Vapers Panel online survey. The original qualification criteria for the 2019 surveys were Regular Vapers aged 15 and older.

A total of 2,000 invitations were sent and 337 respondents completed the 2021 survey (a participation rate of 17%). The survey was conducted between March 8th and 25th, 2021, using the same panel sample sources as the 2019 and 2020 studies. This means that this survey was fielded while most parts of Canada were under public health restrictions due to the COVID-19 pandemic. Of the total 337 responding in 2021, 295 completed all three waves of research (2019, 2020 and 2021) and 42 completed only the 2019 and 2021 waves (i.e., not the 2020 wave). No quotas were used to allow every potential participant to respond. Weighting was used to match the final sample to the *2017 Canadian Tobacco Alcohol and Drugs Survey* (CTADS) in terms of region, gender and age to maintain demographic consistency.

Each respondent was classified as a **regular vaper** if they have vaped at least once a week for the past four weeks and as a **current smoker** if they have smoked daily or occasionally in the past month. Respondents who were both Regular Vapers and Current Smokers were classified as **Dual Users**.

The original sample (and, therefore, also the 2021 sample) was drawn from panels of individuals who have agreed to participate in online surveys. Because the sample is based on those who initially self-selected for participation in the panel, no estimates of sampling error can be calculated, and the results cannot be described as statistically projectable to the target population.

Please note: this sample cannot be considered representative of Regular Vapers as a whole, since it excludes individuals who became Regular Vapers between 2019 and 2021 (i.e., no "new" vapers were invited to the survey).

Qualitative. The second phase of the project involved a qualitative online community exercise with a subsample of respondents from the 2021 online survey. The online community used the Recollective online bulletin board platform to guide participants through a two-day, moderated series of activities based on their past and current vaping and smoking behaviour, with a particular focus on transitions (i.e., quitting and relapsing). Separate English and French communities were run concurrently.

A total of 46 participants (31 English and 15 French) completed the qualitative exercise between April 28 and April 30, 2021. Participants were recruited to reflect a mix of age groups, genders and smoking and vaping experiences. They were informed of the purpose of the exercise, the time commitment and incentive, and provided with guidance on how to protect their privacy. Each participant who completed the qualitative exercise was given an honorarium of \$150 as a thank you for their time.

This research was qualitative in nature, not quantitative. As such, the results provide an indication of participants' views about the issues explored, but they cannot be generalized to the full population of members of the general public or members of the targeted audience segments.

Contract value

The contract value was \$147,564.71 (HST included).

Key findings

This research examines shifts in vaping and smoking behaviour among 337 Canadians who were originally identified as Regular Vapers in 2019, over a three-year period (2019, 2020 and 2021).

More than one in three (36%) experienced a transition of some kind between 2020 and 2021, either quitting vaping and/or smoking, relapsing vaping and/or smoking, or newly taking up smoking (no new vapers were invited to the survey). The remaining six in ten (64%) of participants fall into a "no transition" (status quo) category, meaning they continued to vape, smoke, both or neither in 2021 as they did in 2020. The large size of this status quo category, the decline in the proportion reporting any change in behaviour between 2020-21 (36%) compared to the previous year (54% between 2019-20), and high proportions interested in cessation points to the general tenacity of these behaviours, the difficulty of quitting for some, and a lack of interest in quitting for others.

There is also a degree of churn evident in quitting and relapsing behaviours. For example, while 15% of participants quit vaping since 2020, another 12% relapsed, resulting in a net decrease in vapers of only three percentage points. There was a net increase of smokers by two percentage points, with 6% of respondents quitting smoking, but another 6% relapsing and 2% taking up smoking for the first time. This churn, with

different users effectively replacing each other over time, also points to the challenge inherent in reducing the *overall* proportion of people smoking and vaping over time.

Ultimately, respondents were categorized in broader categories for closer analysis of the following groups of interest:

- 1. Dual Users (38% (n=135*) of respondents): A particular emphasis of this research is on "Dual Users" who both vape and smoke. In 2020, 38% of respondents were Dual Users, and this proportion remains consistent in 2021 (38%). However, this overall stability masks change between 2020 and 2021: during that time, 12% of the total sample moved out of the dual user category (either due to quitting smoking, quitting vaping or both), and another 12% became (new or relapsed) Dual Users in 2021.
- 2. Quit Smoking (6% (n=26*) of respondents): This group consists of all respondents who were smokers in the previous study wave in 2020 (or 2019, for those who did not complete the survey in 2020) but are no longer regular smokers. The subsample size of this target group (n=26) is too small to analyze quantitatively.
- 3. Relapsed Smokers (6% (n=25*) of respondents) and New Smokers (2% (n=6) of respondents). Relapsed Smokers are former smokers from 2019 who were not smoking in 2020, but since started smoking again. New smokers are those who never smoked in 2019 and 2020, but who now do. Due to small sample sizes (n=25 Relapsed Smokers and n=6 New Smokers), the two groups are combined to allow for analysis.
- **4. Quit Vaping (15% (n=56*) of respondents)**: These respondents were vaping in 2020 (or 2019, for those who did not complete the 2020 study) but are no longer vaping regularly in 2021. This group includes the Current Smokers who had quit vaping, but continue to smoke (9% of respondents).

The following bullet points summarize the key findings for specific behaviours, including: vaping behaviours; smoking habits among Dual Use, New and Relapsed Smokers; the use of vaping to quit smoking; and, efforts toward vaping cessation. Overall, there are relatively few changes in these measures since 2020.

^{*} Note: Percentages are based on weighted proportions; actual sample sizes are not weighted.

Vaping Behaviours

- In 2021, over half (56%) of the participants (who were all Regular Vapers in 2019) are still vaping, or vaping again. Of these current Regular Vapers, the large majority (78%) vape products that contain nicotine. The proportion who *only* use nicotine products has increased across the three waves of study, standing at 66% in 2021 (compared to 56% in 2020 and 48% in 2019). Daily use of nicotine products has also crept up since the original study, with six in ten (59%) current vapers using nicotine products daily (compared to 52% in 2020 and 49% in 2019). This shift toward greater nicotine use may reflect that this group no longer includes (successful) vaping quitters who were less likely to use nicotine products, or used nicotine products less frequently.
- Juul continues to be the device brand most widely used by Regular Vapers (24%). Average monthly spending is lower than in past waves, at \$40 a month for devices and \$46 a month for liquids (2019 mean spend was \$55 for devices and \$52 for liquids; 2020 mean spend was \$53 for devices, \$51 for liquids); this could be due to the economic impacts of COVID-19 on discretionary spending or pandemic-related shopping restrictions.
- Compared to previous waves of the study, preference for tobacco flavoured vaping liquids has increased, overtaking fruit flavours as the most common choice among Regular Vapers. Tobacco flavour preference is especially high among former smokers who still vape (46%), suggesting that many of these users have replaced smoking with vaping products to give an experience that more closely resembles smoking. It is also high in Atlantic Canada. This is likely attributed to Nova Scotia banning all flavours except tobacco since April 1, 2020.
- As before, vaping and smoking are rated equally important by their respective users (67% each say these
 activities are very or somewhat important to their day-to-day lives), and dual users do not value any one
 activity/substance more than another.
- While majorities of both vapers and smokers say they sometimes or often feel negatively judged for these behaviours, this stigma is felt more widely by smokers (74%) than Regular Vapers (58%), a pattern that holds true for Dual Users (74% for smoking and 60% for vaping).
- There continues to be a clear hierarchy in terms of perceptions of harm, with just half (50%) of participants seeing vaping products without nicotine as harmful, rising to three-quarters (74%) for vaping products with nicotine, and almost nine in ten (86%) for cigarette smoking; these results are broadly consistent with previous study waves.
- Nearly half of Regular Vapers (47%) have tried to quit vaping or are trying to quit right now, and an even higher proportion (59%) have tried or are trying to reduce their vaping frequency. While these proportions are similar to 2020, fewer report that their attempt is serious (75% serious in 2021, down from 90% in 2020). This may not reflect a change in attitude among individual vapers, but rather points to the attrition of successful quitters leaving behind a group who are less serious about quitting. Nicotine gum or lozenges remain the most common type of quitting aid used by those actively trying to quit vaping.

Smoking Among Dual Users, New and Relapsed Smokers

- As was the case in 2020, dual use continues to be associated with less frequent smoking (44% every day, compared to 66% among those who only smoke) and a lower daily number of cigarettes smoked compared to those who smoke but no longer vape (mean of 8 per day, compared to 10). Dual Users remain most likely to see themselves as both a vaper and smoker (48%) rather than mainly a vaper (30%) or mainly a smoker (17%).
- By comparison to Dual Users, New and Relapsed Smokers tend to be occasional smokers (75% smoke
 occasionally and just 25% smoke daily) and report a relatively lower number of cigarettes per day (mean of 7
 per day). Stress is the top reason these smokers say they have returned to smoking.
- Status quo Dual Users are those who were Dual Users in the previous wave of the study, and are still Dual Users in 2021. When asked why they continue to vape in addition to smoking, these users most often say it's due to habit (37%) or because they like the feeling of smoking that vaping can't offer (32%). This second reason has risen in prominence compared to 2020; as with many other shifts noted in the study, this may be a matter of attrition of quitters, rather than individual changes, that is to say that those who are still Dual Users after two waves of the study are more likely to experience something with smoking that vaping simply can't replicate.
- Vaping in situations where smoking isn't possible remains common among Dual Users: nearly half (46%) report
 doing this at least twice a day. However, the reported frequency of this behaviour has declined since 2020
 (56% in 2020). One hypothesis is that smokers are home more due to the pandemic, and thus encounter fewer
 situations where replacing a cigarette with vaping is necessary.

Vaping for Smoking Cessation

- The use of vaping to cut down or quit smoking remains a common theme among Regular Vapers. As before, most Dual Users say their main reason for vaping is to reduce or eliminate cigarettes altogether (69% in 2021, consistent with 66% in 2020 and 69% in 2019). Despite their use of vaping for this purpose, Status Quo Dual Users say they continue to smoke out of habit and because vaping does not offer the same feeling.
- Moreover, Regular Vapers who have successfully quit smoking (and thus are also Former Smokers) say they still vape as an alternative to smoking (71%) and because it helps them avoid a relapse (51%). Indeed, fewer of this group than before cite reasons related to enjoyment and entertainment.
- Half of Dual Users (51%) indicate an intention to quit smoking, most often looking at a six-month time frame (26%). This is a shift in timing compared to 2020 and 2019, with more looking to quit within six months, and may represent a backlog of hopeful quitters who intend to stop smoking when pandemic concerns subside.
- Dual Users who intend to quit remain most likely to say vaping products with nicotine are the aid they will use to help for this purpose (70% in 2021 and in 2020). Fewer than before say they will use vaping products without nicotine (61% in 2021, down from 69% in 2020) or nicotine patches (44%, down from 59%), and a greater proportion say they will use medication like Zyban or Champix (50%, up from 38%).
- As before, relatively few of these Dual Users who plan to quit smoking have supports in place to increase their chances. Fewer than four in ten (36%) have sought advice on using vaping to quit smoking, most commonly from the medical professional group as a whole (25% will seek advice from a doctor, pharmacist, nurse, or dentist), although friends are the single most-common source of advice (16%). This suggests that while medical advice is valued, some Dual Users might prefer to hear from someone close to them with lived quitting

experience. Moreover, only a third (32%) of these Dual Users who want to quit smoking have a specific plan for when to vape and when to smoke.

Successful Vaping Cessation

- Of all study participants in 2021, 15% have quit vaping since 2020 (or 2019, for those who did not participate in 2020). These new non-vapers include smokers and non-smokers. New vaping quitters continue to cite the health effects of vaping as the main reason they quit (25%), while considerably fewer than in 2020 link their decision to negative media coverage of vaping (1%, compared to 20% in 2020). Three in ten (30%) got information to help them quit, most often from a medical professional, which is similar to those who quit between 2019-2020.
- In terms of strategies used to quit vaping, fewer than before say they reduced their frequency of vaping (44% of former vapers in 2021, down from 59% who quit between 2019-2020). Although tobacco is noted as the most popular flavour among Regular Vapers, it ranks lower among former vapers as a flavour used to quit (22%). Fruit (27%), coffee or tea (27%), and mint or menthol (24%) are mentioned more often as vaping flavours that specifically helped with quitting vaping.
- Asked to name specific aids that helped them to quit vaping, about half of new vaping quitters (48%) say they didn't use anything at all. Compared to 2020, higher proportions of vaping quitters turned to nicotine gum or lozenge (17%, compared to 12% in 2020) and counselling (17%, compared to 10% in 2020). This may point to a higher level of effort among those who quit more recently. Indeed, a higher proportion of 2021 vaping quitters required three or more attempts to quit (26%), compared to 2020 (14%). Nonetheless, most who stopped vaping since 2020 say it was easy (64%).

For those who have quit vaping, an end to cravings or no longer thinking about vaping is the most common sign of success (38%).

Qualitative findings

Transitions: The goal of the qualitative research was to explore more deeply four possible transitions in vaping and smoking use that participants had experienced in the past year.

The two main transitions with which participants had experience were efforts to **quit smoking** (n=23) and efforts to **stop vaping** (n=19).

- Health concerns figured prominently in both cases. This was rarely due to a recent health scare for themselves or their loved ones, but more of a growing realization about the negative health impacts they were experiencing and a desire for a better (healthier) quality of life. Comparatively speaking, those trying to quit smoking referred more often to specific negative physical effects (e.g., trouble breathing during physical activity), while those trying to stop vaping relied more so on the knowledge that vaping is not good for their health. Similarly, the benefits of quitting appeared to be more noticeable to those trying to quit smoking versus vaping.
- Notably, the process of quitting, particularly to quit smoking, appeared highly variable, with individuals trying multiple methods to find the one to help them succeed. For those trying to quit smoking, vaping was just one of the potential tools; for some it made all the difference, while others worried they had simply replaced one bad habit with another. A common first step for those trying to quit or reduce vaping was to reduce their nicotine levels; otherwise, the reported techniques were similar to those trying to quit smoking, including quitting "cold turkey", substituting other activities or avoiding temptation (e.g., social activities).

Personal willpower was a commonly raised theme, seen as central to their success or ability to quit, and a lack
of willpower was often noted as the main reason if they relapsed, both for smoking and vaping. Quitting
appeared to be a fairly solitary activity, with few who described the support of others (family, friends, health
professionals) as a part of their quitting process. Yet, a key recommendation participants made to others who
want to quit was to access outside supports, rather than try to do it on their own.

A small number had **started or resumed smoking** (n=7). These individuals described various circumstances or triggers that led to this, including temptation from peers in social settings, having easy access to family members' cigarettes, and stress or anxiety.

For those who had **resumed vaping** (n=3), two did so to reduce their cigarette consumption and one did so on the recommendation of a medical professional to treat an unspecified medical condition.

Comparisons of Smoking and Vaping: Participants who were current or past smokers were also asked to compare their vaping and smoking experiences.

Among those who currently smoke or have smoked in the past, **smoking** was a source of conflicting feelings. On the one hand, cigarettes provided substantial stress-relief and comfort, with some describing a more intense and longer physical reaction to the nicotine by comparison to vaping. At the same time, they often felt guilt due to a keen awareness of the negative health consequences as well as personal experiences with side effects such as coughing, shortness of breath and feeling distressed.

Vaping was generally described as an adequate, but imperfect, substitute for smoking. While vaping could provide feelings of relaxation and satisfy a nicotine craving, it was perceived to be less physically and emotionally satisfying than cigarettes. It was clearly perceived to be a healthier alternative to smoking, and also more socially acceptable, meaning it was often preferred during the daytime, indoors and in any other settings where smoking would not be appropriate. For these reasons, vaping could be described as the 'rational choice' by comparison to the more 'emotional' choice or guilty pleasure of smoking.

Despite this generally positive positioning of vaping as the healthier and more guilt-free option, there were nonetheless concerns about the long-term effects of vaping, due to the nicotine content, and the fear that one bad habit (smoking) had been replaced by another (vaping).

Vaping flavours. There was no consensus on the role played by vaping flavours. Nearly all participants have used flavoured vape liquids, with fruit flavours being the most popular, followed by mint and vanilla. For some, it was the flavours that made them more willing to accept the trade-off in emotional and physical fulfillment compared to smoking. There was recognition that while flavours made vaping enjoyable as an aid when quitting smoking, they equally could make it difficult to quit vaping later. However, few believed that availability or unavailability of certain flavours would influence their own personal decisions whether or not to vape. The exception was those who exclusively used tobacco flavoured vape liquids, who were more likely to foresee resuming smoking if that flavour became unavailable.

Impact of the pandemic. The COVID-19 pandemic had varying impacts on participants' vaping and smoking habits. For some, it made it easier to quit or reduce smoking or vaping, often because the routines associated with smoking or vaping had changed or participants no longer found themselves in the social situations that encouraged cigarette or vape use. For others, it had the opposite effect of increasing their smoking or vaping

habits, either because of stress related to the pandemic, or because they had greater opportunities to smoke or vape at home.

Political neutrality statement and contact information

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

Sarah Roberton

Vice President, Corporate and Public Affairs

sarah.roberton@environics.ca

Sarah Roberton

613-699-6884

Supplier name: Environics Research Group

PWGSC contract number: HT372-204361/001/CY

Original contract date: 2021-02-03

For more information, contact Department at hc.cpab.por-rop.dgcap.sc@canada.ca

Introduction

Background

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. This Act applies to a range of devices and substances, such as e-liquids, and covers vaping products with and without nicotine. The Act bans the sale and promotion of all vaping products to persons under 18, prohibits the promotion of flavours that appeal to youth, and creates regulatory authority to mandate the display of health-related labels on vaping devices and refill packages.

A key policy objective of allowing vaping products on the market is to provide people who smoke with an alternative path enabling them to use a less harmful form of nicotine. However, there is limited understanding of the transition between products occurring among people who are smoking and using vaping products at the individual level.

This research explored the changes in behaviour over time among those who initially identified as Regular Vapers, with an emphasis on "Dual Users" (people who both smoke and vape). An online survey was conducted with Regular Vapers identified in previous waves of Vapers Online research (including those classified as Dual Users) to measure changes in nicotine use: whether they are continuing to dual use, have quit smoking or vaping or both. Data from this survey will allow Health Canada to prepare a policy response, if needed, to ensure people who smoke understand the potential benefits of completely switching to vaping products (and eventually quitting vaping and nicotine).

Additionally, qualitative research following the survey will help inform the design of future waves of this research.

Research objectives

The main objective of this research is understand patterns of use over time at the individual level with respect to vaping products. The research will gather attitudes and behaviours of Canadians who are (or were when they completed the first wave of the survey) Regular Vapers aged 15 years and older with respect to vaping products.

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

- 1. To measure changes in patterns of use among Regular Vapers over time;
- 2. To understand changes in patterns of Dual Users over time;
- 3. To measure Canadian Regular Vapers' level of awareness and knowledge around vaping products;
- 4. To gather information on Canadian Regular Vapers' behaviours with respect to vaping products, including product evolution;
- 5. To gather information on the vaping devices and e-liquids currently being used by Canadian vapers;
- 6. To assess research instrument options for future waves of this research.

About the report

This report begins with an executive summary outlining key findings, followed by detailed analyses of the quantitative survey data and the qualitative results.

Quantitative. Results from the 2019 and 2020 waves are provided as a point of comparison, but statistical testing is not done from wave to wave since they do not use probability samples. The 2019 results reflect the February and June 2019 surveys (which were unique samples) merged together, and then filtered to include only those who also completed the 2020 wave (i.e., for a total of 992 respondents). No further filtering was conducted on the 2019 and 2020 waves to match the 2021 sample, since it includes a combination of participants from the 2020 survey (n=295) and from the 2019 survey (who did not participate in 2020; n=42). While this means that the sample sizes for past data in 2019 are smaller, the results shown are based on a more consistent group of respondents.

The exception is Section 1A, which explicitly explores behaviour change between 2019 and 2021 for the 337 respondents to the 2021 survey. For this section, results from previous waves have been filtered to only include the 331 respondents from 2021.

Each respondent is classified as either a **Regular Vaper** (vaped at least once a week for the past four weeks) or a **Non-Vaper**. Respondents are also grouped per their smoking status: **Current Smokers** (daily or occasional smokers, including experimental smokers who have only recently started smoking on a regular basis) or **Non-Smokers** (not currently smoking). Respondents who are both Regular Vapers and Current Smokers are classified as **Dual Users**. Other relevant groupings based on current and past behaviour are defined as necessary throughout the report.

Since the focus of the report is on the different subgroups of vapers and smokers, and how their behaviour has changed over time, further subdividing these subgroups by region or demographics (e.g., age, gender) has limited utility. Where subgroup comparisons are given, they present only 2021 data unless otherwise explicitly stated. Statistically significant differences between subgroups are bolded where they exist. The age groups presented in the report are defined based on their age in the original 2019 study, although respondents have aged roughly two years since they first participated. The age groups are youth (15-19 years), young adults (20-24 years) and adults (25+), although due to the smaller sample size of the 2021 survey, the results are combined for youth and young adults. Some subgroup analysis presented in previous waves of research was not possible in 2021 due to sample sizes.

Provided under a separate cover is a set of detailed "banner tables" presenting the results for all questions by population segments (including by region, demographics and vaping and smoking behaviours). These tables are referenced by the survey question in the detailed analysis.

A detailed description of the methodology used to conduct this research is presented in Appendix A as well as the survey instrument in Appendix B and the qualitative discussion guide in Appendix C.

Throughout the report, results are expressed as percentages unless otherwise noted. Statistically significant differences between groups are based on Z-test results and noted with bolding. Where base sizes are reported in tables and charts, they reflect the actual number of respondents who answered the question. Results presented are from the 2021 wave unless explicitly stated otherwise. 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 charts due to rounding. Quotations originally in French are translated to English for the English report, and vice versa.

I. Quantitative - Detailed findings

A. Vaping and Smoking Status

Change in vaping status. The 2021 survey was conducted on a "return to sample basis," with a total of 337 previous participants responding. The diagram below shows the nicotine use status of participants over time over time from the 2019 study, when all respondents were Regular Vapers, to 2021. Note that this chart shows progression specifically for the n=337 respondents to the 2021 survey.

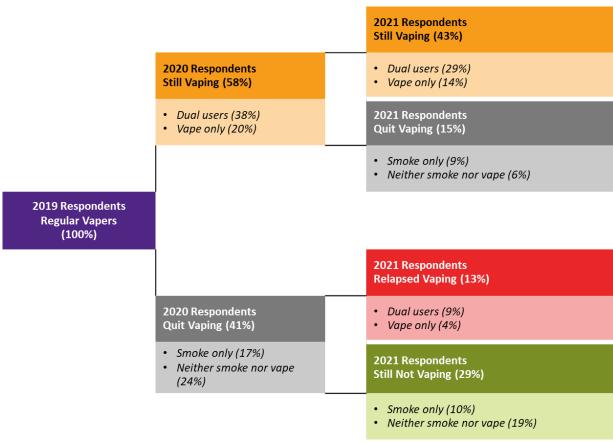
Among those who responded to the 2021 study, four in ten (43%) are still vaping (i.e. they have been Regular Vapers during each wave of the study since 2019). Another 13% are relapsed vapers who had reported quitting in 2020, but now report they are vaping regularly again. This adds up to 56% who are considered Regular Vapers in 2021, a two-point decline from 2020 (58%).

Looking at those who are not vaping in 2021, they include those who have newly quit vaping since 2020 (15%) and those who quit in 2020 and still aren't vaping regularly in 2021 (29%). These two groups comprise Non-Vapers (44%, up from 41% in 2020).

While the proportions of Regular Vapers and Non-Vapers are quite similar compared to 2020, there is a fair degree of transition in terms of quitting and relapsing behaviour. For example, the 15% who are new vaping quitters are almost entirely offset by the 13% who are relapsed vapers.

Smoking is discussed in more detail later in the report, but it is worth noting here that smoking in this sample has seen a marginal increase to 57% who are either Dual Users or only smokers, from 55% in 2021.

Figure 1: Change in Vaping Status 2019 to 2021



Base: All 2021 respondents (n=337)

Note: Chart reflects progression based on 2021 sample only, to show a longitudinal picture for this group of respondents. Proportions for 2020 are based on those who completed the 2020 study (n=295); those who did not complete the 2020 wave (n=42) were mapped directly from 2019 to 2021.

2021 vaping and smoking status. The table below outlines final vaping and smoking status for all respondents. Youth or young adults are less likely to be Dual Users (33%) and more likely to neither vape nor smoke (38%). In contrast, dual use is highest among those aged 25-34 (63%), while doing neither is lowest in this age range (6%). Differences in smoking only between age groups are not statistically significant.

Table 1: Vaping and Smoking Status by Age

Vaping and Smoking Status	All respondents (2021)	15-24 (n=37) ¹	25-34 (n=44)¹	35-59 (n=189)	60+ (n=67)
Still vaping (Net)	56%	48%	72%	54%	63%
Dual users	38%	33%	63%	<i>39%</i>	24%
Vape only	18%	15%	9%	15%	37%
Stopped vaping (Net)	44%	51%	27%	46%	38%
Smoke only	19%	13%	21%	23%	18%
Neither	25%	38%	6%	23%	20%

Base: All respondents (n=337)

The age groups presented in the report are defined based on their age in the original 2019 study, although respondents have aged roughly two years since they first participated.

Change in status. The change in status among all respondents from 2019 to 2021 is mapped out in the table below (all of the proportions given are of the overall sample of 337 respondents). Note that some respondents did not complete the 2020 study (n = 42); their smoking status was mapped directly from 2019 to 2021. Over the three waves of study, there are forty-eight possible dispositions for final smoking and vaping status, with transitions. A table summarizing all forty-eight dispositions is included in Appendix A.

Table 2 groups together these dispositions into key groups of interest based on the type of transition (quit vaping, relapsed vaper, quit smoking, relapsed smoker or new smoker) or lack of transition. In some instances, a participant may belong to more than one category, for example, a person may have relapsed vaping but quit smoking. Note that no new vapers have been included in this research since the original study population in 2019; any changes in proportions over time should be interpreted carefully as noted where relevant.

¹Results should be interpreted with caution due to small sample size.

Overall, more than six in ten (64%) are status quo, i.e., these participants have not changed their vaping and smoking habits since 2020. The remaining 36% of respondents experienced at least one type of transition:

- 15% quit vaping and 12% relapsed, for a small net loss of vapers (-3 percentage points).
- In terms of smoking, 6% quit and 8% either relapsed (6%) or started smoking for the first time (2%), for a small net gain of smokers (+2 points).

Overall, fewer respondents reported a change in status between 2020-2021 (36%) than in the previous year (54%).

Table 2: Transitions over time

Table 2: Transitions over time					
2021 Transition Status	Change 2019 to 2020 ¹	Change 2020 to 2021 ²			
Any transition	54%	36%			
Quit vaping	30%	15%			
Relapsed vaper	n/a	12%			
Net vaping change	-30	-3			
Quit smoking	11%	6%			
Relapsed smoker	5%	6%			
New smoker	8%	2%			
Net smoking change	+2	+2			
No transition (status quo)	46%	64%			

¹Base: All respondents who completed the study in 2020 and 2021 (n=295).

Target Groups of Interest

There are four key groups noted in the executive summary which are of specific interest to Health Canada and whose behaviours (and reasons for that behaviour) need to be better understood. Results for these groups are explored throughout the rest of the report, where sample sizes permit.

1. Dual Users (38% of respondents): A particular emphasis of this research is on "Dual Users" who both vape and smoke. In 2020, 38% of respondents were Dual Users, and this proportion remains consistent in 2021 (38%). However, this overall stability masks change between 2020 and 2021: during that time, 12% of the total sample moved out of the dual user category (either due to quitting smoking, quitting vaping or both), and another 12% became (new or relapsed) Dual Users in 2021. Figure 2 shows transitions from 2020 (or 2019) to 2021, specifically in the context of Dual Users.

²Base: All respondents (n=337). Includes respondents (n=42) who did not complete the 2020 study, and who have been mapped directly from 2019 to 2021.

2021 Non-Dual Users (12%)

- Quit smoking (2%)
- Quit vaping (8%)
- Quit both (2%)

2021 Still Dual Users (26%)

2021 Dual Users New and Relapsed (12%)

2020 Non-Dual Users (62%)

2021 Still Non-Dual Users (50%)

Figure 2: Change in Dual Status 2020 to 2021

Base: All 2021 respondents (n=337)

Note: Chart reflects progression based on 2021 sample only, to show a longitudinal picture for this group of respondents. Proportions for 2020 are based on those who completed the 2020 study (n=295); those who did not complete the 2020 wave (n=42) were mapped directly from 2019 to 2021.

- 2. Quit Smoking (6% of respondents): This group consists of all respondents who were smokers in the previous study wave in 2020 (or 2019, for those who did not complete the survey in 2020) but are no longer regular smokers. The subsample size of this target group (n=26) is too small to analyze quantitatively.
- **3.** Relapsed Smokers (6% of respondents) and New Smokers (2% of respondents). Relapsed Smokers are former smokers from 2019 who were not smoking in 2020, but since started smoking again. New smokers are those who never smoked in 2019 and 2020, but who now do. Due to small sample sizes (n=25 Relapsed Smokers and n=6 New Smokers), the two groups are combined to allow for analysis.
- **4. Quit Vaping (15% of respondents)**: These respondents were vaping in 2020 (or 2019, for those who did not complete the 2020 study) but are no longer vaping regularly in 2021. This group includes some Current Smokers who quit vaping, but continue to smoke (2%).

Groups of interest by demographics. The following table presents the profile of these various groups of interest by age, gender and education. The profiles for the target groups are similar, with Dual Users skewing somewhat toward the 25 to 34 age cohort.

Table 3: Demographics by Group of Interest

rable 3. Demographies by Group of interest						
Demographic Profile	2021 Overall	Dual Users	Regular Vapers	Current Smokers	New / Relapsed Smokers	Quit Vaping
Subsample size	n=337	n=135	n=188	n=208	n=31¹	n=56¹
Age						
15-24	31%	27%	27%	25%	32%	25%
25-34	11%	18%	14%	16%	23%	15%
35-59	43%	44%	40%	47%	37%	46%
60+	16%	10%	19%	12%	8%	14%
Gender						
Male	60%	61%	56%	60%	62%	69%
Female	40%	39%	44%	40%	38%	31%
Education						
High school or less	26%	18%	24%	17%	7%	10%
College/CEGEP, college, university below bachelor	41%	50%	43%	49%	43%	53%
Bachelor's degree	24%	24%	25%	26%	38%	27%
Post-graduate	8%	7%	7%	7%	9%	9%

Base: All respondents (n=337)

The age groups presented in the report are defined based on their age in the original 2019 study, although respondents have aged roughly two years since they first participated.

 $^{^{1}}$ Results should be interpreted with caution due to small sample size.

B. Vaping Specifics

Vaping Behaviours

Three quarters of Regular Vapers have vaped liquids with nicotine in the past 30 days. Daily use is higher for those using products with nicotine compared to those using products without nicotine.

Just over half (56%) of the 2021 RTS respondents are Regular Vapers; three-quarters of these vapers (78%) have vaped liquids with nicotine in the past 30 days. This is consistent with results from 2020, although a higher proportion report using only nicotine compared to 2020 (+10 points) and fewer report using both nicotine and non-nicotine liquids (down 8 points). Dual Users are generally similar to those who only vape in terms of nicotine and non-nicotine vaping, but they are more likely to report using both nicotine and non-nicotine vaping products (15% vs. 3%).

Table 4: Nicotine Content of Liquids Vaped in Past 30 Days (Tracking)

Q1: Which of the following have you done in the past 30 days?	2019 Overall (n=992)	2020 Regular Vapers (n=593)	2021 Regular Vapers (n=188)	2021 Dual Users (n=123)	2021 Vapers Only (n=65)
Vaped liquids with nicotine (Net)	63%	76%	78%	78%	73%
Used nicotine only past 30 days	48%	56%	66%	63%	70%
Used both past 30 days	15%	20%	12%	15%	3%
Used non-nicotine only past 30 days	25%	18%	15%	14%	17%
Not sure	11%	6%	9%	11%	9%

Base: All respondents (n=337)

Regular vapers were asked how frequently they vape liquids with and without nicotine. Reported daily use is highest among Regular Vapers who use liquids with nicotine (59%) than among those who use liquids without nicotine (40%); this reflects the same pattern noted in previous waves of the study. There is also an increase in daily use of nicotine (+7 points) and non-nicotine (+5) products. Conversely, vaping liquids without nicotine is more commonly done occasionally (i.e., not daily; 60% vs. 41%), a pattern that is evidence across the previous waves. Interestingly, the occasional use of nicotine and non-nicotine liquids showed a decrease (-8 points and -6 points, respectively). Thus, the data suggests a trend towards more daily vaping but this could also be influenced by differing rates of attrition (i.e., daily vapers could be more likely to continue vaping while occasional vapers may be more likely to quit).

Table 5: Frequency of Vaping by Nicotine Content of Liquids Vaped in Past 30 Days

Q3., Q4., and Q5.	<u> </u>	With Nicotine			Without Nicotine		
Which of the following best describes how often you vaped <liquid type=""> in the past 30 days?</liquid>	2019 (n=641)	2020 (n=447)	2021 (n=148)	2019 (n=383)	2020 (n=221)	2021 (n=51)¹	
I vaped them every day	49%	52%	59%	26%	35%	40%	
I vaped them at least once a week, but not daily	47%	47%	37%	64%	59%	52%	
I vaped them less than weekly, but at least once in the past 30 days	4%	2%	4%	10%	7%	8%	

Base: Regular vapers who use each type of liquid

Brand of Current Vaping Device

Juul continues to be the most commonly used device brand; a quarter could not name the brand they use.

Juul continues to be the most common device brand mentioned by Regular Vapers (24%), although this level has declined since 2020 (down 10 points), while a higher proportion mentioning other brands (27%, up 6). Consistent with 2020, one in four Regular Vapers (27%) are unsure what brand of device they are currently using.

Table 6: Device Brand Currently Being Used

Q9A. What brand(s) of vaping device do you currently use? (Top responses)	2020 All Regular Vapers (n=593)	2021 All Regular Vapers (n=188)	2021 Dual Users (n=128)	2021 Vapers Only (n=60)	2021 15-34 (n=50) ¹	2021 35+ (n=138)
Juul	34%	24%	26%	21%	31%	19%
Vype/Vuse	8%	8%	8%	6%	3%	11%
Aspire	8%	6%	4%	11%	2%	9%
Smok	6%	5%	3%	10%	0%	9%
A heated tobacco product	4%	6%	8%	2%	5%	7%
Other	21%	27%	17%	18%	22%	14%
Not sure	26%	27%	29%	21%	34%	21%

Base: Regular vapers who use each type of liquid

Among those who are unaware of the brand of device they use, devices with pre-filled cartridges and those with a refillable tank are similar in popularity.

Table 7: Type of Current Vaping Device

Q6. Which of the following images best represents the vaping device you are currently using?	2020 Regular Vapers Unaware of Device Brand (n=104)	2021 Regular Vapers Unaware of Device Brand (n=31)1
Vaping device with replaceable pre-filled cartridges or pods	40%	47%
Vaping device with a tank that you fill with liquid (e.g. mods)	70%	45%
Disposable (not refillable or rechargeable) vaping device (e.g. cig-a-like)	16%	11%
Another type of device not shown	N/A	4%

Base: Regular vapers who could not name the brand of device they use

¹Results should be interpreted with caution due to small sample size.

¹Note: Results should be interpreted with caution due to small sample size.

Amount spent on devices and liquids

Average monthly spending on vaping devices and liquids is lower than in past waves at \$40 for devices/components and \$46 for liquids.

The reported monthly amount Regular Vapers spend on vaping devices and liquids is lower than in 2019 and 2020. The reason for this shift is unclear, but may be related to the economic impact of the pandemic (i.e., less discretionary spending) or pandemic restrictions around shopping. Regular vapers most often spend between \$21 to \$50 per month on devices (26%) and pods/e-liquids (26%).

Table 8: Monthly Spend on Devices and Liquids

Q12A. and Q12B. How much do you spend in a typical month on vaping devices and pods/e-	Devices/ components			Liquids		
liquids?	2019* (n=412)	2020 (n=593)	2021 (n=188)	2019* (n=412)	2020 (n=593)	2021 (n=188)
\$0	11%	13%	7%	1%	1%	1%
Less than \$10	3%	2%	6%	3%	1%	5%
\$10-\$20	11%	13%	13%	18%	13%	17%
\$21-\$50	18%	23%	26%	34%	37%	26%
\$51-\$99	9%	9%	4%	11%	12%	10%
\$100+	12%	12%	7%	9%	10%	11%
I don't know	36%	29%	38%	23%	25%	30%
Mean	\$55.25	\$52.85	\$40.02	\$52.29	\$51.52	\$46.03

Base: Regular vapers

*Note: Question asked only in February 2019

Vaping Liquid Use

As before, Regular Vapers report a range of nicotine concentrations in the products they use most frequently.

Regular Vapers were asked to report the concentration of nicotine in the vaping products they use most frequently. One-quarter (23%) have not used nicotine liquid at all in the past 30 days; among those using nicotine, concentrations less than 10mg/ml are most common (21%). Concentrations reported in mg/ml are mentioned more often than percentage-based numbers. Nicotine concentration choices are similar to 2020. There are no statistically significant differences between Dual Users and Vapers Only.

Table 9: Current Concentration of Nicotine Most Commonly Used

Q10. How much nicotine do the ecigarettes, cartridges, pods or e-liquids you currently use contain?	2020 All Regular Vapers (n=593)	2021 All Regular Vapers (n=188)	2021 Dual Users (n=128)	2021 Vapers Only (n=60)
Percentage				
Less than 2%	4%	3%	3%	2%
2% to 4.9%	10%	12%	8%	20%
5% or more	5%	5%	7%	0%
mg/ml				
Less than 10 mg/ml	19%	21%	20%	22%
10-19 mg/ml	16%	14%	18%	7%
20-29 mg/ml	10%	7%	6%	8%
30-39 mg/ml	4%	2%	2%	2%
40 mg/ml or more	1%	2%	1%	5%
None/do not vape nicotine	24%	23%	22%	23%
Not sure	7%	13%	13%	11%

Base: Regular vapers

Liquid Flavour Preference

Among Regular Vapers, preference for tobacco flavoured vaping liquids has increased and is now similar to fruit flavours, followed by menthol.

The top three vaping flavour choices reported in 2021 remain consistent with 2019 and 2020. However, tobacco is more widely mentioned than in past waves (27% vs. 15%-17%), and is now on par with fruit flavour (25%), while menthol rounds out the top three (14%). Fruit flavours (33%) are the top choice for vapers under 35, followed closely by tobacco (30%). Vapers who do not smoke most often choose tobacco (44%) as their preferred flavour, compared to Dual Users (19%). Fruit is the flavour most often preferred by Dual Users (25%). Tobacco flavour preference is particularly high among former smokers who still vape (46%).

Table 10: Preferred Vaping Liquid Flavour

		a taping inqui			
Q12. What is your preferred flavour to vape?	2019 Regular Vapers Overall (n=412)*	2020 Regular Vapers Overall (n=593)	2021 Regular Vapers Overall (n=188)	2021 Dual Users (n=128)	2021 Vapers Only (n=60)
Tobacco flavour	15%	17%	27%	19%	44%
Fruit	29%	28%	25%	25%	25%
Mint/menthol	14%	18%	14%	14%	13%
Floral/herbal	3%	3%	6%	9%	-
Flavourless/no flavour in descriptor	3%	2%	5%	5%	5%
Coffee/tea	6%	6%	3%	5%	1%
Candy/confectionary	7%	6%	3%	4%	1%
Cannabis/marijuana flavour	2%	3%	2%	4%	-
Soft drink flavour	5%	4%	2%	2%	2%
Candy floss	5%	2%	2%	3%	-
Dessert	4%	3%	2%	2%	2%
Cookies	2%	<1%	2%	3%	-
Alcohol flavour	3%	2%	2%	2%	1%
Energy drinks	1%	1%	1%	2%	-
Cereal	1%	1%	0%	0%	-
Other	1%	1%	3%	1%	6%

Base: Regular vapers

^{*}Note: Question asked only in February 2019

¹Results should be interpreted with caution due to small sample size.

Importance of Vaping and Smoking

Most smokers and vapers continue to rate these activities as similarly important to their day-to-day lives.

Regular Vapers and Current Smokers were asked about the importance of vaping and smoking (respectively) in their day-to-day lives. Vaping (67%) and smoking (67%) are both regarded as similarly important by their respective users, and Dual Users do not value one activity/substance over another (65% for vaping and 63% for smoking).

Compared to 2020, among those who only vape, there is a notable 10-point increase in the proportion who say that vaping is important to them (70% in 2021 vs. 60% in 2020). There is a similar increase in the proportion of those who say smoking is important, among those who only smoke (up 8 points to 74%). It may be that those who place lower importance on vaping or smoking are more likely to either quit or become Dual Users over time.

Table 11: Importance of Vaping in Daily Life

Q43A. Overall, how important	Vaping: NET Important			
to you in your day-to-day life is?	2020	2021		
All Regular Vapers (2020 n=593, 2021 n=188)	64%	67%		
Vapers Only (2020 n=209, 2021 n=60)	60%	70%		
Dual Users (2020 n=384, 2021 n=128)	67%	65%		

Base: Regular vapers

Table 12: Importance of Smoking in Daily Life

Q43A. Overall, how important to you in your day-to-day life	Smoking: NET Important			
is?	2020	2021		
All Current Smokers (2020 n=616, 2021 n=208)	63%	67%		
Smokers Only (2020 n=232, 2021 n=70)	66%	74%		
Dual Users (2020 n=384, 2021 n=128)	62%	63%		

Base: Current smokers

Negative Judgements

As before, Smokers report feeling negatively judged for their behaviour more often than do Regular Vapers.

Regular Vapers and Current Smokers were also asked about how often they feel negatively judged by others for their use of these substances. Majorities in both cases say they feel judged sometimes or often, but such perceptions are more widespread among smokers (74% of smokers and 58% of vapers). This pattern also holds true among Dual Users, who feel more widely judged for smoking (74%) than vaping (60%). These proportions are consistent with feelings of stigma noted in 2020.

Table 13: Feeling of Being Negatively Judged For Vaping

Q43B. How often do you feel	Vaping: NET Oft	en / Sometimes
negatively judged by other people when you vape?	2020	2021
All Regular Vapers (2020 n=593, 2021 n=188)	57%	58%
Vapers Only (2020 n=209, 2021 n=60)	53%	52%
Dual Users (2020 n=384, 2021 n=128)	60%	60%

Base: Regular vapers

Table 14: Feeling of Being Negatively Judged For Smoking

Q43B. How often do you feel	Smoking: N	NET Often / times
negatively judged by other people when you smoke?	2020	2021
All Current Smokers (2020 n=616, 2021 n=208)	75%	74%
Smokers Only (2020 n=232, 2021 n=70)	77%	75%
Dual Users (2020 n=384, 2021 n=128)	73%	74%

Base: Current smokers

Perceptions of Harm

Cigarettes continue to be perceived as the most harmful to health overall, followed by nicotine vaping products, but half also see vaping products without nicotine as harmful.

Perceptions of the harm associated with cigarettes and vaping are similar compared to 2019 and 2020, with a clear distinction between the three types of products under consideration. Half (50%) find that vaping products without nicotine are very or somewhat harmful. This rises to three-quarters for vaping products with nicotine (74%) and nearly nine in ten (86%) for cigarettes.

Table 15: Perceptions of Harm 2019, 2020, 2021

Q18. In your opinion, how harmful, if at all, do you think each of the following are to the health of the person using them?	Vaping products WITH nicotine		Vaping products WITHOUT nicotine			Cigarettes	5		
	2019* (n=580)	2020 (n=992)	2021 (n=337)	2019* (n=580)	2020 (n=992)	2021 (n=337)	2019* (n=580)	2020 (n=992)	2021 (n=337)
Harmful (Net)	72%	77%	74%	33%	49%	50%	90%	89%	86%
Very harmful	23%	30%	32%	6%	14%	14%	68%	66%	65%
Somewhat harmful	49%	47%	42%	27%	35%	36%	22%	23%	21%
Not harmful (Net)	26%	20%	22%	61%	47%	45%	9%	10%	11%
Not very harmful	21%	15%	17%	43%	33%	30%	6%	7%	8%
Not at all harmful	5%	5%	5%	19%	14%	14%	3%	3%	4%
Not sure	2%	3%	4%	6%	4%	5%	1%	1%	3%

Base: All respondents

*Note: Question asked only in June 2019

Perceptions of harm caused by vaping products with nicotine and cigarettes are more common among those who stopped regular vaping compared to Regular Vapers and Current Smokers.

Table 16: Perceptions of Harm by Vaping / Smoking Status

Q18. In your opinion, how harmful, if at all, do you think each of the following are to the health of the person using them? (% Very Harmful)	Regular Vaper 2021 (n=188)	Non-Vaper 2021 (n=149)	Current Smokers 2021 (n=208)
Vaping products WITH nicotine	16%	49%	22%
Vaping products WITHOUT nicotine	11%	18%	11%
Cigarettes	59%	72%	50%

Base: All respondents

Quitting/reducing frequency of vaping

A majority of Regular Vapers have tried to reduce their vaping at some point, and nearly half have tried to quit vaping entirely.

Nearly half (47%) of Regular Vapers say that they are either currently (26%) or have tried in the past to quit vaping (21%). Most (59%) Regular Vapers are either currently trying to reduce their frequency of vaping (39%) or have tried in the past (20%). This is consistent with results from 2020.

Table 17: Attempts to Stop or Reduce Vaping Frequency among Regular Vapers

Q13. Are you currently trying, or	To Stop Vaping		To Reduce Frequency of Vapir			
have you previously tried?	2019 2020 2021 (n=992) (n=593) (n=188)			2019 (n=992)	2020 (n=593)	2021 (n=188)
Ever tried (Net)*	21%	48%	47%	42%	64%	59%
Currently trying	n/a	24%	26%	n/a	39%	39%
Previously tried (but not currently)	n/a	24%	21%	n/a	25%	20%
Never tried	75%	50%	46%	55%	33%	35%
Not sure	4%	2%	6%	3%	2%	7%

Base: Regular Vapers

Note: In 2019, the question asked only whether respondents had ever tried to quit at any point.

One in five (21%) vapers who are currently trying to quit report that they are very serious about the attempt; just over half (54%) are somewhat serious. In total, the proportion of those who say they are seriously trying to quit has declined compared to 2020 by 15 points. This may be a matter of attrition over time, possibly because those who were most serious about quitting are less likely to be vaping a year later.

Table 18: Seriousness of Attempt To Quit Vaping

Q14. How serious is your current attempt to stop vaping?	2020 (n=143)	2021 (n=42)¹
Serious (Net)	90%	75%
Very serious	38%	21%
Somewhat serious	52%	54%
Not very serious	9%	22%
Not at all serious	1%	1%

Base: Regular vapers currently trying to quit vaping

¹Note: Results should be interpreted with caution due to small sample size.

Nicotine gum or lozenges are still the most common types of cessation aids used by those who are currently trying to quit vaping, reported by 30% of regular vapers trying to quit vaping in 2021. Also consistent with 2020, one in four (24%) are attempting to quit without any specific aids or quitting supports. One in five (20%) say they are using cannabis to help them quit; this proportion has risen relative to 2020.

Table 19: Methods Being Used to Quit Vaping

Q15. Which of the following, if any, are you using to help you stop vaping?	2020 (n=143)	2021 (n=42)¹
Nicotine gum or lozenge	31%	30%
Cannabis	12%	20%
Nicotine patch	17%	17%
Medication (e.g. Zyban, Champix)	12%	12%
Acupuncture	12%	9%
Other nicotine replacement therapy products	3%	7%
Self-help books	13%	6%
Counselling	12%	3%
Hypnosis	5%	3%
Quit-line	4%	2%
Other	5%	4%
Nothing	27%	24%
Not sure	1%	1%

Base: Regular vapers currently trying to quit vaping

¹Note: Results should be interpreted with caution due to small sample size.

Those who are not currently trying to quit vaping were also asked if and when they plan to quit; combined with those who are currently trying to quit, a summary of quitting intentions for all regular vapers is shown in the table below. In total, two-thirds (66%) of Regular Vapers are either trying to quit now (26%), or have plans to quit vaping (40%); this is generally consistent with 2020. There are no statistically significant differences between Dual Users and Vapers Only in terms of quitting intentions.

Table 20: Plans To Quit Vaping

Q13. Are you currently trying, or have you previously tried to stop vaping? Q16. Do you plan to stop vaping?	2020 Regular Vapers (n=593)	2021 Regular Vapers (n=188)	2021 Dual Users (n=128)	2021 Vapers Only (n=60)
Yes, plan to quit (Net)	70%	66%	64%	69%
Yes, currently trying to quit	24%	26%	30%	18%
Yes, in the next month	3%	2%	1%	4%
Yes, in the next 6 months	11%	8%	8%	8%
Yes, in the next year	11%	9%	10%	8%
Yes, more than a year from now	5%	1%	1%	0%
Yes, I plan to stop vaping, but I don't know when	17%	19%	14%	31%
No, I do not plan to stop vaping	19%	22%	21%	22%
Not sure	11%	13%	14%	9%

Base: Regular Vapers

Of those Regular Vapers who say they do not intend to quit vaping, nearly half (46%) cite their enjoyment of vaping as a reason. Nearly one in five (17%) say that vaping helps them to quit smoking and about one in ten use vaping to relax (12%); this is generally consistent with 2020, though the proportion who say it helps to quit smoking has increased by 4 points and those who are not sure has increased by 7 points.

Table 21: Reasons For Not Planning To Quit Vaping

Q17. You indicate that you do not plan to stop vaping. What are the main reasons why you plan to continue vaping?	2020 Regular Vapers (n=120)	2021 Regular Vapers (n=44) ¹
Enjoy vaping/feel good	52%	46%
Helps to quit smoking	13%	17%
Good for relaxing/destressing	12%	12%
Healthier than smoking/no signs of harmful effects	16%	7%
Cheaper than smoking	2%	6%
No annoying smell to it	3%	2%
Like flavour/taste of it	5%	2%
Used to it/became a routine of my lifestyle	5%	1%
Other	9%	2%
Not sure	13%	20%

Base: Vapers who do not plan on quitting vaping

¹Note: Results should be interpreted with caution due to small sample size.

C. Dual Users & Smoking

Behaviours

The 2021 results continue to suggest that vaping helps Dual Users reduce their frequency of smoking and daily number of cigarettes smoked in comparison to smokers who stopped vaping at some point since 2019.

More than half (57%) of RTS respondents in 2021 are smokers, split between Dual Users (37%) and those who quit vaping (19%); these proportions are similar to 2020 when 38% were Dual Users and 22% were smokers who quit vaping. Current Smokers include a range of specific dispositions including status quo Dual Users, smokers who quit vaping since 2019, relapsed smokers, and New Smokers.

Among all Current Smokers, half (51%) are daily smokers and the other half (49%) smoke less often (although at least once in the past month). Daily smoking has risen steadily since the first wave of the study, from 44% of smokers reporting daily use in in 2019 to 51% in 2021. One hypothesis is that more frequent smokers may be less likely to succeed at quitting, and thus become more concentrated in the pool of respondents who are Current Smokers in 2021.

As was the case in 2020, daily smoking is most common among smokers who stopped vaping (66%); it is less common among Dual Users (44%). Dual Users also report smoking fewer cigarettes per day (26% smoke just one or two a day and an average of 8 per day), compared to those who smoke but no longer vape (13% smoke one or two a day and an average of 10 per day). While the small sample size of New and Relapsed Smokers precludes direct comparisons with other groups, it is worth noting that few of these smokers are smoking daily (25%) and one-third of them (34%) smoke only one or two cigarettes a day, suggesting more short-term smoking habits.

Table 22: Smoking Frequency and Amount

Q20. In the past 30 days, how often did you smoke cigarettes? Q22. On the days when you smoke, how many cigarettes do you typically smoke?	June 2019 (n=337)	2020 (n=616)	2021 (n=208)	2021 Dual Users (n=135)	2021 Smokers Only (n=73)	2021 New and Relapsed Smokers (n=31) ¹
Frequency of smoking						
Every day	44%	46%	51%	44%	66%	25%
Occasionally (less than daily)	56%	54%	49%	56%	34%	75%
Number of cigarettes / day						
1-2	23%	23%	22%	26%	13%	34%
3-4	15%	13%	8%	9%	6%	5%
5-9	17%	18%	19%	18%	21%	15%
10-19	21%	25%	23%	18%	33%	5%
20+	11%	12%	10%	9%	13%	11%
Mean	7.94	8.80	8.77	8.06	10.09	6.64
Not sure	13%	9%	18%	20%	14%	30%

Base: Current smokers

Perceptions

Dual users most often to see themselves as both a vaper and a smoker.

¹Note: Results should be interpreted with caution due to small sample size.

As was the case in previous waves, the largest proportion of current Dual Users (48%) sees themselves as both a vaper and a smoker, although this view has declined since 2020 (down 12 points). The next largest group of Dual Users continues to be those who consider themselves a vaper (30%); as before, relatively few consider themselves to be a smoker (17%). (Note the sample sizes of new and relapsed smokers are too small to break out separately from status quo dual users.)

Table 24: Smoking and Vaping Identity

Q24. Which of the following best describes you?	2019 Dual Users (n=605)	2020 Dual Users (n=384)	2021 Dual Users (n=135)
I am a vaper	26%	26%	30%
I am a smoker	16%	14%	17%
I am both a smoker and a vaper	53%	60%	48%
I am neither a smoker nor a vaper	3%	<1%	2%
Not sure	2%	1%	3%

Base: Dual users

Reasons for Vaping and Smoking

Among Dual Users, reasons for vaping most commonly revolve around cutting down or quitting smoking, or vaping in spaces where smoking is not permitted. Status quo Dual Users say they continue to smoke out of habit or because they like the feeling. Stress is the top reason for those who returned to or began smoking since the previous wave.

Reasons for vaping. Dual users were again asked the main reasons why they vape (from a list provided). Similar to previous waves, attempting to quit smoking is the most common reason for vaping (69%). One in four also report vaping where smoking is not permitted (24%). (Note the sample sizes of new and relapsed smokers are too small to break out separately from status quo dual users.)

Table 25: Main Reasons for Vaping Among Dual Users

Table 25: Main Reasons for Vaping Among Duai Osers					
Q25. Which of the following best describes the main reason(s) you vape?	2019 Dual Users (n=605)	2020 Dual Users (n=384)	2021 Dual Users (n=135)		
Trying to quit/reduce smoking (NET)	69%	66%	69%		
I'm trying to quit smoking	45%	39%	38%		
To reduce the number of cigarettes I smoke	43%	42%	31%		
I vape where smoking is restricted/not allowed	16%	16%	24%		
Helps me relax/cope	n/a	23%	21%		
I like the flavours and/or smell	23%	23%	18%		
It's cheaper than smoking	20%	17%	17%		
It's less harmful to my health than smoking	26%	21%	16%		
Habit/ritual	12%	10%	15%		
I vape in certain social settings	16%	12%	13%		
Can vape discretely/without it being noticed	n/a	13%	12%		
It passes the time/boredom	9%	9%	9%		
It's less harmful to others/family/children than smoking	12%	10%	8%		
My friends/family vape	7%	6%	7%		
It gives me a break from work/school/home	7%	7%	7%		
For the "buzz"/alternate source of nicotine/like nicotine	16%	6%	7%		
It's easier to hide from my family than smoking	3%	4%	7%		
It is fun and exciting	11%	11%	5%		
I like doing tricks	6%	4%	3%		
I vape when it is offered to me	5%	3%	3%		
As a social activity with friends or family	4%	4%	2%		
It's easier to buy/get than cigarettes	2%	1%	1%		
Other	1%	<1%	1%		

Base: Dual users

Reasons for smoking. Status quo Dual Users were asked the main reason(s) why they continue to smoke in addition to vaping, from a list of possible reasons. Results for 2020 are shown for information purposes, however, this question was previously asked as an open-ended question so results are not directly comparable.

Habit is given as the top reason status quo Dual Users continue to smoke (37%). The second-most common reason given in this wave is that they like the feeling of smoking. Addiction (29%) and nicotine cravings (29%) are tied in third place.

Table 26: Reasons for Continuing to Smoke in addition to Vaping

Q26. Which of the following best describes the main reason(s) you continue to smoke in addition to vaping?	2020 Status Quo Dual Users (n=311)	2021 Status Quo Dual Users (n=89
Habit	43%	37%
Like the feeling after smoking/vaping does not give the same feeling	20%	32%
Addiction/can't give it up/hard to quit	38%	29%
Craving nicotine/tobacco	24%	29%
Still enjoy smoking	33%	24%
Smoke when I am stressed/anxious	16%	19%
Smoke with other smokers/with a drink/it's a social thing	13%	13%
Like the taste of cigarettes better	12%	11%
Trying to quit smoking gradually	13%	10%
Like cigarettes/smoking more than vaping	9%	6%
Not sure	1%	3%

Base: Status quo Dual Users

Note: This question was asked in an open-ended format in 2020.

New and Relapsed Smokers were asked the main reasons why they picked up or went back to smoking since the previous wave of research (either 2019 or 2020). One in five (19%) said stress was a main reason for smoking. A mix of other reasons, including smoking in social situations, difficulty quitting, and that smoking is only an occasional convenience, were mentioned by smaller proportions. However, half (51%) cannot pinpoint a reason.

New smokers were additionally asked what flavours they were vaping before they began smoking; the sample size for this subgroup (n=6) precludes quantitative analysis, but qualitatively, fruit, coffee / tea, and candy floss were mentioned most often.

Table 23: Reasons for Going Back To / Picking Up Smoking

Q23. What are the main reasons you have gone back to / picked up smoking?	2021 New and Relapsed Smokers (n=31) ¹
Coping with stress	19%
Being around friends who smoke/seeing others smoking	6%
Hard to quit smoking	5%
Occasional convenience	2%
Other	13%
Not sure	51%

Base: Relapsed Smokers

¹Note: Results should be interpreted with caution due to small sample size.

Vaping When Smoking Is Not Possible

Vaping at times and in places where smoking is not possible is common among Dual Users, who report doing so an average of three times a day. Reported frequency of this behaviour has declined somewhat since 2020.

Dual users commonly report vaping when they are unable to smoke (e.g., in places where smoking is not permitted or accepted). Nearly half of Dual Users vape at least twice a day for this reason (46%); this proportion has declined since 2020 (56%), while the proportion answering "not sure" has increased (up 13 points). These shifts may be tied to pandemic restrictions in different ways. One possibility is that smokers are home more and encounter fewer situations where replacing a cigarette with vaping is necessary. It may also be that frequent changes in pandemic restrictions make it difficult for smokers to indicate what is usual behaviour for them, since routines are difficult to maintain at this time.

Table 27: Vaping When Smoking is Not Possible

Q27. In a typical day, how many times do you vape because you cannot smoke a cigarette?	2020 All Dual Users (n=384)	2021 All Dual Users (n=135)
Zero	4%	4%
1	14%	13%
Twice a day or more (NET)	56%	46%
2	18%	19%
3-5	23%	22%
6-19	13%	5%
20+	2%	<1%
Not sure	25%	38%
Mean	4.39	3.21

Base: All dual users

D. Vaping for Smoking Cessation

Successful Smoking Cessation

Former smokers who vape continue to cite having used vaping to help them quit and to help them stay away from cigarettes; general enjoyment and entertainment reasons for vaping are mentioned less often than before.

Regular vapers who are former smokers (i.e., quit smoking at some point in the past) were asked some questions to explore the relationship between vaping and smoking cessation. These vapers make up 13% of the overall study sample.

The most prominent reasons for vaping (chosen from a list provided), within this former smokers group, are all tied to the decision to quit smoking cigarettes, including that vaping helped them quit smoking (71%), avoid a relapse (51%), or is less harmful to their health than smoking (45%). While these have been the top three reasons every time this question was asked across all three study waves, the proportion of respondents selecting these top reasons has increased each wave; this may suggest a degree of entrenchment in behaviour within specific groups over time. Some former smokers also mention that vaping is a cheaper alternative to smoking (37%) and is less harmful to others (30%). Other reasons for vaping, mostly related to enjoyment and socializing, are now less prominent than before.

Table 28: Main Reasons for Vaping Among Former Smokers

Q35. Which of the following best describes the main reason(s) you vape?	Former Sm	Former Smokers & Regular Vapers		
	2019 (n=207)	2020 (n=117)	2021 (n=53)¹	
I used it to help me quit smoking	58%	68%	71%	
I use them to stay off cigarettes/avoid a relapse	37%	49%	51%	
It's less harmful to my health than smoking	42%	44%	45%	
It's cheaper than smoking	27%	40%	37%	
It's less harmful to others/family/children than smoking	20%	21%	30%	
Helps me relax/cope	n/a	27%	27%	
I like the flavours and/or smell	29%	28%	21%	
It passes the time/boredom	14%	13%	8%	
My friends/family vape	7%	6%	5%	
It is fun and exciting	9%	8%	4%	
It gives me a break from work/school/home	6%	7%	2%	
For the "buzz"/alternate source of nicotine/like nicotine	17%	4%	1%	
Other	3%	1%	1%	

Base: Regular vapers who are former smokers

Using vaping to quit smoking. Those who quit smoking only since the 2020 wave of research were asked what methods they used to quit (from a list provided). The subsample size is too small to report (n=26), but qualitatively, the results are similar to past waves, with nicotine aids like vaping, gum or lozenge and the nicotine patch the most common choices.

The further subsample of those who stopped smoking since 2020 using vaping products (with or without nicotine) were asked a small series of follow-up questions, but again, the subsample size is too small to report

¹Results should be interpreted with caution due to small sample size.

(n=9). Qualitatively speaking, none of the nine identified any problems or challenges using vaping products to quit smoking, two (2) got advice or information about how to use vaping to quit smoking (one from a doctor and another from a friend and, three (3) say they had a specific plan in place for when to smoke and when to vape, to help them quit smoking.

Planning To Quit Smoking

The vast majority of Dual Users are either planning to quit, or already trying to quit smoking; most of those who plan to quit intend to do so within the next six months.

The table below summarizes the intentions to quit smoking among all current Dual Users. A subset of Dual Users (38%) are already trying to quit smoking, based on their response to an earlier question about their reason for vaping (see "Perceptions" under Section C). The remainder of Dual Users not already trying to quit were asked whether they planned to quit in the future. Half (51%) say they are planning to quit smoking, although few plan to do so in the near-term (7% in the next month).

Quitting intentions among Dual Users have increased each wave, from 43% in 2019 to 51% in 2021. Intentions have also shifted somewhat toward the six month time frame (away from next month or beyond six months). A hypothesis for this shift is that there is a backlog of potential quitters who are waiting for more favourable, post-pandemic conditions before they make a serious attempt at quitting, but who do not intend to put off quitting for an extended period of time.

Table 29: Intentions to Quit Smoking

Q25. Which of the following best describes the main reason(s) you vape? Q33. Are you planning to quit smoking cigarettes?	2019 (n=606)	2020 (n=384)	2021 (n=135)
Already trying to quit	45%	39%	38%
Planning to quit smoking cigarettes (Net)	43%	47%	51%
Within the next month	6%	11%	7%
Within the next 6 months	15%	16%	26%
Sometime in the future beyond 6 months	21%	20%	17%
I am not planning to quit	12%	14%	11%

Base: Dual users

Use of Smoking Cessation Aids

Dual Users who plan to quit smoking remain most likely to say they will use a vaping product with nicotine to help them quit. Fewer than four in ten have sought advice on quitting, and one in three have a strategy for when to smoke and when to vape.

Dual Users who plan to quit smoking in the future (in any future time frame, based on their response to the previous question) were asked to rate their likelihood of using some common cessation aids. Vaping products with nicotine (70%) are most often noted as a likely choice among Dual Users who intend to quit smoking; this remains stable compared to 2020.

Since 2020, fewer plan to use vaping products without nicotine (61%, down 8 points) or nicotine patches (44%, down 15), and a greater proportion say they will use medication options like Zyban and Champix (50%, up 12). The likelihood to use nicotine gum is unchanged (60%).

Table 30: Likelihood of Using Cessation Aids

Q34. How likely are you to use each of the following to help you	•	to use for ting
quit smoking cigarettes?	2020 (n=169)	2021 (n=91)
Vaping products with nicotine	70%	70%
Vaping products without nicotine	69%	61%
Nicotine gum or lozenge	60%	60%
Medication (e.g. Zyban, Champix)	38%	50%
Nicotine patch	59%	44%

Base: Dual users who are planning to quit smoking within the next month, next six months, or beyond six months

Advice on using vaping to quit smoking. Among Dual Users who are trying to cut down smoking or quit, four in ten (36%) have sought advice or information about using vaping for this purpose; this is consistent with previous waves of the study. As in 2020, health care professionals (25%) were consulted somewhat more often for advice than peers (20%) overall, though friends specifically are the most common single source of advice (16%).

Table 31: Source of Advice on Using Vaping to Quit or Reduce Smoking

Q28. Did you get information/advice from anyone on using vaping to quit or reduce smoking? Q29. From where did you get advice on using vaping to quit or reduce smoking?	2019 (n=425)	2020 (n=256)	2021 (n=83)
Yes, received advice on using vaping to quit or cut down on smoking	38%	40%	36%
Health Care Professionals (NET)	21%	23%	25%
Doctor	12%	16%	14%
Pharmacist	9%	8%	11%
Nurse/nurse practitioner	5%	7%	4%
Dentist	4%	1%	4%
Peers (NET)	25%	18%	20%
Friend/classmate	17%	13%	16%
Co-worker	8%	6%	3%
Sister/brother	9%	4%	2%
Parent/guardian	4%	3%	2%
Vape shop	6%	4%	6%
Web forum	2%	7%	4%
Support group	3%	2%	4%
Other	1%	1%	0%
No, did not receive advice	58%	55%	59%
Not sure	4%	4%	4%

Base: Dual users who are trying to quit or cut down on smoking

Note: The February 2019 wave asked only about "advice" and not "information/advice" as in

June 2019, 2020, and 2021.

Specific plan for quitting smoking using vaping. One-third of Dual Users (32%) who are trying to quit or reduce smoking, and who indicate that this is one of their main reasons for vaping, have a specific strategy for when to smoke and when to vape. This proportion is consistent with previous waves.

Table 32: Specific Plan for Quitting Smoking Using Vaping

Q30. To help you quit smoking, do you have a specific plan or strategy in place for when to smoke and when to vape?	2019 (n=231)	2020 (n=256)	2021 (n=83)
Yes	32%	34%	32%
No	60%	58%	54%
Not sure	8%	8%	14%

Base: Dual users who are trying to quit or cut down on smoking and who say their main reason for vaping is to quit or reduce smoking

Problems or challenges using vaping to quit smoking. Dual Users trying to quit or reduce smoking (and who say that quitting or reducing smoking is a main reason for vaping) were asked an open-ended question about the challenges they face using vaping for this purpose. As in 2020, issues related to addiction are most common (20%). A smaller proportion of these Dual Users have concerns about vaping itself (8%); this has declined since 2020 when it was 14%. Half (51%) could not name any problems they are having using vaping to help them quit smoking.

Table 33: Problems and Challenges Using Vaping to Quit Smoking

Q31. What problems or challenges, if any, are you having using vaping products to help you quit or reduce smoking?	2020 (n=256)	2021 (n=83)
Addicted to cigarettes (Net)	22%	20%
Addicted to smoking/can't quit totally	9%	7%
Lack of will power	5%	3%
Craving for a cigarette is too strong	4%	5%
Vaping is not as satisfying as smoking	4%	5%
Concerns about vaping (Net)	14%	8%
Public perception of vaping/not socially accepted	3%	3%
Expensive to purchase devices/liquids	2%	2%
Inability to get preferred flavours easily/flavour(s) illegal in my province	3%	1%
Might become addicted to vaping	4%	1%
Concerns with recent reports about health problems related to vaping	3%	1%
Pressure from friends to smoke with them	2%	4%
Enjoy smoking/don't intend to quit/prefer taste of cigarettes	6%	1%
Too much stress with current COVID-19 situation	2%	1%
Also require nicotine patches/gum	2%	0%
Smoking is easier than vaping/no need to clean device/fill it with liquid/keep it charged	5%	0%
Other	2%	5%
Nothing/I am capable of quitting if I want to	8%	12%
Not sure	39%	51%

Base: Dual users who are trying to quit or cut down on smoking and who say their main reason for vaping is to quit or reduce smoking

E. Successful Vaping Cessation

Reasons for Quitting Vaping

As before, negative health impacts and lack of enjoyment are the most common motivators among those who quit vaping regularly since 2020. Negative media coverage of vaping is less of a motivator than in 2020.

Respondents who indicated they have quit vaping since 2020 (or 2019, for those who did not complete the 2020 survey) and are no longer classified as Regular Vapers (i.e., had **not** used a vaping product at least once a week for the past four weeks) account for 15% of the total sample. This includes both smokers (9% of total) and non-smokers (6% of total) who stopped vaping regularly since 2020. These new non-vapers were asked some questions related to their transition away from vaping. Their responses are compared to respondents to the 2020 survey who quit vaping since 2019.

The negative health impacts of vaping are the most common reason given for quitting (25%). About one in ten each say they just don't like vaping or that it's not as enjoyable as smoking a cigarette (11%) and that it's too expensive (8%). Since 2020, there has been a substantial decline in the proportion citing negative media coverage of vaping as a reason for quitting (down from 21% in 2020 to 1% in 2021).

Table 34: Reasons Decided to Stop Vaping

Q44. Your answers from 2020 indicate you were regularly vaping. What is the main reason why you decided to stop vaping?	2020 respondents who quit vaping since 2019 (n=399)	2021 respondents who quit vaping since last wave (n=56)¹
Bad for my health/causes side effects/got sick	29%	25%
Don't like it/not as enjoyable as smoking a cigarette	7%	11%
Too expensive/can't afford it	7%	8%
Decided to quit/no longer interested in vaping	2%	2%
Negative media coverage/reports about deaths caused by vaping/studies showing how harmful it is	21%	1%
Concerned with current COVID-19 pandemic/its effects on smokers' lungs	5%	1%
It was to help me quit smoking and it worked	3%	1%
Still vape cannabis	2%	7%
I just reduced amount of vaping	1%	2%
Other	9%	6%
Not sure	19%	36%

Base: Those who quit vaping since the previous wave

¹Note: Results should be interpreted with caution due to small sample size.

Advice and Information Used in Quitting Vaping

Among people who stopped regular vaping, there continues to be three in ten who got information or advice to help them quit, most often from a doctor.

Three in ten (30%) who stopped regularly vaping received advice or information to help them, which is consistent with 2020, as are the sources they used. This advice remains most likely to have come from health professionals (27%) than from peers (9%); doctors specifically are mentioned by one in five (19%).

Table 35: Use of Advice and Information To Quit Vaping

Q45. Did you get information and/or advice from anyone on how to stop vaping? Q46 From where did you get advice on how to stop vaping?	2020 respondents who quit vaping since 2019 (n=399)	2021 respondents who quit vaping since 2020 (n=56) ¹
Yes, received information/advice	28%	30%
Health Care Professionals (NET)	18%	27%
Doctor	14%	19%
Pharmacist	4%	9%
Dentist	4%	6%
Nurse/nurse practitioner	3%	3%
Peers (NET)	14%	9%
Parent/guardian	4%	5%
Friend/classmate	7%	4%
Sister/brother	5%	4%
Co-worker	3%	1%
Support group	3%	3%
Web forum	5%	1%
Vape shop	2%	1%
Other	1%	1%
No, did not receive advice	69%	65%
Not sure	3%	6%

Base: Those who quit vaping since the previous wave

Those who received advice or information about quitting vaping were asked what specifically they were told about how to stop (open-ended, without providing response options). This subsample is too small to report (n=13). Qualitatively, however, the advice given to these new non-vapers includes cautions about health risks and instructions on how to quit (including advice to quit 'cold turkey,' use nicotine patches, or simply reduce vaping over time).

Strategies and Aids Used in Quitting Vaping

Reducing vaping frequency as a strategy to help stop vaping is less widely reported by those who stopped vaping since 2020 than those who quit vaping between 2019-2020. Fruit vaping liquids are identified as the flavour that most helped them quit, followed by coffee/tea, menthol and tobacco flavours.

¹Note: Results should be interpreted with caution due to small sample size.

Strategies. The reported use of reducing vaping frequency as a strategy to help stop vaping is lower among those who quit vaping in 2021 (44%) than before (59%), although it is unclear why this is the case. This technique is still more widely used than switching to a lower nicotine strength to help quit vaping (26%).

Table 36: Strategies Used to Quit Vaping

Q48. To help you stop vaping, did you do any of the following?	2020 All who quit vaping (n=399)	2021 All who quit vaping (n=56) ¹
Reduce your frequency of vaping (% yes)	59%	44%
Switch from a higher to a lower nicotine strength (% yes)	25%	26%
Neither	38%	54%

Base: Those who quit vaping since the previous wave

¹Note: Results should be interpreted with caution due to small sample size.

Flavours. Those who quit vaping since 2020 were asked a new question about which vaping flavours most helped them stop. The top flavour for this purpose is fruit (32%), followed by coffee or tea (27%) and mint or menthol (24%); this is somewhat different compared to general flavour preferences among Regular Vapers, where coffee/tea ranked sixth. Tobacco flavour, which Regular Vapers identify as their favoured flavour overall, is less favoured as a flavour to specifically help with quitting (22%).

Table 37: Vaping Flavour Used to Quit Vaping

Q48C. What vape flavour(s) most helped you stop?	2021 All who quit vaping (n=56) ¹
Fruit	32%
Coffee/tea	27%
Mint/menthol	24%
Tobacco flavour	22%
Cereal	16%
Energy drinks	15%
Flavourless/no flavour in descriptor	15%
Candy/confectionary	14%
Dessert	13%
Cannabis/marijuana flavour	10%
Alcohol flavour	9%
Floral/herbal	5%
Soft drink flavour	4%
Cookies	3%
Candy floss	2%
Other	5%
Not sure	27%

Base: Those who quit vaping since 2020

¹Note: Results should be interpreted with caution due to small sample size.

Cessation Aids. Similar to 2020, about half (48%) of those who have stopped regular vaping since 2020 did so without any specific aids to help. Nicotine gum or lozenge (17%) and counselling (17%) were employed most often by those who did use an aid to quit, followed by cannabis (12%) and the nicotine patch (11%).

Table 38: Aids Used to Quit Vaping

Q49. Which of the following, if any, did you use to help you stop vaping?	2020 All who quit vaping (n=399)	2021 All who quit vaping (n=56) ¹
Nicotine gum or lozenge	12%	17%
Counselling	10%	17%
Cannabis	11%	12%
Nicotine patch	11%	11%
Self-help books	5%	7%
Acupuncture	3%	4%
Medication (e.g. Zyban, Champix)	4%	3%
Other nicotine replacement therapy products	1%	2%
Quit-line	2%	1%
Hypnosis	2%	0%
Other	5%	4%
I did not use anything to quit vaping	52%	48%
Not sure	3%	6%

Base: Those who quit vaping since the previous wave

¹Note: Results should be interpreted with caution due to small sample size.

Difficulty of Quitting Vaping

Despite an average of two attempts needed to successfully quit vaping, most of those who stopped vaping since 2020 say it was easy.

Two thirds of those who stopped regular vaping since 2020 describe it as easy (64%), one in four (27%) say it was very easy; this is consistent with results for those who quit vaping between 2019 and 2020. More than half (57%) successfully stopped vaping after one or two attempts; the average number of attempts before quitting is two.

Table 39: Difficulty and Number of Attempts to Quit Vaping

Table 39: Difficulty and Number of Attempts to Quit Vaping					
Q50. How easy or	2020 All who	2021 All who			
difficult was it for you	quit vaping	quit vaping			
to stop vaping?	(n=399)	(n=56)¹			
Easy (Net)	65%	64%			
Very easy	28%	27%			
Somewhat easy	37%	37%			
Difficult (Net)	33%	31%			
Somewhat difficult	27%	21%			
Very difficult	5%	10%			
Not sure	2%	5%			
Q51. How many times di successfully quit?	d you try to stop va	ping before you			
Zero	8%	3%			
1	37%	32%			
2	20%	14%			
3	7%	18%			
4+	7%	8%			
Not sure	21%	24%			
	1.91	1.95			

Base: Those who quit vaping since the previous wave

Those who have stopped both regular vaping and smoking were asked about the relative ease of the two. The subgroup of these dual quitters is too small for analysis (n=19), but qualitatively it is most common to say it is equally easy to quit vaping and smoking.

¹Note: Results should be interpreted with caution due to small sample size.

Markers of Successfully Quitting Vaping

Most often, those who quit vaping say they know they've succeeded at quitting when they stop having cravings or thinking about vaping.

Those who have stopped regular vaping were asked how they know they have successfully quit (asked openended, without providing response options). Similar to 2020 results, a lack of cravings is the most common indicator (38%). A similar proportion (42%) say they don't know, or it is still too early to tell if they have truly succeeded.

Table 40: Indicators of Successfully Quitting Vaping

Q52. Now that you have stopped vaping, how do you know that you have successfully quit?	2020 All who quit vaping (n=399)	2021 All who quit vaping (n=56) ¹
No longer crave it/don't think about it	26%	38%
Don't need it anymore	2%	4%
Still vape occasionally/vape cannabis	3%	3%
Haven't vaped for a long time/don't vape even if I have the craving for it	21%	3%
I got rid of vaping gear/destroyed it/threw it in the garbage	4%	1%
Just know it	1%	1%
Other	13%	6%
Nothing	1%	0%
DK/NA/still early to tell	33%	42%

Base: Those who quit vaping since the previous wave

¹Note: Results should be interpreted with caution due to small sample size.

F. Cannabis Use

About half of respondents have used cannabis in the past 30 days, most often by smoking.

Close to half (48%) of respondents say they have used cannabis in the past 30 days, most often by smoking it (30%); both of these measures have declined since 2020. Significantly more Regular Vapers reported using cannabis in the past 30 days (57%) compared to Non-Vapers (38%), notably by vaping (25% vs. 9%).

Comparing between target groups of interest (that have sufficient sample sizes for analysis), about three-quarters of Status Quo Dual Users (72%) report using cannabis in the past 30 days; this is significantly higher compared to those who Quit Vaping since 2020 (49%), and Status Quo Vapers (30%).

Table 41: Cannabis Use in Past 30 Days by Vaping Type

Q54. Have you consumed cannabis in the last 30 days?	2020 Overall (n=992)	2021 Overall (n=337)	2021 Regular Vapers (n=188)	2021 Non- Vapers (n=149)
Used cannabis in past 30 days (Net)	56%	48%	57%	38%
I have smoked it	40%	30%	35%	24%
I have vaped it	15%	17%	25%	9%
I have consumed it in another way	17%	18%	19%	16%
Did not use cannabis in past 30 days	42%	50%	40%	60%
Not sure	2%	2%	2%	2%

Base: All respondents

Table 42: Cannabis Use in Past 30 Days by Groups of Interest, 2021

Q54. Have you consumed cannabis in the last 30 days?	2021 Overall (n=337)	2021 Status Quo Dual Users (n=89)	2021 Status Quo Vapers (n=45) ¹	2021 Quit Vaping since previous wave (n=56)1
Used cannabis in past 30 days (Net)	48%	72%	30%	49%
I have smoked it	30%	45%	23%	39%
I have vaped it	17%	34%	3%	12%
I have consumed it in another way	18%	25%	7%	19%
Did not use cannabis in past 30 days	50%	24%	70%	49%
Not sure	2%	4%	0%	2%

Base: All respondents

II. Qualitative - Detailed findings

A. Vaping and smoking habits

Participants (n = 46) were asked to describe their current or previous vaping and smoking habits in terms of frequency, situations, and products.

Vaping Habits. All qualitative study participants were either current vapers (n = 29) or past vapers (n = 17) who originally participated in a vaping study conducted in 2019, and in the return to sample study in 2021. Reported vaping frequency, based on current or past habits, ranged from multiple times a day to a few times per week, with most participants saying they vaped multiple times per day (or did so, when they used to vape). Most participants said they generally vaped at home, with many indicating this was in part due to pandemic restrictions. Other common vaping locations included social settings or at a friend's house. A few participants who vaped throughout the day mentioned they kept their vaping device with them so they could vape whenever they felt the urge. Many said they used pod-based devices or vape pens, often with nicotine and in different flavours. Most said they usually vaped alone, but sometimes with friends or co-workers.

Smoking Habits. Participants included 32 current smokers and 8 former smokers. Among current smokers, reported smoking frequency ranged from a couple cigarettes every day to 20 cigarettes per day. Some participants who had reduced their smoking frequency credited vaping in helping them cut back. Many participants who smoke specified that they tended to smoke outside, either on breaks, at work, or at home. Most often, participants said they smoke alone; those who smoke with others tended to smoke with friends or co-workers who also smoke.

B. Transitions

Vaping and smoking transitions were a key area of interest for this qualitative research. In this section of the online exercise, participants were asked which transitions they had experienced in the previous 12 months and to describe what the transitions looked like. A total of 52 transitions from the past year were discussed. Note that some participants fell into multiple transition groups; these participants were asked questions related to each transition they experienced.

Transitions	Total	English	French
Started/resumed smoking (Net)	7	6	1
Started smoking for the first time	2	2	0
Resumed smoking (after a break)	5	4	1
Quit/tried to reduce smoking (Net)	23	16	7
Quit smoking (successfully)	5	4	1
Tried/trying to quit smoking	9	7	2
Tried/trying to reduce smoking (frequency or amount)	9	5	4
Quit/tried to reduce vaping (Net)	19	13	6
Stopped vaping (successfully)	3	1	2
Tried/trying to stop vaping	4	2	2
Tried/trying to reduce vaping (frequency or strength)	12	10	2
Resumed vaping (after a break)	3	3	0
No transitions	10	7	3

Started/Resumed Smoking

Seven participants either started smoking for the first time (n=2) or resumed smoking after a period of not smoking (n=5).

These participants were asked the reasons why they started or resumed smoking. Peer influence on smoking behaviour was a frequent theme among responses; examples of peer influence included spending time with friends or family who smoke, and wanting to fit in socially. Relapsed smokers referred to the difficulty of quitting smoking, where it was hard to resist the urge to smoke in general, but especially in social situations where cigarettes were immediately accessible and others were also smoking.

"After a break of not smoking for 3 months, I just had a kind of relapse, I was with friend, and he was smoking, and I just could not resist the urge to light up." - Male, 45+

"I think the temptation was the greatest because my son had moved back home, his clothes smelled like smoke when he came inside from just having a cigarette it brought back memories of me as a smoker." - Male, 45+

While specific life circumstances varied from person to person, it was apparent that feeling stressed or anxious played a role for many of the participants who started or resumed smoking. Some participants specifically mentioned stress due to the COVID-19 pandemic:

"I started working more. Socializing more. More active. Anxieties due to Covid." - Male, 18 to 29

"There was nothing in particular happening in my life at that time, I think it was just all of the pressure of dealing with everyday life, and the current pandemic situation." - Male, 45+

"We were well into the pandemic, lockdowns, people losing jobs, lack of pay for some of my friends. I was worried it could happen to me... then [I] lost my middle son ... so I think that pressure and starting a new job again weighed on me." - Male, 45+

"En ce moment je vis beaucoup de stress et incertitude pour l'avenir." - Female, 30 to 44

Other contributing factors for resuming smoking were ease of access and the influence of other smokers. Situations where participants could access cigarettes, without having to purchase them, often created the conditions for a gradual restart.

"I was out for a walk with a friend, and he was smoking, he offered me a smoke, and I just couldn't resist the urge." - Male, 45+

"My son always left his cigarettes and lighter next to an outside door, and it was easy just to take one and wait till he was out to go out myself with a coffee and light up." - Male, 45+

Other factors that respondents felt contributed to resuming smoking were boredom, cravings, habit, and the positive feelings associated with smoking.

"How easy it was to get cigarettes [from another smoker in the home] and how good it made me feel to smoke, always said I will only have one." - Male, 45+

These smokers could not think of any supports that could have helped them avoid resuming smoking. One individual mentioned that they would never join a support group, while another said they called a quitting helpline but that it didn't help. In line with this thinking, these smokers had limited insight into what they would or could have done differently, other than being stricter with themselves, including in following quitting programs.

I would have to find a way to clear my mind, and find a healthier replacement. » - Female, 30 to 44"

"Need to be very strict until you pass the craving stage." - Male, 18 to 29

"Follow the quit smoking program using Nicorette patches...but don't skip a step or thinking I will only do two or three weeks. Follow the six-week steps." - Male, 45+

Quit/tried to quit/reduced smoking

There were 23 participants who have either successfully quit smoking in the past year (n=5), or tried to quit (n=9) or reduced their smoking frequency or amount (n=9).

Motivation. It was clear that participants who comprise this group were aware of the negative health impacts of smoking, and this was often a driving factor in their decision to quit. Other motivators were cost savings, the bad smell associated with smoking, and pressure from family members.

"It is unhealthy. It is expensive. It smells bad. It is a waste of time." - Female, 30 to 44

"I wanted to quit smoking because I knew that it was having a bad effect on my health and I was learning so much negativity towards smoking. Also, I was coughing very much every morning and more warning signs that smoking really was having a bad effect on me." - Male, 45+

"Just tried to quit cigarettes cold turkey to save money, health reasons are secondary." - Male, 30 to 44

"I realize it is not good for you- my partner hates it." - Female, 45+

When asked to describe what was happening in their lives when they decided to quit or reduce smoking, participants pointed to a range of experiences. The responses suggested that the impetus for quitting was not necessarily a recent event (such as a personal health scare), but a slowly growing realization about the need to take action. For some, this realization was driven by having difficulty breathing during physical exercise, receiving a doctor's advice, or seeing the negative impacts of smoking on friends or family members. Some respondents suggested they were in a positive head space, were reflecting on how to improve their quality of life more broadly, or had the capacity to undertake such a difficult change.

"Nothing really, I'm just coming more to terms with my mortality and trying to delay the inevitable as much as possible." - Male, 30 to 44

"I was worried about my health, was thinking about it more because of COVID and realized I was getting out of breath when I exercised despite being fit. I felt worried." - Female, 18 to 29

"Job change, more time to smoke, needed to do something. I was feeling worried about smoking too much and getting older, time to quit or reduce the nasty habit." - Female, 45+

"I was at a time in my life, where I was trying to get a better perspective, and understanding of my health, and lifestyle habits, I was thinking of friends who were going through difficult times, due to their bad health. I was afraid of having to deal with the same issues." - Male, 45+

"I was excited, nervous, happy, hopeful, scared all emotions I felt when quitting. I can't remember anything specific happening in my life when I decided to quit it was just time." - Female, 30 to 44

Process. When asked to describe their course of action to quit smoking, the responses suggested participants were searching through multiple options, seeking to find one that will work for them. There was little indication that participants had a set plan in mind, including what to do when they encountered challenges or relapsed.

"Went to a smoking cessation course first, tried nicotine gum, did not work, doctor wanted to give prescription, did not want it, so tried vaping as it worked for other people." - Female, 45+

"I tried to reduce my smoking by vaping instead. I did try a patch but it only made me jumpy and I felt sick. I have been trying to quit but it is so hard. I will continue to try other methods like the iQos." - Female, 45+

Among this group of participants, vaping appeared to be a common tool to replace their cigarette consumption, while some purchased products like nicotine replacement gum and patches.

"Vaping substituted nicely." - Male, 45+

"I shifted to e-cigarettes - that helped a bit." - Male, 30 to 44

"I started the Nicorette patch 3 step program over 6 weeks, along with using a vaping device to sub for smoking was the way I dropped using cigarettes." - Male, 45+

There were references both to quitting 'cold turkey' and to slowly reducing their cigarette consumption. Other techniques involved avoiding situations where they might feel tempted, using other activities to distract themselves or simply not buying cigarettes any longer.

"I just quit cold turkey, started an exercise program, tried to keep my mind busy with other activities." -Male, 45+

"I just began to reduce my cigarette intake more and more each day." - Male, 45+

"First I reduced by 20% than 50% but slowly I went back." - Male, 18 to 29

"I stopped buying or delayed buying. I gave myself a limit and a schedule." - Female, 45+

"I tried not to put myself in a situation that I get tempted to smoke like party or unnecessary gatherings." - Male, 45+

Most responses described individual, self-driven actions toward quitting. However, a few indicated they relied on advice and help from others.

"I first went to the pharmacy and bought some nicotine replacement gum. Then I went online and read stories of how other people quit." - Female, 18 to 29

"Had lots of discussions with other smokers and doctor about quitting, lots of people recommending I quit." - Female, 45+

Improvements/benefits. Quitting or reducing smoking was noticeably beneficial for most participants in this group, who often found they could breathe easier, had better smelling breath, and just felt healthier overall.

"There were benefits and improvements, such as improving health, easier breathing, overall feeling healthier, stronger, and there were some financial benefits as well." - Male, 45+

"My energy levels increased the less I smoked." - Male, 30 to 44

Some felt like they saved money by reducing smoking, but this was not the case for everyone. Other participants felt like they simply reallocated their cigarette budget to other products, like vaping and nicotine replacement products, to help them cut down.

Challenges. The major challenges for many participants trying to quit were the disruption to their daily routine and the cravings that came along with this change.

"[Any challenges?] Disruption of routine, but now getting used to it." - Male, 45+

"The nicotine addiction is very real and powerful to break." - Male, 30 to 44

"[Any challenges?] Everyday. Was not motivated enough to stop." - Female, 18 to 29

"Yes, hard to guit I was craving for more." - Male, 18 to 29

Other challenges included the impact of stress and the pressure of social situations, both of which individuals associated with an increased desire to smoke. A few indicated that being at home (due to COVID-19) and having less exposure to tempting situations actually made it easier to stick to their goals.

"Challenging that my work friends still smoked and that I felt I lost this in common with them, sometimes the cravings got bad." - Female, 18 to 29

"I have always enjoyed having a cigarette and that is a roadblock for me. Having coffee also contributes to my wanting to smoke. I enjoyed having a cigarette along with my friend but it has stopped due to Covid and not being able to socialize." - Female, 45+

"Actually because of the COVID-19 protocols, it was somewhat easier to quit smoking, because I was spending most of my time at home, challenges arose when I was in contact with friends, or colleagues who smoked." - Male, 45+

A couple of participants mentioned experiencing the side effect of weight gain.

Advice for others. When asked if there was anything they would have done differently, or if they had any advice for others, there was a clear theme of regret among past smokers. The top suggestion for others was to try to

quit sooner or never begin smoking at all. Aside from never starting, including support from others, such as healthcare professionals, support groups, etc., in the plan to quit was a common piece of advice.

"I would definitely have done it sooner. My advice is don't start to begin with!" - Female, 18 to 29

"I think I would take the same approach as I did, it was working pretty well, and still is, I have reduced my smoking significantly. I would just advise others to try and make a program or routine that can work for you. One can look for ways to quit by doing online search for resources, or talk to your health providers."

- Male, 45+

"I probably should have asked my GP for smoking cessation medications." Male, 45+

Despite many participants indicating they used vaping or other nicotine replacements as part of their effort to quit, a couple specifically said they would not recommend this to others because they feel it simply involves replacing one bad habit with another.

"Looking back when I was completely off cigarettes I would have never started to vape. I tried to replace smoking with vaping which was a really bad choice." - Male, 45+

"Quit cold turkey. Going from one bad habit to another is not the solution. You can quit if you put your mind to it or with professional help." - Female, 45+

"I got a substitute for smoking, think I want a substitute for vaping." - Male, 45+

Quit/tried to stop/reduced vaping

There were 19 participants who have either successfully stopped vaping in the past year (n=3), or tried to stop (n=4) or at least reduce their vaping frequency or amount (n=12).

Motivation. Similar to those trying to quit smoking, those who quit or reduced vaping had a variety of reasons. While some of these participants initially started vaping to help them quit smoking, they did not want vaping itself to become a crutch or another stubborn bad habit.

"It came down to my health, and trying to set an example for my kids, and other family members." - Male, 45+

"Not good for me - felt like I was replacing one habit with another." - Female, 45+

"Trying to quit vaping as part of my New Years resolution, and at the same time cutting the expenses." - Male, 30 to 44

Often, as with smoking, the main deciding factors for quitting vaping revolved around health. Many participants in this group said they wanted to improve their overall health and decided to quit or reduce vaping as part of their general health and wellness goals. A few specifically mentioned the desire to reduce their nicotine intake.

"I was vaping too often and buying a lot more liquid ... I was starting to worry about becoming addicted to vaping and not knowing the long-term effects." - Female, 45+

"I was thinking about getting healthier overall, improving diet and fitness too, as well as mental health. It's part of an overall "wellness kick" I'm starting." - Female, 18 to 29

"I was just starting to realize that I was getting older, and my health was deteriorating. I wanted to regain my overall health." - Male, 45+

"I didn't want nicotine to impact my health." - Female, 18 to 29

For some of these participants, the motivation to quit came from external sources such as health care practitioners or peers with information about the negative impacts of vaping.

"I heard the story that someone died from vaping and that scared me. I wanted to stop primarily because of that." - Female, 18 to 29

"I saw my GP who advised me to quit or cut down on my vaping. I was thinking I should quit using nicotine products eventually, why shouldn't I give it a try now. I believe my mood was neutral and calm then." Male, 45+

Process. A common first step in the quitting process was to reduce nicotine levels by purchasing new vaping products with no nicotine, or lower concentrations of nicotine.

"I started out by switching out some of my nicotine pods for non-nicotine pods." - Female, 18 to 29

"I used a lower level of nicotine e-liquid." - Male, 45+

"I reduced the nicotine strength and purchased a smaller refill so it was easier to control how much I used per day." - Female, 45+

Others choose to stop vaping outright ("cold turkey").

"All my liquids and pods were finished, so I would have to buy more anyways and it was a challenge. I had to move online shopping and it was more of a hassle." - Female, 18 to 29

"I just quit cold turkey, started an exercise program, although quitting abruptly is difficult, I feel it worked better for me." - Male, 45+

Another common course of action was to substitute other activities to replace vaping or simply keeping the temptation away.

"I started drinking caffeine to substitute. It only worked for a bit because my marijuana habit was still out of control, so it didn't quell my desire to vape." - Female, 18 to 29

"I just kept the vape away from me." - Male, 45+

"I try to keep busy with other things and not think about smoking or vaping, this has helped a lot."

Benefits. Many participants in this group were unable to point to clear benefits from stopping or reducing vaping. For some, the benefits appeared to have been negated by the fact they resumed or continued smoking.

"No benefits whatsoever, except a bit of savings on liquid or refill purchases." - Female, 45+

"[Any benefits?] Not noticeable yet." - Male, 45+

"[Any benefits?] No, I had a hard time quitting. My mental health was not going well because of the pandemic." - Female, 18 to 29

"[Any benefits?] Not really because I smoked instead." - Female, 45+

Those who did feel benefits when they quit vaping described health improvements similar to reducing smoking, like easier breathing, more energy.

"I felt mentally clearer and more focused when I didn't use the nicotine pods. I felt like I was doing something good for my body. Got me thinking more positively overall." - Female, 18 to 29

"Yes, I noticed improvements like better breathing and improved stamina in physical activity." - Male, 45+

Challenges. The experience of quitting vaping was not uniform among participants. While some participants encountered challenges dealing with nicotine withdrawal and changes to their daily habits and routines, others seemed to have an easier time with it.

"I became irritable and anxious, put on some weight and some insomnia. I believed the ongoing COVID-19 pandemic has pressed a lot of stress on me." Male, 45+

"I had a hard time quitting because nicotine is addictive. So I had to try to reduce vaping, but then I would vape outside or my parents would know. I had to vape at opportune times. It was stressful." - Female, 18 to 29

"I did not really encounter any challenges, other than the occasional urge. I think the pandemic, kind of worked in a way that I was spending more time alone, and away from friends who engage in these activities." - Male, 45+

Advice for others. Those who reduced or quit vaping often said they would advise others to build support when quitting through programs or healthcare professionals. Some mentioned strategies that were personally effective for them, like gradually reducing nicotine or making routine changes to make it easier to avoid vaping.

There were varying opinions as to whether vaping was a helpful way to quit smoking or should be avoided for that purpose.

"I don't think I could have done anything differently, I think I was somewhat successful. Advice I would give to others, is try to get a program or routine that fits with your lifestyle." - Male, 45+

"Slowly reducing nicotine level works best." - Male, 45+

"I would have started vaping sooner and get rid of the cigarettes and then slowly decrease my use of vaping. It is hard but I have come to realize it is a bad habit and affects many things a person can do." - Female, 45+

"Do not start vaping if you want to quit smoking, it is just as addictive, find other resources to help you quit." - Female, 45+

Resumed vaping

There were three participants who resumed vaping after a period of time away from it. Two of the three participants chose to take up vaping again to reduce their cigarette smoking habits. The third was advised by a medical professional to resume vaping to address an (unspecified) medical issue.

"To cut back on cigarettes." - Male, 30 to 44

"I wasn't using my vape for travelling anymore, so decided to use it more consistently at home while teleworking. Also, I can safely use it indoors without the house smelling of smoke in the winter." - Female, 45+

"For medical reasons. I was scared and did not want to do it since I don't like smoking, but now because of its benefit, I am doing it now." - Female, 30 to 44

Among this small group of participants, spending more time at home, and wanting to save money prompted the return to vaping.

"I decided that if I was going to be home so much, I should try alternatives to cigarette smoking. I didn't want to smoke too often just because I could." - Female, 45+

"I just made the decision to try and quit and save money." - Male, 30 to 44

Participants in this group felt quite self-directed in their decision to resume vaping as a preferable alternative to smoking. As a result, they did not feel as though there were any supports that could have helped them avoid starting or resuming vaping.

"Resuming was only to stop from continually smoking cigarettes, so not really a support issue." - Female, 45+

"Nope, I'm the only factor that stops/starts me from doing it." - Male, 30 to 44

When describing if there was anything they would have done differently to avoid a vaping relapse, these participants did not have a detailed answer aside from using will power.

"Just keep going, will power, easier said than done." - Male, 30 to 44

Final comments

When asked if they had final comments about the transitions they had experienced in the past year, several comments were made about vaping. There were both positive and negative perceptions of vaping, but notably there were comments from two individuals who had or were trying to stop vaping that suggest their enjoyment of vaping flavours may have hampered their efforts.

"Quitting smoking cigarettes was the best thing I ever did. Vaping was the only successful method out of many I tried." - Male, 30 to 44

"Working from home and being alone have a great chance to vape. I get bored and I ended up vaping just for fun. If you are driving alone, it's nice to vape and smell the good flavor that I like." - Male, 30 to 44

"[Vaping] is super addictive and the flavours in vaping make it enjoyable and therefore hard to quit." - Female, 45+

"Vaping is NOTHING like smoking. I didn't find it enjoyable." - Female, 30 to 44

C. Factors influencing transitions

This section of the bulletin board exercise marked the start of Day 2, where participants were asked to dig deeper into their personal experiences and discuss the factors that may have influenced their shifts or transitions in vaping and smoking behaviour in further detail.

Fluidity of Behaviour

Feelings about smoking: Current and former smokers were asked to describe how smoking made them feel. Most often, they said smoking made them feel relaxed, calm, and peaceful. Often, these participants talked about smoking as a source of stress-relief and comfort.

"It usually makes me feel more relaxed to smoke. I feel alone with my thoughts and like I can just relax." - Female, 30 to 44

"I feel relaxed and pampered when I smoke. If I am anxious or depressed that is what I reach for comfort." - Female, 45+

"PEACEEEEEEEEEEFUL!!!! Especially now with all this madness that is going on. It relaxes me." - Female, 18 to 29

"It gives me immediate stress relief." - Female, 45+

Echoing the first day's discussion around motivations for smoking, some participants, often younger smokers aged 18-29, also mentioned a social element to smoking that makes them feel "cool" and accepted by their peers, or conversely, rebellious.

"Smoking makes me feel a bit 'cosmopolitan' and 'cool', which I know isn't true." - Female, 18 to 29

"When I used to smoke at first it made me fit into the crowd. All my friends were smokers so I decided to fit in or be part of the group. It made me feel cool and popular. When smoking I felt more calm and relaxed. It was like smoking was a great way to help me cope with matters in my life." - Male, 45+

"I like the aesthetic of smoking cigarettes. I like the act of smoking. It's kinda socially unacceptable to smoke nowadays and I like going against the grain." - Male, 30 to 44

Current and former smokers frequently discussed mixed feelings about smoking: on the one hand, they experienced good feelings and had specific motivations or reasons for smoking, but on the other hand, this enjoyment was countered by feelings of guilt and disgust.

"Feel the haze within my body. Knowing every puff was internal and was hazing within my body. A bit disgusting knowing all the chemicals going in my body. When I was younger, I felt strong and invincible thinking a little cigarette can't do much harm... I was so wrong." - Male, 45+

"It makes me feel a bit guilty, but it makes me feel an instant sense of relaxation, peace, and calm. Like I'm taking a break from the busy, stressful, everyday world and escaping into my own little oasis. I feel guilty afterwards though, because I know it's bad for my health. It's a love-hate relationship." - Female, 18 to 29

"Ashamed of smoking. Now it taste and smells very bad to me." - Male, 45+

"It makes me feel relieved, but also gross. I don't enjoy smoking." - Female, 18 to 29

"When I feel bored or anxious, I smoke. It is fun to smoke, but on the other hand, I feel guilty somehow." Male, 45+

Feelings about vaping: All study participants (all of whom are current or former vapers) were asked to describe how vaping made them feel. Most participants described vaping as an enjoyable experience and often talked about it as an adequate, if imperfect, substitute for cigarettes. For many vapers, vaping provided an experience similar to cigarettes, but with less guilt or worry about the negative consequences often associated with smoking.

"It makes me feel somewhat like getting an escape, a break." - Male, 45+

"Vaping really relaxes me. It's less harsh than smoking and makes me less anxious." - Female, 30 to 44

"I enjoy it, feels less dirty than cigarettes although I am aware of the risks. Vaping is fun, more convenient as you can get away with it in public spaces. Somewhat more socially acceptable." - Male, 18 to 29

"It meets the need without the feelings of guilt." - Male, 30 to 44

"It makes me feel as if I am in control of my life and my situation." - Female, 18 to 29

Some participants mentioned that vaping helped them to feel successful in quitting smoking.

"I enjoy vaping. Makes me feel good to have finally quit smoking." - Male, 45+

"When I used to vape, it made me feel really good. To be honest I felt better vaping then I did smoking. Vaping made me feel like smoking was nothing any more. I enjoyed it so much that I dropped the smoking habit all together. Vaping was my new normal and I loved it very much." - Male, 45+

"I have a feeling of smoking when I vape. It helps me to not have a cigarette." - Female, 45+

Others indicated vaping was not a perfect replacement for cigarettes.

"It kinda feels funny, artificial way of smoking. For me it doesn't replace the sensation or it doesn't mimic smoking." - Male, 30 to 44

"Not as good as a cigarette but so-so really, I would rather have an old fashioned cig. It's the feel of the smoke also inhaling is better in a cigarette." - Female, 30 to 44

"When I vape it feels good to get that short nicotine hit, but it would not last as long as smoking a cigarette. So to combat this I ended up switching to a higher level of nicotine content." - Male, 45+

Perceived similarities: Participants who had experience with both vaping and smoking were asked to compare the two habits, and generally found the two to be similar. Most often, these participants mentioned the presence of nicotine and other chemicals as a similarity between the two. This major similarity led some participants to see both as bad habits. Some participants mentioned that both products created smoke and others pointed out that both smoking and vaping involved a hand to mouth movement.

"Both satisfy my nicotine craving..." - Male, 45+

"They are both the same, not good for your health." - Female, 45+

"The similarities are that both have nicotine involved in them. Smoking delivers nicotine by burning tobacco and vaping delivers nicotine by heating a liquid. As we all know, nicotine is not good for your

health so they are both similar for being very unhealthy and can cause lung cancer and other life threating problems. By inhaling both many unhealthy chemicals are going into your body."

Perceived differences: Discussing differences between vaping and smoking, many participants found that vaping seemed cleaner and provided greater flexibility, though it was not quite as satisfying as smoking. While there appeared to be a consensus among participants about the harms of cigarette smoking, some participants seemed confident that vaping was a healthier and more socially acceptable option by comparison.

"...vaping tastes better and is less offensive to other people. Vaping is a pleasurable experience with a good flavour taste and no aftertaste. Smoking makes me cough and leaves a bad aftertaste in my mouth and is not a good experience." - Male, 45+

"Smoking is visually raw and full of chemicals. Smoking has proven and medically supported negative side effects. Now, vaping is visually healthier with the packaging, flavours, potencies and options. Even introducing weed. Feeling more controlled and safer." - Male, 45+

Another key difference participants mentioned was that vaping provided more flexibility and control than smoking cigarettes. With vaping, they could choose the amount of nicotine and the flavours, and they could vape indoors or outdoors.

"Vaping is better feeling because I get to pick the flavour and personalize my state of calmness The difference is the calmness and escape feeling is much more prominent when I smoke versus vape. But smoking leaves me feeling a lot more guilty. Vaping leaves me with a sort of calm energy, a reinvigorated feeling, whereas smoking makes me feel more out of it in a good, calming way." - Female, 45+

Despite these positive perceived benefits that were unique to vaping, some participants said that it was less satisfying than smoking. To these participants, vaping felt different both mentally and physically. They described nuances in the way smoking made them feel, and differences in the way vaping devices felt.

"I find smoking is a little more harsh, but it does take the edge off or help me forget about whatever is stressing me out. Vaping is less harsh (more smooth) than smoking, but doesn't really take the edge off. I feel more relaxed after vaping though." - Female, 30 to 44

"For me the difference seems to be that I get a quicker reaction from smoking a cigarette, it is a stronger feeling." - Male, 45+

Preferences: Participants were asked to explain which feeling they preferred and their rationale. Although some had difficulty choosing a favourite because they liked both vaping and smoking for their respective advantages, there seemed to be a slight preference for vaping because it was a more logical choice, based on perceptions that vaping was healthier or guilt-free.

"I prefer vaping because it is safer for your health than smoking. However, I am trying to quit vaping because I am scared of the health risk." - Female, 18 to 29

"I preferred the vaping feeling just because of the many flavours that I could try. While vaping I was taking in those wonderful flavours without really thinking about my health. The feeling that I disliked the most was the feeling the next morning after I smoked heavily the night before. The feeling of being sick and coughing up each morning was really bad." - Male, 45+

"I prefer I can have fun and do not feel guilty. I dislike the guilty feeling and worrying about health in the future." Male, 45+

A small number of participants said they preferred cigarettes over vaping; for these participants, cigarettes provided a unique feeling and experience that vaping didn't offer.

"I enjoy of the process of smoking. I feel satisfied when I smoke cigarettes. Also I like vaping but it doesn't feel or smell the same." - Female, 18 to 29

"The cigarette is lighter and can be held between 2 fingers. The vape needed to be held between my thumb and index finger. I prefer cigarettes." - Female, 30 to 44

Physical effects: Discussing the physical effects of smoking and vaping, many participants felt that both methods fulfilled their nicotine cravings and provided a sense of relaxation, though there were some differences in sensation.

"They both fulfill a craving but vaping feels more relaxing in a quicker way." - Female, 18 to 29

"When I began vaping I had really bad cravings. I was transitioning from smoking to vaping and I couldn't wait for that first puff in the morning. It would make me feel relaxed and put me in a great mood. As for the nicotine rush it was awesome." - Male, 45+

However, despite these similarities overall, many participants found they got a stronger and longer-lasting nicotine rush from cigarettes.

"I get more satisfaction from smoking, rush lasts longer than vaping, after a cigarette I do not crave for another one for a while. Vaping is a constant, I feel I need to vape way more often than when I smoke to get that satisfaction. Both mechanisms deliver nicotine to your body which is harmful." - Female, 45+

"Smoking provides an instant relaxing feeling, and the effects are from a high point to reduced over say an hour. While vaping tends to be in the moment. You get the nicotine rush at the point of vaping, but when you stop, so does the feeling or rush you get, so I tend to vape longer and more often." - Male, 45+

Although smoking provided a more intense rush, the majority of participants also experienced other effects like coughing, severe shortness of breath, and even lung pain which they did not experience when vaping.

"Smoking used to get me to cough, lay in bed gasping for air. Vaping I have a shortness of breath every once in a while, 90% more physically active once I switched from cigarettes to vaping. I still crave around the same amount of nicotine. The craving is easier to stand though." - Male, 18 to 29

"When I smoked I had the craving with me all the time. The first cigarette of the day was so enjoyable. After I coughed up and felt bad in the morning not long after I would be foolish enough to smoke again. That first one would make me feel relaxed and I loved the nicotine rush that came with it. I would then continue to smoke all day and night long feeling good about myself." - Male, 45+

"Some cough, sputum and smell in my mouth. Vaping doesn't affect me much physically. The good things for both include relaxation, killing the time and fun feelings." - Male, 45+

"Smoking is more aggressive. It makes me feel distressed. They both have similar effects, depends on how you are looking at it. There are lots of factors to consider. If I am in a stressful depressed mood I pull out my pen. Just chill out and relax." - Female, 18 to 29

"Smoking gives me a cough and make my lungs hurt. Vaping fulfills my nicotine craving." - Male, 45+

When asked to choose which physical reaction they preferred, most participants expressed a preference for the physical reaction associated with vaping because there were fewer negative side effects compared to cigarettes.

"I like the controlled reaction (mild coughing) from vaping more than the reactions from smoking cigarettes (heavy coughing and shortness of breath). Now that smoking cigarettes and vaping are both available, you can compare the effects of both. The control of vaping and no control of cigarettes is the factor that determines my choice of vaping over cigarettes." - Male, 45+

"I prefer the physical reaction from vaping. I can feel calmer and not smell like an ashtray and enjoy my process of de-stressing. They both end up making me tired because I eat less." - Female, 45+

"The physical reaction I preferred the most was that one of vaping. There was no better feeling than inhaling those flavourful ingredients and the relaxation that came with it." - Male, 45+

Although some participants preferred the physical reaction of vaping in general, the social context, location, and time of day played a role in the preferences of other participants. Vaping was often preferred during the daytime, indoors, and in any other settings where smoking would not be appropriate.

"It depends which situation I'm in. If I'm stressed out, I prefer to smoke to take the edge off. If I'm tired, I prefer to vape so I can go to sleep." - Female, 30 to 44

"I would never smoke in the house, so first thing in the morning in good or bad weather I was outside with a coffee and cigarette. So lots of work breaks during the day smoking, until the time I went to bed before having my last cigarette. While vaping I can do this in my home with no smell or bothering anyone else. I vape from the time I get up, during my work from home, or driving in my car to see my next customer. It just seems a modern way to be a smoker, but without smoke." - Male, 45+

"I smoke every day in day time or evening at home at my backyard, or sometimes at friends house. I vape once a week on Friday with friends in their home or my home in the backyard. I feel nice relaxing spending time with my friends and smoking or vaping." - Female, 18 to 29

"When I smoke a cigarette it can be any time of the day, any day of the week – the effect is always the same. I prefer to vape later in the day, it just feels better for me, I have always only vaped after 5 pm." - Male, 45+

"I smoke outdoors, in the middle of the school/work day (pre COVID) with friends (pre COVID). It's definitely cued by social context. I vape alone at home at any time in the day, usually in the morning when I need more energy and later in the afternoon when I start to get tired and crave nicotine." - Female, 18 to 29

"I feel like smoking is more of a late night or going out thing. Vaping feels like a more acceptable daytime activity." - Female, 18 to 29

To conclude the section on the fluidity of use behaviour, participants were asked to discuss any other important differences for them between smoking and vaping. Responses mainly reiterated points already discussed, often referring to a sense of improved personal health, control and peace of mind associated with vaping. Some also mentioned potential cost differences between cigarettes and vaping supplies.

"Vaping seems less unhealthy than smoking. But I find smoking more satisfying." - Female, 30 to 44

"I think it is the amount of control between the two. With vaping you can choose the flavour, ingredients and potency." - Male, 45+

"Vaping is less offensive to others. No second-hand smoke to affect my family." - Male, 45+

"Cost to purchase cigarettes compared to the cost of vaping supplies is the big difference, and I feel that the benefits of to your health is much better vaping than smoking cigarettes." - Male, 45+

Vaping Flavours

Flavour choice was an important aspect of the vaping experience for most participants. In line with the quantitative research, fruit flavours were most popular, followed by mint and vanilla. Most participants had tried several different flavours, especially when they were new to vaping, before landing on the flavours they preferred most. While some participants who were trying to quit smoking mentioned they like the tobacco flavour, very few preferred this flavour over others.

Thinking back to the transitions they've experienced, participants were asked to describe how vaping flavours factored into those changes. Participants across the different transition groups often expressed that the availability of flavours was not integral to their initial decision to quit smoking. That being said, these participants often acknowledged that vaping was not a perfect substitute for cigarettes, and since quitting smoking can be a difficult journey, vaping flavours could create a more enjoyable quitting experience for them. In fact, some participants viewed vaping as a treat or something to look forward to while they tried to quit smoking.

"The pleasant taste made it much easier to give up smoking." - Male, 45+

"I prefer to have a flavour when I would vape, it makes a big difference what it tastes like." - Female, 45+

"I did like the flavours, it made vaping more fun." - Male, 18 to 29

"The flavours of vaping did not play a major part in making it easier to reduce or quit vaping or smoking, the point of trying different flavours was to experience them. I guess you could say it was to enjoy, and experience the different varieties of flavours." - Male, 45+

However, some participants felt like the flavours were a double-edged sword that could make it harder to reduce or quit vaping.

"The only downfall is that because it tastes so good a person would want to vape more. Smoking does not really have a taste like vaping. It is really hard to quit one or the other." - Female, 45+

Participants were asked how it would impact them if their preferred vaping flavour became unavailable. Most participants felt that it was not a big deal because they could find another flavour they liked.

"There are many flavours I prefer. So if my preferred flavour is discontinued, there are other flavours I also prefer. Also, there are so many different flavours available and more every day." - Male, 45+

There were a handful of participants who had strong feelings to the contrary, suggesting that losing their favourite flavour could lead them to return to smoking instead. Those who exclusively used the tobacco flavour were most likely to be in this group.

"I am also super picky, so if I'm not able to get the flavour I want, I won't vape." - Female, 18 to 29

"If we remove the taste of tobacco I will be angry and stop vaping while continuing to smoke more cigarettes." - Male, 30 to 44

"If the tobacco flavor was no longer available I would probably stop vaping." - Male, 45+

"It actually has me angry. It has gone flavourless in my province, and there is no need for it. I'm going to vape the same amount, it's just tasteless. The flavour isn't what gets kids started. For many it's the need for an intense feeling that sets apart from boredom. BRING BACK THE FLAVOURS." - Male, 18 to 29

While some participants specified that removing the flavours would reduce the appeal of vaping, they had mixed feelings about this. On one hand, it was viewed negatively because it would make them less likely to use vaping as an alternative to smoking. In another light, it was sometimes noted as a potential positive because it would reduce the risk of vaping addiction.

"If there were no flavours I doubt I would have tried vaping to quit smoking." - Female, 30 to 44

"It would take away the only advantage over cigarettes in my eyes." - Female, 30 to 44

"I think that I wouldn't have become addicted to so many flavours if they weren't available. It would have had a major impact I think because it was the flavours that made me addicted to vaping. If the flavours were stopped being available I think that I would have quit vaping sooner then I did." - Male, 45+

Pandemic impact on smoking and vaping habits

The COVID-19 pandemic and related restrictions have undoubtedly altered the daily routines for many vapers and smokers. Participants in this study expressed mixed feelings about how the pandemic had affected (or had not affected) them, but they were more likely to report an increase in their vaping habits than in their smoking habits. About half of those who were already vaping or smoking said the pandemic made them vape more. Fewer participants said they started smoking more during the pandemic.

Those trying to quit or reduce vaping sometimes encountered difficulties during the pandemic, often increasing their vaping instead.

"Simply increased the amount of vaping in the past few months when you can vape anytime anywhere in your house. Boredom and anxiety also increases the need to vape." - Female, 45+

While being home presented increased opportunity to vape for some, others found that their household situation during the pandemic made them vape less.

"I smoke and vape less and I have been at home and my husband has been at home working due to Covid. I do not like to smoke or vape around him." - Female, 45+

While the impact on vaping was quite mixed among participants, the pandemic generally led smokers to reduce their smoking frequency, particularly among those who smoke socially. For these smokers, being away from their usual smoking cues made it easier to smoke less during pandemic restrictions.

"There may have been some correlation based on my work atmosphere - I work from home now instead of the office." - Male, 30 to 44

"Lack of social context to smoke in, then increased stress led to more vaping, and me thinking more about my health in general and how important my health is has prompted me to quit smoking and try and reduce my vaping." - Female, 18 to 29

While reduced smoking was most common among participants who smoke or used to smoke, this experience was not completely universal. In at least one instance, pandemic circumstances led to resumed smoking.

"Yes it [the pandemic] caused more anxiety. I changed cities and jobs so new social circles." - Male, 18 to 29

Although the pandemic conditions have affected the frequency of smoking or vaping for some, other participants felt that the pandemic did not largely change their habits or cause them to reconsider decisions they made before the pandemic.

"I was smoking long before the pandemic so nothing changed my habits or patterns." - Male, 30 to 44

"No the pandemic really didn't contribute in any way. I was going to quit either way." - Male, 45+

D. Feedback from participants

Many participants did not have any specific thoughts to share about completing the exercise, but the ones who did generally found it to be a positive experience. After completing multiple waves of the quantitative study before joining the online qualitative exercise, a couple participants found it repetitive.

"I think that this kind of study is awesome. It gets many different opinions of people's behaviour towards smoking and vaping. I think that the survey did a great job of asking questions and I really enjoyed taking part in it. This can be a sensitive topic to some but making awareness to people and gathering people's thoughts are a great way to educate everyone about this topic. This survey did an excellent job of asking questions and gathering information." - Male, 45+

"The survey was easy to follow and complete. Some questions became a bit repetitive in my case, but overall fine." - Female, 45+

Some participants felt that completing this exercise has helped them with self-reflection along their journey.

"There have been a lot of changes between 2019 to now. I guess I have come a long way." - Female, 45+

Participants were also asked to suggest other questions that could be relevant to better understanding vaping, smoking, and the transitions between the two. In general, most participants felt the questions they saw comprehensively covered the topics of interest.

"I think the survey asked a lot of well-rounded and thought-provoking questions." - Female, 18 to 29

"I think it did an excellent job of covering everything you need to know about smoking and vaping." - Male, 45+

Some participants offered suggestions on areas where a deeper look could prove useful:

- The social components of smoking and vaping.
- The role of mental health in individuals who vape.
- The style of vaping devices, cost and affordability of nicotine alternatives.
- Barriers to quitting or reducing smoking and vaping.
- Resources and information for quitting smoking and vaping.

Overall, participants felt good about participating in this research and were hopeful that their experiences will be useful.

"Just hoping it gets used in a reasonable, progressive way." - Male, 18 to 29

"I'm cool with info gathering - I think it serves a worthwhile cause." - Male, 30 to 44

Appendix A: Final Vaping and Smoking Dispositions

The respondents were mapped according to their vaping and smoking status across all three waves of the study. This mapping results in 48 possible dispositions outlined in the table below. Note that this table shows results only for 2021 respondents (n = 337).

Table 44: Transitions in Vaping and Smoking Status 2019 to 2021*

Feb/Jun 2019	Mar 2020	Mar 2021	Final Disposition 2021		
		Dual use	1. Status quo (22%)		
	- (000()	Vaper only	2. Quit smoking (1%)		
	Dual use (30%)	Smoker only	3. Quit vaping (6%)		
		Neither	4. Quit smoking & vaping (1%)		
		Dual use	5. Relapsed smoker (1%)		
	1 (40()	Vaper only	6. Status quo (2%)		
	Vaper only (4%)	Smoker only	7. Relapsed smoker, quit vaping (<1%)		
D -1 (F20/)		Neither	8. Quit vaping (<1%)		
Dual use (53%)		Dual use	9. Relapsed vaper (6%)		
	Consolitor and (140/)	Vaper only	10. Quit smoking (<1%)		
	Smoker only (14%)	Smoker only	11. Status quo (6%)		
		Neither	12. Quit smoking (1%)		
		Dual use	13. Relapsed smoker & vaper (1%)		
	Noithor (EO/)	Vaper only	14. Relapsed vaper (<1%)		
	Neither (5%)	Smoker only	15. Relapsed smoker (1%)		
		Neither	16. Status quo (1%)		
		Dual use	17. Status quo (1%)		
	Dual uso (20/)	Vaper only	18. Quit smoking (again) (1%)		
	Dual use (3%)	Smoker only	19. Quit vaping (<1%)		
		Neither	20. Quit smoking (again) & vaping (<1%)		
		Dual use	21. Relapsed smoker (1%)		
	Vaper only (11%)	Vaper only	22. Status quo (7%)		
	vaper only (11%)	Smoker only	23. Relapsed smoker & quit vaping (<1%)		
Vaper only/former		Neither	24. Quit vaping (2%)		
smoker (23%)		Dual use	25. Relapsed vaper (<1%)		
	Smoker only (2%)	Vaper only	26. Quit smoking, relapsed vaper (0%)		
	Silloker offity (270)	Smoker only	27. Status quo (1%)		
		Neither	28. Quit smoking (again) & vaping (<1%)		
		Dual use	29. Relapsed smoker & vaper (<1%)		
	Neither (7%)	Vaper only	30. Relapsed vaper (<1%)		
	Neither (770)	Smoker only	31. Relapsed smoker (<1%)		
		Neither	32. Status quo (6%)		
		Dual use	33. Status quo (3%)		
	Dual use (5%)	Vaper only	34. Quit smoking (0%)		
	Dual use (570)	Smoker only	35. Quit vaping (1%)		
Vaper only/never		Neither	36. Quit smoking & vaping (<1%)		
smoker (24%)		Dual use	37. New smoker (<1%)		
	Vaper only (5%)	Vaper only	38. Status quo (2%)		
	vaper only (3/0)	Smoker only	39. New smoker (1%)		
		Neither	40. Quit vaping (1%)		

Sn	moker only (1%)	Vaper only Smoker only	41. Relapsed vaper (<1%) 42. Quit smoking, relapsed vaper (0%) 43. Status quo (1%) 44. Quit smoking (<1%)
Ne	either (13%)	Vaper only Smoker only	45. New smoker, relapsed vaper (0%) 46. Relapsed vaper (3%) 47. New smoker (1%) 48. Status quo (10%)

Base: All respondents

Appendix B: Methodology

The results of this research are based on a quantitative Return to Sample (RTS) online survey conducted with Canadians aged 15 and older who initially participated in either the February or June 2019 wave of the Health Canada Vapers Panel online survey, and subsequently in the 2020 RTS survey as well.

Invitations were sent to those who completed the earlier surveys to participate in the 2021 follow-up. All of those invited were 15 years of age or older at the time of the 2019 survey and were identified as **Regular Vapers.**—those who vaped at least once a week for the past four weeks in 2019. Invitations were sent to 2,000 panel members and completed by 337 (a participation rate of 17%). The survey was conducted between **March 8 and March 25, 2021**. This means that this survey was fielded while most parts of Canada were under shutdown due to the COVID-19 pandemic. There is some evidence that the pandemic may have contributed to the vaping and tobacco attitudes and behaviours identified in this survey (e.g., mentions of increased stress due to COVID-19), but the extent of this impact cannot be conclusively determined.

No quotas were used in this research to allow every potential participant to respond. Weighting was used to match respondents in each wave to the 2017 Canadian Tobacco Alcohol and Drugs (CTADS) study in terms of region, gender and age (15-19, 20-24, 25+) to maintain consistency. This approach allows for a longitudinal analysis of the same respondents from 2019 and 2020 in order to track changes in their behaviour over that time.

The original sample sources (and, therefore, the 2021 sample) was drawn from among panels of individuals who have agreed to participate in online surveys. Because the sample is based on those who initially self-selected for participation in the panel, no estimates of sampling error can be calculated, and the results cannot be described as statistically projectable to the target population.

Target population and sample design

The sample for this project was respondents to two initial waves of the Health Canada Vapers Panel conducted in 2019:

- Wave 1 February 2019 (POR 083-18): An online survey with 2,027 Canadians 15 years of age or older identified as Regular Vapers. Quota targets used 2015 CTADS estimates for Regular Vapers in terms of age, gender and region.
- Wave 2 June 2019 (POR 141-18): An online survey with 2,043 Canadians 15 years of age or older identified as Regular Vapers. Quota targets used 2017 CTADS estimates for Regular Vapers in terms of age, gender and region.

All respondents from Wave 1 and Wave 2 were invited to Wave 4, even if they did not participate in Wave 3. Results for Wave 3 are shown below for information purposes:

Wave 3 – March 2020 (POR 098-19): An online return-to-sample survey with 997 Canadians who initially
participated in Wave 1 or Wave 2. No quotas were set, to allow every potential participant to respond.

Each respondent is classified as either a Regular Vaper (vaped at least once a week for the past four weeks) or a Non-Vaper. Respondents are also grouped into one of three segments per their smoking status: Current Smokers (daily or occasional smokers), Former Smokers (not currently smoking, but have smoked 100 cigarettes over their lifetime) and Never Smokers (have never smoked a whole cigarette, or are not currently smoking and have not smoked 100 cigarettes over their lifetime). Respondents who are both Regular Vapers and Current Smokers are classified as Dual Users. The age groups presented in the report are defined as follows: youth

vapers (15-19 years old), young adult vapers (20-24 years old) and adult vapers (25+ years old or split between 25-44 and 45+).

Survey respondents to the original 2019 surveys and 2020 RTS survey were drawn from the *Asking Canadians* panel and was made up of individuals who had agreed to participate in online surveys. To allow for the inclusion of youth under 18 years of age, invitations were sent to panellists who were parents of children aged 15-17 and asked to provide consent for their child's participation before having their child complete the survey (the same approach to obtaining parental consent was used in 2020 and 2021 when re-contacting respondents, even though some of the participants are now 18 or older and thus no longer technically require parental consent). Respondents who participated in the 2019 studies were invited, whether or not they had participated in the 2020 RTS survey. Due to member attrition in the online panel, only 2,000 of the original respondents were available to contact for the 2021 study. Out of the 2,000 invitations deployed to previous respondents, a total of 337 respondents responded to the 2021 invitation and completed the survey.

As the aim of this project was to gather longitudinal responses from those who originally completed a survey in 2019, no quotas were used in order to allow all potential respondents to provide input. The 337 respondents to the 2021 survey were then weighted to match the latest CTADS estimates of Regular Vapers in Canada (2017) in terms of age, region and gender. This approach corrects for divergent response rates among demographic groups by ensuring the weighted results have the same demographic characteristics as previous waves.

The table below compares the demographic make up of the three waves of study. Comparing these proportions demonstrates the demographic differences between the group who were invited to participate and those who completed the survey. There are only minor differences in terms of region and gender, but those in the younger age groups were less likely to respond in 2020 and in 2021 than those in the older groups. **Note that age is based on original age in the 2019 study, so shifts over time are NOT due to respondents aging.** Youth made up 14.1% of 2019 respondents but only 9.5% of the 2020 RTS sample and 8.3% of the 2021 RTS sample. Similarly, young adults made up 17.2% of the 2019 respondents, 6.9% of the RTS sample, and 2.7% of the 2021 RTS sample. This is a typical pattern with RTS projects. Over time, some respondents lose interest and decline to respond to the RTS invitations, but other respondents stop participating in the survey panel entirely and cannot be contacted to be invited.

Table 43: Unweighted Response From Total 2019 Sample, 2020 RTS, and 2021 RTS

Demographic group	Unweighted 2019 Invited Respondents (n=4,018)	Unweighted 2020 Respondents (n=992)	Unweighted 2021 Sample (n=337)	Weighted 2021 Sample (n=337)
Province				
Atlantic	10.0%	9.1%	9.8%	9.7%
Quebec	24.7%	23.9%	27.3%	27.4%
Ontario	27.4%	29.1%	20.5%	20.4%
Manitoba/Saskatchewan	9.9%	8.9%	6.8%	10.2%
AB	10.1%	10.3%	11.0%	7.6%
BC	17.9%	18.8%	24.6%	24.7%
Age group (Age in 2019)				
15-19	14.1%	9.5%	8.3%	24.9%
20-24	17.2%	6.9%	2.7%	5.6%
25-44	35.9%	40.6%	32.3%	25.2%
45+	32.8%	43.0%	56.7%	44.3%
Gender				
Woman/girl	43.4%	41.7%	38.0%	39.8%
Man/boy	56.4%	58.3%	62.0%	60.2%

Other	0.20/	0.00/	0.00/	0.00/
Other	0.2%	0.0%	0.0%	0.0%

Weighting is used to account for these demographic differences by weighting up the groups which are underrepresented so that the weighted totals match the 2017 CTADS targets for Regular Vapers. The table below provides the educational and income distribution of the complete 2019 data set (to whom invitations were sent), the 2020 RTS sample, and the 2021 RTS sample.

While broadly similar, those who responded to the 2021 survey are less likely to have an education below high school, and are less likely to belong to the lowest household income level (under \$20,000 a year). Since these questions were asked of respondents at each wave, upward movement in education and income are expected, since many respondents were youth or young adults at the outset of the study in 2019.

Table 44: Socioeconomic Variable Comparison - Total 2019 Sample, 2020 RTS, 2021 RTS

rable 44. Socioeconomic variable companson		,	
Demographic group	Weighted 2019 Respondents (n=4,018)	Weighted 2020 Respondents (n=992)	Weighted 2021 Respondents (n=337)
Education			
Some high school or less	10%	7%	3%
High School diploma or equivalent	24%	19%	23%
Registered Apprenticeship or other trades certificate/ diploma	8%	8%	5%
College, CEGEP/other non-university certificate or diploma	25%	26%	31%
University certificate or diploma below bachelor's level	7%	6%	5%
Bachelor's degree	18%	25%	24%
Post graduate degree above bachelor's level	7%	8%	8%
Prefer not to say	1%	1%	1%
Income			
Under \$20,000	11%	7%	5%
\$20,000 to just under \$40,000	18%	17%	13%
\$40,000 to just under \$60,000	17%	18%	18%
\$60,000 to just under \$80,000	17%	17%	21%
\$80,000 to just under \$100,000	12%	14%	12%
\$100,000 to just under \$150,000	14%	16%	15%
\$150,000 and above	6%	7%	10%
Not sure/Prefer not to say	5%	5%	5%

Questionnaire design

Environics worked with Health Canada to develop a questionnaire that ensured the research objectives were met and all questions were appropriately worded. Upon approval from Health Canada, the questionnaire was translated into French.

In consultation with Health Canada, Environics developed a draft questionnaire which included both questions that were asked in the February and/or June 2019 wave of research, the 2020 wave, and questions new to the 2021 survey. The questionnaire was designed to meet all of the research objectives set out for this project and adhere to Federal Government standards for public opinion research. The final questionnaire is included as Appendix B.

Prior to finalizing the survey for field, a pre-test (soft launch) was conducted in English (45 completed) and French (7 completed). The pre-test assessed the questionnaires in terms of question wording and sequencing, respondent sensitivity to specific questions and to the survey overall, and to determine the survey length;

standard Government of Canada pre-testing questions were also asked. No changes which affected the integrity of the pre-test interviews were made so they were all kept as part of the final sample.

Fieldwork

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).

All respondents were offered the opportunity to complete the surveys in their official language of choice. All research work was conducted in accordance with the Standards for the Conduct of Government of Canada Public Opinion Research — Online Surveys as well as applicable federal legislation (Personal Information Protection and Electronic Documents Act, or PIPEDA). All survey respondents were informed of the Health 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.

Completion results

Survey respondents took 7.5 minutes on average to complete the survey. The completion results are presented in the table below:

Table 45: Contact Disposition

	Total email addresses used	2,000
Invalid cases		0
0	invitations mistakenly sent to people who did not qualify for the study	0
0	incomplete or missing email addresses	0
Unreso	olved (U)	1,645
0	email invitations bounce back	0
0	email invitations unanswered	1,645
In-scope non-responding units (IS)		18
0	non-response from eligible respondents	0
0	respondent refusals	0
0	language problem	0
0	selected respondent not available (illness; leave of absence; vacation; other)	0
0	early break-offs (started, but did not finish the survey)	18
Respo	nding units (R)	337
0	completed surveys disqualified – quota filled	0
0	completed surveys disqualified for other reasons	0
0	completed surveys	337
	Participation rate = R ÷ (U + IS + R)	16.9%

Qualitative research

The second phase of the project involved a qualitative online community exercise. The target population audience for the online community consisted of respondents from the 2021 online survey; at the end of the survey, respondents were asked if they wished to opt into the qualitative exercise. These respondents were subsequently invited to the qualitative online community by email.

The online community used the Recollective online bulletin board platform (programmed and hosted in Canada). This platform generated an asynchronous threaded discussion that developed as participants completed the exercises assigned to them. The discussion guide for this research was developed by Environics, in consultation with Health Canada; participants were asked relevant questions based on their past and current vaping and smoking behaviour, with a particular focus on transitions (i.e., quitting and relapsing). Separate English and French communities were run concurrently.

A total of 46 participants (31 English and 15 French) completed the qualitative exercise over a total window of three days, from April 28 to April 30, 2021. The activity was designed to be completed over two days, with an extra day included as a buffer for participants who needed more time to finish their responses. The online community was moderated to ensure participants were responsive and civil in the activities, and to assist with participants who encountered difficulty in the platform.

Participants in the online community exercise were informed of the purpose of the exercise, the time commitment and incentive, and provided with guidance on how to protect their privacy. The methodology avoided attrition by minimizing the time lag between recruitment and the beginning of the qualitative exercise; survey participants who opted into the qualitative exercise were also sent a reminder the day before the exercise began. Each participant who completed the qualitative exercise was given an honorarium of \$150 as a thank you for their time.

The participant profile is outlined below:

Participant Demographics	English (n=31)	French (n=15)
Age		
18-29	10	3
30-44	8	7
45+	13	5
Gender		
Male	15	7
Female	16	8
Transitions		
Quit/tried to reduce vaping	12	5
Quit/tried to reduce smoking	16	7
Resumed vaping	3	0
Started/resumed smoking	6	1
Smoking		
Non-smokers	31	14
Current/previous smoker	28	12

This research was qualitative in nature, not quantitative. As such, the results provide an indication of participants' views about the issues explored, but they cannot be generalized to the full population of members of the general public or members of the targeted audience segments.

Appendix C: Quantitative Research Instrument

Environics Research March 8, 2021

Health Canada Spring 2021 Regular Vapers Panel Survey Questionnaire – FOR PRE-TESTING Return-to-sample (RTS) from 2019 and 2020 surveys; 100% qualification

LANDING PAGE

Please select your preferred language for completing the survey.

01 – English 02 – French

Background information

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

In 2019, you gave permission for your 15, 16 or 17-year old teenager to participate in an important survey for Health Canada about vaping [2020 RESPONDENTS ONLY:], and again in March/April 2020. 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.

If you agree to allow your teen 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

Page Break

ALL RESPONDENTS

In 2019 [2020 RESPONDENTS ONLY:] and again in March/April 2020, 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 in 2019 [2020 RESPONDENTS ONLY:] and again in March/April 2020, 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.

Vaping status

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

[2020 Q1]

- Which of the following have you done in the past 30 days?
 SELECT ALL THAT APPLY
 - 01 I have not vaped in the past 30 days EXCLUSIVE
 - 02 I have vaped liquids WITHOUT nicotine
 - 03 I have vaped liquids WITH nicotine
 - 04 I have vaped, but I'm not sure if my vape liquids contain nicotine or not
 - 05 I have vaped liquids containing cannabis/marijuana/THC/CBD

[2020 Q2]

- 2. [IF Q1=02-04] Have you used a vaping product at least once a week for the past four weeks?
 - 01 Yes
 - 02 No
 - 99 Not Sure

REGULAR VAPER: Q1=02-04 AND Q2=01 NON-REGULAR VAPER: EVERYONE ELSE

[NEW SCREEN]

NOTE: The remainder of the questions in this survey refer only to vape liquids with/without nicotine and not cannabis/marijuana/THC.

Vaping use

ASK Q3-17 IF (STILL) REGULAR VAPER. IF NON-REGULAR VAPER, SKIP TO Q18

[2020 Q3]

- 3. [IF Q1=03] Which of the following best describes how often you vaped liquids WITH NICOTINE in the past 30 days?
 - 01 I vaped them every day
 - 02 I vaped them at least once a week, but not daily
 - 06 I vaped them less than weekly, but at least once in the past 30 days

SHOW IF SELECT CODE 2: How often did you vape liquids WITH NICOTINE?

03 – A couple times a week

04 - Weekends only

05 - Other (SPECIFY)

[2020 Q4]

- 4. [IF Q1=02] Which of the following best describes how often you vaped liquids WITHOUT NICOTINE in the past 30 days?
 - 01 I vaped them every day
 - 02 I vaped them at least once a week, but not daily
 - 06 I vaped them less than weekly, but at least once in the past 30 days

SHOW IF SELECT CODE 2: How often did you vape liquids WITHOUT NICOTINE?

03 – A couple times a week

04 – Weekends only

05 - Other (SPECIFY)

[2020 Q5]

- 5. [IF Q1=04] Which of the following best describes how often you vaped liquids you weren't sure contained nicotine or not in the past 30 days?
 - 01 I use them every day
 - 02 I use them at least once a week, but not daily
 - 06 I vaped them less than weekly, but at least once in the past 30 days

SHOW IF SELECT CODE 2: How often did you vape liquids you weren't sure contained nicotine or not?

03 – A couple times a week

04 - Weekends only

05 - Other (SPECIFY)

DAILY USER: ANY CODE 1 AT Q3-Q5

NON-DAILY USER: NOT DAILY USER (No Code 1 at Q3-Q5)

USED NICOTINE ONLY PAST 30 DAYS: Q1=03 AND Q1 <> 2

USED NON-NICOTINE ONLY PAST 30 DAYS: Q1=02 AND Q1 <> 3

USED BOTH PAST 30 DAYS: Q1=02 AND 03

6. MOVED TO AFTER 9c

7. Question deleted

9. Question deleted

[2020 Q9a]

9a. What brand(s) of vaping device do you currently use?

77 – [Open-ended response]

99 - Not sure SKIP TO Q6NEW

9b. Question deleted

9c. Question deleted

[2020 Q6new]

6NEW. [ASK ONLY IF Q9a=99] Which of the following images best represents the vaping device you are currently using?

SELECT ALL THAT APPLY

RANDOMIZE LIST/IMAGES

1. - Disposable (not refillable or rechargeable) vaping device (e.g. cig-a-like)



2. - Vaping device with a tank that you fill with liquid (e.g. mods)



3. - Vaping device with replaceable pre-filled cartridges or pods



- 97 Another type of device not shown here [ANCHOR]
- 99 Not sure [ANCHOR AT BOTTOM, SINGLE PUNCH]

SKIP TO Q12 IF USED NON-NICOTINE ONLY PAST 30 DAYS: Q1=02 AND Q1 <> 3

[2020 Q10]

VAPED NICOTINE IN PAST 30 DAYS

10. How much nicotine do the e-cigarettes, cartridges, pods or e-liquids you currently use contain? You can choose to report the % or mg/ml. If you use different concentrations of nicotine, please select the one used most frequently.

Percentage

- 01 None (0%)
- 02 Less than 2%
- 03 2% to 4.9%
- 04 5% or more

mg/ml

- 05 None (0 mg/ml nicotine)
- 06 Less than 10 mg/ml
- 07 10-19 mg/ml
- 08 20-29 mg/ml
- $09 30 39 \,\text{mg/ml}$
- 10 40 mg/ml or more
- 88 Prefer not to answer
- 99 Not sure
- 11. Question deleted
- 11a. Question deleted
- 11b. Question deleted

[2020 Q12]

12. What is your preferred flavour to vape?

SELECT ONE ONLY

RANDOMIZE LIST

- 01 Fruit
- 02 Candy/confectionary
- 03 Candy floss
- 04 Coffee/tea
- 05 Dessert
- 06 Mint/menthol
- 07 Energy drinks
- 09 Cereal
- 09 Cookies
- 10 Tobacco flavour
- 11 Cannabis/marijuana flavour (simply a flavour, not containing THC or CBD)
- 12 Alcohol flavour
- 13 Soft drink flavour
- 14 Flavourless/no flavour in descriptor
- 15 Floral/herbal
- 97 Other [SPECIFY] [ANCHOR]
- 99 Not sure [ANCHOR AT BOTTOM, SINGLE PUNCH]

[FEB 2019 Q19]

12bc. From where do you usually get your vaping devices and liquids?

SELECT ALL THAT APPLY

	Vaping devices (Q12b)	Vaping liquids (Q12c)
I buy it myself at a vape shop (in person, not online)	01	01
I buy it myself at a convenience store	02	02
I buy it myself at other retail stores	03	03
I buy it myself online	04	04
l buy it from a friend	05	05
I buy it from someone else	06	06
l ask someone to buy it for me	07	07

A family member gives/lends it to me	08	08
A friend gives/lends it to me	09	09
Someone else gives/lends it to me	10	10
Other (SPECIFY)	97	97
Not sure	99	99

Page Break

[2020 Q12a]

12a. How much do you spend i pods or e-liquids? ENTER	n a typical month on vaping devices (including each of its components) and c
•	
On devices \$ per	month [RANGE \$0-\$700]
· ·	999 - I don't know
On pods or e-liquids \$	per month [RANGE \$0-\$250]
	999 - I don't know

[2020 Q13]

13. Are you currently trying, or have you previously tried...?

GRID - SHOW IN ORDER

		Currently trying (01)	Previously tried (but not currently) (02)	Never tried (03)	Not sure (99)
a.	To stop vaping				
b.	To reduce your				
frequency	of vaping				

[2020 Q14]

TRYING TO QUIT VAPING

- 14. [IF Q13a=01] How serious is your current attempt to stop vaping?
 - 01 Very serious
 - 02 Somewhat serious
 - 03 Not very serious
 - 04 Not at all serious
 - 99 Not sure

[2020 Q15]

TRYING TO QUIT VAPING

- 15. [IF Q13a=01] Which of the following, if any, are you using to help you stop vaping? SELECT ALL THAT APPLY
 - 03 Nicotine patch
 - 04 Nicotine gum or candy
 - 05 Medication (e.g. Zyban, Champix)
 - 06 Other nicotine replacement therapy products
 - 07 Counselling
 - 08 Acupuncture
 - 09 Hypnosis

- 10 Self-help books
- 11 Quit-line
- 12 Cannabis
- 97 Other (SPECIFY)
- 98 Nothing
- 99 Not sure

[2020 Q16]

NOT CURRENTLY TRYING TO QUIT VAPING

- 16. [IF Q13a=02-03,99] Do you plan to stop vaping....?
 - 01 Yes, in the next month
 - 02 Yes, in the next 6 months
 - 03 Yes, in the next year
 - 04 Yes, more than a year from now
 - 05 Yes, I plan to stop vaping but I don't know when
 - 06 No, I do not plan to stop vaping
 - 99 Not sure

[2020 Q17]

NOT CURRENTLY TRYING OR PLANNING TO STOP VAPING

- 17. [IF Q13a>01 AND Q16=06] You indicate that you do not plan to stop vaping. What are the main reasons why you plan to **continue vaping**?
 - 77 [Open-ended response]
- 99 Not sure

Vaping harm perceptions

ASK ALL

[2020 Q18]

18. In your opinion, how harmful, if at all, do you think each of the following are to the health of the person using them?

SHOW ONE AT A TIME (CAROUSEL) – RANDOMIZE ORDER

	Very	Somewhat	Not very	Not at all	Don't know
	harmful (4)	harmful (3)	harmful (2)	harmful	(99)
				(1)	
a. Vaping					
products <u>WITH</u> nicotine					
b. Vaping					
products WITHOUT nicotine					
c. Cigarettes					

Page Break

Smoking status

ASK ALL UNLESS SMOKETYPE = 1,2 OR DUAL2020 = 1,2 THEN ASSUME Q19 = 1

[2020 Q19]

- 19. Have you ever smoked a whole cigarette?
 - 01 Yes
 - 02 No

99 - Don't know/prefer not to say

ASK ALL

[2020 Q20]

- 20. [IF Q19=01,99] 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

[2020 Q21]

- 21. [IF Q19=01,99] Have you smoked at least 100 cigarettes in your life?
 - 01 Yes
 - 02 No
 - 99 Don't know/prefer not to say

Page Break

FOR PROGRAMMING - GROUP DEFINITIONS

Current Smokers:

Daily/occasional - [If Q20=01-03] AND [Q21 = 01] Experimental - [If Q20=01-03] AND Q21 = 02 or 99]

REGULAR VAPER: Q1=02-04 AND Q2=01

For 2021 data, create following categories in variable called 2021SMOKETYPE based on current behaviour in 2021 survey:

- 1. Dual = Current Smoker (daily/occasional or experimental) AND Regular Vaper (Q1=02-04 and Q2=01)
- 2. Smoker only = Current Smoker (daily/occasional or experimental) AND NOT Regular Vaper (Q1=02-04 and Q2=01)
- 3. Vaper only = Regular Vaper (Q1=02-04 and Q2=01) AND NOT CURRENT SMOKER
- 4. **Neither** = NOT REGULAR VAPER, NOT CURRENT SMOKER

See below for logic to define the following groups:

NEW SMOKER

RELAPSED SMOKER

FORMER SMOKER

QUIT SMOKING

NEVER SMOKER

QUIT VAPING

RESPONDENTS WHO COMPLETED 2019 AND 2020

For respondents who completed survey in 2019 and 2020, refer to these variables in past data:

2019 = SMOKETYPE (01=Dual user, 02=Former smoker, 03=Never smoker)

2020 = DUAL2020 (01=Dual, 02=Smoker only, 03=Vaper only, 4=Neither)

	(2019 SMOKETYPE = 3) AND (2020 DUAL2020 = 3 OR 4) AND	
2019 AND 2020	(2004 CURRENT CAACKER)	New smoker in 2021.

2019 AND 2020	RELAPSED SMOKER	(2019 SMOKETYPE = 1 OR 2) AND (2020 DUAL2020 = 3 OR 4) AND	Relapsed smoker in 2021, who smoked in 2019 or prior to 2019, but not in 2020
2019 AND 2020		(2019 SMOKETYPE = 1 OR 2) OR (2020 DUAL2020 = 1 OR 2) AND (2021 = VAPER ONLY (3) OR	Former smoker, does not smoke now but smoked at some point in the past either before 2019 survey, or during 2019 survey, but does not smoke now.
2019 AND 2020	FURIVIER SIVIUNER	(77	does not smoke now.
2019 AND 2020	QUIT SMOKING	` '	Smoked in 2020 but does not smoke now.
2019 AND 2020	NEVER SMOKER	(2021 = VAPER (3) OR	Never smoker in 2019, did not smoke in 2020 and does not smoke now.
2019 AND 2020	QUIT VAPING		Vaper in 2020 but does not vape now.

RESPONDENTS WHO COMPLETED 2019 BUT NOT 2020

For respondents who completed survey in 2019 but not in 2020, refer to 2019 SMOKETYPE variable.

2019 ONLY	NEW SMOKER	(2019 SMOKETYPE = 3) AND (2020 NON RESPONDENT) AND (2021 = CURRENT SMOKER)	New smoker in 2021.
2019 ONLY	RELAPSED SMOKER	(2019 SMOKETYPE = 2) AND (2020 NON RESPONDENT) AND (2021 = CURRENT SMOKER)	Relapsed smoker in 2021.
2019 ONLY	FORMER SMOKER	(2019 SMOKETYPE = 1,2) AND (2020 NON RESPONDENT) AND (2021 = VAPER ONLY OR NEITHER)	Former smoker, does not smoke now but smoked at some point in the past either before 2019 survey, or during 2019 survey, but does not smoke now.
2019 ONLY	QUIT SMOKING	(2019 SMOKETYPE = 1) AND (2020 NON RESPONDENT) AND (2021 = VAPER ONLY OR NEITHER)	Smoked in 2019 but does not smoke now.
2019 ONLY	NEVER SMOKER	(2019 SMOKETYPE = 3) AND (2020 NON RESPONDENT) AND (2021 = VAPER ONLY OR NEITHER)	Never smoker in 2019 and does not smoke now.
2019 ONLY	QUIT VAPING	(2019 SMOKETYPE = 1-3) AND (2020 NON RESPONDENT) AND (2021 = SMOKER ONLY OR NEITHER)	Vaper in 2019 but does not vape now.

Page Break

Feb/Jun 2019	Mar 2020	Mar 2021	Change 2020 to 2021
(2019 SMOKETYPE)	(DUAL2020)	(2021 SMOKETYPE)	
,		Dual use	Status quo (01)
	D .1	Vaper only	Quit smoking (02)
	Dual use	Smoker only	Quit vaping (03)
		Neither	Quit smoking & vaping (04)
		Dual use	Relapsed smoker (05)
		Vaper only	Status quo (06)
	Vaper only	Smoker only	Relapsed smoker, quit vaping (07)
		Neither	Quit vaping (08)
Dual use		Dual use	Relapsed vaper (09)
		Vaper only	Quit smoking (10)
	Smoker only	Smoker only	Status quo (11)
		Neither	Quit smoking (12)
		Dual use	Relapsed smoker & vaper (13)
	NI - III	Vaper only	Relapsed vaper (14)
	Neither	Smoker only	Relapsed smoker (15)
		Neither	Status quo (16)
		Dual use	Status quo (17)
	D .1	Vaper only	Quit smoking (again)(18)
	Dual use	Smoker only	Quit vaping (19)
		Neither	Quit smoking (again) & vaping (20)
	Vaper only	Dual use	Relapsed smoker (21)
		Vaper only	Status quo (22)
		Smoker only	Relapsed smoker & quit vaping (23)
		Neither	Quit vaping (24)
Vaper only/former smoker		Dual use	Relapsed vaper (25)
	Caralian and	Vaper only	Quit smoking, relapsed vaper (26)
	Smoker only	Smoker only	Status quo (27)
		Neither	Quit smoking (again) & vaping (28)
		Dual use	Relapsed smoker & vaper (29)
	No:thou	Vaper only	Relapsed vaper (30)
	Neither	Smoker only	Relapsed smoker (31)
		Neither	Status quo (32)
		Dual use	Status quo (33)
	Dualusa	Vaper only	Quit smoking (34)
	Dual use	Smoker only	Quit vaping (35)
		Neither	Quit smoking & vaping (36)
		Dual use	New smoker (37)
Vaper only/never smoker	Vanar anlı	Vaper only	Status quo (38)
	Vaper only	Smoker only	New smoker (39)
		Neither	Quit vaping (40)
		Dual use	Relapsed vaper (41)
	Smoker only	Vaper only	Quit smoking, relapsed vaper (42)
	Smoker only	Smoker only	Status quo (43)
		Neither	Quit smoking (44)
	Noithar	Dual use	New smoker, relapsed vaper (45)
	Neither	Vaper only	Relapsed vaper (46)

Smoker onl	New smoker (47)	
Neither	Status quo (48)	

Page Break

ASK Q.22-34 OF CURRENT SMOKERS.

The next few questions are about smoking cigarettes (please exclude cannabis smoking).

[2020 Q22]

CURRENT SMOKERS

22. On the days when you smoke, how many cigarettes do you typically smoke?

[RANGE 1 - 90]

99 - Not sure

[2020 Q23]

NEW SMOKERS OR RELAPSED SMOKERS

23. [SEE GROUP DEFINITIONS ABOVE]

NEW SMOKER #37,39,45,47: Your previous answers indicate you had never smoked. What are the main reasons you have picked up smoking?

RELAPSED SMOKER #05,07,13,15,21,23,29,31: Your previous answers indicate you were not smoking cigarettes. What are the main reasons you have gone back to smoking?

77 – [Open-ended response]

99 - Not sure

23a. [NEW SMOKERS OR RELAPSED SMOKERS, BUT EXCLUDE IF 2020 DUAL2020 = 2,4] What vape flavour(s) were you using most before [starting/restarting] smoking?

SELECT ALL THAT APPLY ONLY

RANDOMIZE LIST

- 01 Fruit
- 02 Candy/confectionary
- 03 Candy floss
- 04 Coffee/tea
- 05 Dessert
- 06 Mint/menthol
- 07 Energy drinks
- 09 Cereal
- 09 Cookies
- 10 Tobacco flavour
- 11 Cannabis/marijuana flavour (simply a flavour, not containing THC or CBD)
- 12 Alcohol flavour
- 13 Soft drink flavour
- 14 Flavourless/no flavour in descriptor
- 15 Floral/herbal
- 97 Other [SPECIFY] [ANCHOR]
- 99 Not sure [ANCHOR AT BOTTOM, SINGLE PUNCH]

ASK Q.24-27 OF DUAL USERS

[2020 Q24]

DUAL USER

- 24. Which of the following best describes you?
 - 01 I am a vaper
 - 02 I am a smoker
 - 03 I am both a smoker and a vaper
 - 04 I am neither a smoker nor a vaper
 - 99 Not sure

[2020 Q25]

DUAL USER

25. Which of the following best describes the main reason(s) you vape?

SELECT ALL THAT APPLY

LIST FOR: DUAL USERS

- 01 I'm trying to quit smoking
- 02 To reduce the number of cigarettes I smoke
- 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
- 10 I like doing tricks
- 11 My friends/family vape
- 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
- 18 It's easier to hide from my family than smoking
- 19 As a social activity with friends or family
- 97 Other (Specify)
- 99 Not sure

[2020 Q26]

DUAL USERS BUT EXCLUDING NEW SMOKERS AND RELAPSED SMOKERS INCLUDES #01,09,17,25,33,41

- 26. Which of the following best describes the main reason(s) you **continue to smoke** in addition to vaping? SELECT ALL THAT APPLY
 - 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
 - 15 Like cigarettes/smoking more than vaping

94 - Trying to quit smoking gradually

97 – Other (Specify)

99 – Not sure

[2020 Q27]

DUAL USER

27. In a typical day, how many times do you vape because you cannot smoke a cigarette (for example, in places where smoking is not permitted or accepted)?

ENTER NUMBER OF TIMES _____ [RANGE 0-50] 99 – Not sure

DUAL USERS WHO ARE TRYING TO QUIT/CUT DOWN [Q25=01-02]

[2020 Q28]

DUAL USERS TRYING TO QUIT/CUT DOWN

- 28. [IF Q25=01-02] Did you get information and/or advice from anyone on using vaping to quit or reduce smoking?
 - 01 Yes
 - 02 No SKIP TO Q.30
 - 99 Not sure SKIP TO Q.30

[2020 Q29]

DUAL USERS TRYING TO QUIT/CUT DOWN

- 29. [IF Q28=01] From where did you get advice on using vaping to quit or reduce smoking? SELECT ALL THAT APPLY
 - 01 Doctor
 - 02 Nurse/nurse practitioner
 - 02 Pharmacist
 - 03 Dentist
 - 04 Parent/guardian
 - 05 Sister/brother
 - 06 Friend/classmate
 - 07 Co-worker
 - 08 Support group
 - 09 Vape shop
 - 10 Web forum
 - 97 Other [Specify]
 - 99 Not sure

[2020 Q30]

DUAL USERS TRYING TO QUIT/CUT DOWN

- 30. [IF Q25=01-02] To help you quit smoking, do you have a specific plan or strategy in place for when to smoke and when to vape?
 - 01 Yes
 - 02 No
 - 99 Not sure

[2020 Q31]

DUAL USERS TRYING TO QUIT/CUT DOWN

31. [IF Q25=01-02] What problems or challenges, if any, are you having using vaping products to help you quit or reduce smoking?

77 – [Open-ended response]

- 99 Not sure
- 32. Question deleted

DUAL USERS WHO ARE NOT TRYING TO QUIT [Q25>01]

[2020 Q33]

DUAL USERS NOT TRYING TO QUIT

- 33. [IF Q25 = codes 02 19, 97 or 99] Are you planning to quit smoking cigarettes...?
 - 01 Within the next month
 - 02 Within the next 6 months
 - 03 Sometime in the future beyond 6 months
 - 04 I am not planning to quit SKIP TO NEXT SECTION

[2020 Q34]

PLANNING TO QUIT

34. [Q33=01-03] How likely are you to use each of the following to help you quit smoking cigarettes?

SHOW ONE AT A TIME (CAROUSEL) – RANDOMIZE ORDER

	Very likely	Somewhat	Not very	Not at all	Not sure
	(4)	likely (3)	likely (2)	likely (1)	(99)
a. Vaping					
products WITH NICOTINE					
b. Vaping					
products WITHOUT NICOTINE					
c. Nicotine					
patch					
d. Nicotine gum					
or lozenge					
e. Medication					
(e.g. Zyban, Champix)					

Page Break

ASK Q.35-36 OF REGULAR VAPER AND FORMER SMOKER - I.E. NOT CURRENT SMOKER

[2020 Q35]

REGULAR VAPER AND FORMER SMOKER #02,06,10,14,18,22,26,30,34,42

35. Which of the following best describes the main reason you vape? SELECT ALL THAT APPLY

LIST FOR: FORMER SMOKERS

- 21 I used it to help me quit smoking
- 22 I use it to stay off cigarettes/avoid a relapse
- 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
- 10 I like doing tricks
- 11 My friends/family vape
- 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
- 16 For the "buzz"/as an alternate source of nicotine
- 17 It's easier to buy/get than cigarettes
- 18 It's easier to hide from my family than smoking
- 19 As a social activity with friends or family
- 97 Other (SPECIFY)
- 99 Not sure

36. Question deleted

ASK Q.37-42 OF **QUIT SMOKING** (REGARDLESS OF VAPING STATUS)

[2020 Q37]

QUIT SMOKING #02,04,10,12,18,20,26,28,34,42,44

37. [RECALL ANSWER FROM 2019 OR 2020 SURVEY]

QUIT SMOKING: Your previous answers indicate that you were previously smoking. This time, you are not smoking. Which of the following, if any, did you use to help you quit smoking cigarettes?

SELECT ALL THAT APPLY

- 01 Vaping products WITH nicotine
- 02 Vaping products WITHOUT nicotine
- 03 Nicotine patch
- 04 Nicotine gum or candy
- 05 Medication (e.g. Zyban, Champix)
- 06 Other nicotine replacement therapy products
- 07 Counselling
- 08 Acupuncture
- 09 Hypnosis
- 10 Self-help books
- 11 Quit-line
- 12 Cannabis
- 97 Other (SPECIFY)
- 98 I did not use anything to quit smoking
- 99 Not sure

[2020 Q38]

QUIT SMOKING #02,04,10,12,18,20,26,28,34,42,44 AND USED VAPING TO QUIT 1033 = 01.02

38. [IF Q37=01-02] What problem or challenges, if any, did you have using vaping products to help you quit smoking?

77 – [Open-ended response]

99 - Not sure

[2020 Q39]

QUIT SMOKING #02,04,10,12,18,20,26,28,34,42,44 AND USED VAPING TO QUIT [037=01,02

- 39. [IF Q37=01-02] Did you get information and/or advice from anyone on using vaping to quit smoking?
 - 01 Yes
 - 02 No SKIP TO Q.41
 - 99 Not sure SKIP TO Q.41

[2020 Q40]

QUIT SMOKING #02,04,10,12,18,20,26,28,34,42,44 AND USED VAPING TO QUIT 1037-01,02

40. [IF Q39=01] From where did you get advice on using vaping to quit smoking?

SELECT ALL THAT APPLY

- 01 Doctor
- 02 Nurse/nurse practitioner
- 02 Pharmacist
- 03 Dentist
- 04 Parent/guardian
- 05 Sister/brother
- 06 Friend/classmate
- 07 Co-worker
- 08 Support group
- 09 Vape shop
- 10 Web forum
- 97 Other [Specify]
- 99 Not sure

[2020 Q41]

QUIT SMOKING #02,04,10,12,18,20,26,28,34,42,44 AND USED VAPING TO QUIT 1037=01.02

- 41. [IF Q37=01-02] To help you quit smoking, did you have a specific plan or strategy in place for when to smoke and when to vape?
 - 01 Yes
 - 02 No
 - 99 Not sure

[NFW/

QUIT SMOKING #02,04,10,12,18,20,26,28,34,42,44 AND USED VAPING TO QUIT 1037=01,02

42. [IF Q37=01-02] What vape flavour(s) most helped you quit?

SELECT ALL THAT APPLY ONLY

RANDOMIZE LIST

- 01 Fruit
- 02 Candy/confectionary
- 03 Candy floss
- 04 Coffee/tea
- 05 Dessert
- 06 Mint/menthol
- 07 Energy drinks
- 09 Cereal
- 09 Cookies
- 10 Tobacco flavour
- 11 Cannabis/marijuana flavour (simply a flavour, not containing THC or CBD)
- 12 Alcohol flavour

- 13 Soft drink flavour
- 14 Flavourless/no flavour in descriptor
- 15 Floral/herbal
- 97 Other [SPECIFY] [ANCHOR]
- 99 Not sure [ANCHOR AT BOTTOM, SINGLE PUNCH]

ASK Q.43 OF "REGULAR VAPER AND NEVER SMOKER"

[2020 Q43]

REGULAR VAPER WHO IS A **NEVER SMOKER** #38,46

43. Which of the following best describes the main reason you vape? SELECT ALL THAT APPLY

LIST FOR: NEVER SMOKERS

- 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
- 10 I like doing tricks
- 11 My friends/family vape
- 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
- 17 It's easier to buy/get than cigarettes
- 18 It's easier to hide from my family than smoking
- 19 As a social activity with friends or family
- 20 For the "buzz"/I like nicotine
- 97 Other (SPECIFY)
- 99 Not sure

REGULAR VAPERS AND/OR CURRENT SMOKERS:

[2020 Q43a]

43a. Overall, how important to you in your day-to-day life is....?

SHOW ONE AT A TIME (CAROUSEL) - RANDOMIZE ORDER

	Very	Somewhat	Not very	Not at all	Not sure
	important	important	important	important	(99)
	(4)	(3)	(2)	(1)	
a. [IF REGULAR					
VAPER] Vaping					
b. [IF CURRENT					
SMOKER] Smoking					

[2020 Q43b]

43b. How often do you feel negatively judged by other people when you...?

SHOW ONE AT A TIME (CAROUSEL) - RANDOMIZE ORDER

	Often (4)	Rarely (3)	Sometimes (2)	Never (1)	Not sure (99)
a. [IF REGULAR VAPER] Vape					
b. [IF CURRENT SMOKER] Smoke					

ASK Q.44-53 OF THOSE WHO **QUIT VAPING** #03,04,07,08,19,20,23,24,28,35,36,40. ALL OTHERS, SKIP TO Q54

[2020 Q44]

QUIT VAPING

44. Your previous answers indicate you were regularly vaping. What is the main reason why you decided to stop vaping?

77 – [Open-ended response]

99 - Not sure

[2020 Q45]

QUIT VAPING

45. Did you get information and/or advice from anyone on how to stop vaping?

01 - Yes

02 - No SKIP TO Q.48

99 - Not sure SKIP TO Q.48

Page Break

[2020 Q46]

QUIT VAPING

46. [IF Q45=01] From where did you get advice on how to stop vaping?

SELECT ALL THAT APPLY

01 - Doctor

02 - Nurse/nurse practitioner

02 - Pharmacist

03 - Dentist

04 - Parent/guardian

05 - Sister/brother

06 - Friend/classmate

07 - Co-worker

08 - Support group

09 - Vape shop

10 - Web forum

97 - Other [Specify]

99 - Not sure

[2020 Q47]

QUIT VAPING

47. [IF Q45=01] What advice were you given about how to stop vaping?

77 – [Open-ended response]

99 - Not sure

[2020 Q48]

QUIT VAPING

48. To help you stop vaping, did you do any of the following?

GRID - RANDOMIZE

	Yes (01)	No (02)	Not sure (99)
a. Reduce your			
frequency of vaping			
b. Switch from a higher			
to a lower nicotine strength			

[NEW]

QUIT VAPING

48c. What vape flavour(s) most helped you stop?

SELECT ALL THAT APPLY ONLY

RANDOMIZE LIST

- 01 Fruit
- 02 Candy/confectionary
- 03 Candy floss
- 04 Coffee/tea
- 05 Dessert
- 06 Mint/menthol
- 07 Energy drinks
- 09 Cereal
- 09 Cookies
- 10 Tobacco flavour
- 11 Cannabis/marijuana flavour (simply a flavour, not containing THC or CBD)
- 12 Alcohol flavour
- 13 Soft drink flavour
- 14 Flavourless/no flavour in descriptor
- 15 Floral/herbal
- 97 Other [SPECIFY] [ANCHOR]
- 99 Not sure [ANCHOR AT BOTTOM, SINGLE PUNCH]

[2020 Q49]

QUIT VAPING

49. Which of the following, if any, did you use to help you stop vaping?

SELECT ALL THAT APPLY

- 03 Nicotine patch
- 04 Nicotine gum or candy
- 05 Medication (e.g. Zyban, Champix)
- 06 Other nicotine replacement therapy products
- 07 Counselling
- 08 Acupuncture
- 09 Hypnosis
- 10 Self-help books
- 11 Quit-line

- 12 Cannabis
- 97 Other (SPECIFY)
- 98 I did not use anything to stop vaping
- 99 Not sure

[2020 Q50]

QUIT VAPING

- 50. How easy or difficult was it for you to stop vaping?
 - 01 Very easy
 - 02 Somewhat easy
 - 03 Somewhat difficult
 - 04 Very difficult
 - 99 Not sure

[2020 Q51]

QUIT VAPING

51. How many times did you try to stop vaping before you successfully quit?

YOU MAY ENTER AN ESTIMATE, BUT NOT A RANGE

ENTER NUMBER OF ATTEMPTS _____ [RANGE 0-50]

99 - Not sure

[2020 Q52]

QUIT VAPING

52. Now that you have stopped vaping, how do you know that you have successfully quit?

77 – [Open-ended response]

99 - Not sure

[2020 Q53]

QUIT VAPING AND FORMER SMOKER #04,07,08,19,20,23,24,28,36

- 53. In your experience, which is easier to quit?
 - 01 Quitting vaping is easier
 - 02 Quitting smoking is easier
 - 03 About the same
 - 99 Not sure/have not tried to quit smoking
- 53c. Question deleted

ASK ALL

[2020 Q54]

54. Have you consumed cannabis in the last 30 days?

SELECT ALL THAT APPLY

- 01 I have vaped it
- 02 I have smoked it
- 03 I have consumed it another way (e.g., edibles)
- 04 None of the above [SINGLE PUNCH]
- 99 Not sure [SINGLE PUNCH]

Respondent Characteristics

- D1. LANGUAGE RECALL FROM FEBRUARY/JUNE 2019
- D2. IDENTITY (Indigenous, visible minority, LGBTQ2) RECALL FROM FEBRUARY/JUNE 2019

[2019 D3]

- D3. What is the highest level of formal education that you have completed?
 - 01 Some high school or less
 - 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 Post graduate degree above bachelor's level
 - 99 Prefer not to say

Page Break

[2019 D4]

- D4. 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

[2019 D5]

- D6. [ASK 16+ ONLY] Which of the following categories best describes your total household income? That is, the total income of all persons in your household combined, before taxes?
- 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 Not sure/Prefer not to say
- D7. Children under 18 in the home RECALL FROM FEBRUARY/JUNE 2019

ASK QUAL RECRUITMENT QUESTIONS OF ADULTS 18+ ONLY:

QUAL1. We would like to invite you to participate in a follow-up qualitative research study. This would involve a moderated online community to more deeply explore the vaping experiences (past and present) of Canadians like yourself. Participants will receive [POINTS] as a thank you for their time.

The online community will be conducted by Environics Research (https://environicsresearch.com/) on behalf of the Government of Canada.

Participants will be asked to participate in a series of fun and interactive activities for approximately one hour per day over two consecutive days. These activities can be completed at any time and place that is convenient for you each day.

The online research activities will be moderated, meaning that a representative from Environics Research will observe the board and may ask follow-up questions to explore your comments in further detail.

The data 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/

Participating in the online forum is completely voluntary. If you are interested, you will need to provide your first name, last name and email address. Please note that this information (name and email) will only be used to invite you to participate, should you be selected, and will be kept separate your responses on the online forum. Are you interested in participating?

- Yes
- No

If Yes:

QUAL1A. The online forum is anonymous – the moderator will only have access to your first name and some basic demographic information (age, gender, region). The information you provide on the forum will not be linked with your name on any written document. You will also have the option of providing input in text or video formats (with or without showing your face). Government of Canada representative may observe the text and video contributions made by all participants on the forum, so we ask that you do not disclose your last name and/or any identifiable information about yourself or others on the forum.

Do you agree to these terms of participation?

- Yes
- No

QUAL2: Please provide us with the following contact information so we can send you details about the online community if you are selected to participate:

First name	
Last name	
Email address	

□ I am not willing to provide my contact information (you will not be invited to participate).

[IF CONTACT INFO PROVIDED]. Thank you. We will let you know as soon as possible if you qualify for the study.

[SHOW ALL] This completes the survey. On behalf of the Government of Canada, thank you for your participation.

Appendix D: Qualitative Research Instrument

Day 1: Transition journey

HELLO and WELCOME!

Thanks for joining me today! My name is _____ and I will be your moderator for this discussion.

Over the next two days, I'm going to ask you to share your thoughts and experiences on topics related to vaping and smoking. For each key question, there will be sub-questions. Please try to be as clear and as detailed as you can when you respond to each of these, because your answers are really important to me and will help me understand **how you think** and **what is important to you**.

Sometimes I will ask some follow up questions to make sure I really understand your answers. Please make sure you come back and check on this board to see if there are any follow up questions for you.

Today we are going to be talking about how your vaping and/or smoking (if applicable) activity has changed over the past year, and what those shifts or transitions have looked and felt like for you. On day 2, we will talk more about the factors that might influence these shifts or transitions. We understand that these topics may be difficult or sensitive to talk about. If a question makes you uncomfortable, it's okay to skip it. However, we hope you will find this a safe space in which to honestly share your thoughts and experiences.

The questions about vaping throughout refer to vaping of nicotine and/or non-nicotine products. Please exclude cannabis vaping.

Health Canada staff may observe the contributions made by all participants via the website, but will not have access to any personally identifiable information. We ask that you do not disclose your last name and/or any identifiable information about yourself or others during the exercise.

1. Getting to know you

A. To get us started, please briefly introduce yourself, and share something about yourself that is interesting or unique (i.e., your interests, hobbies, etc.). If you'd like, you can upload a picture of something that represents you or captures your current mood. This is entirely optional, and you can feel free to provide an image or a text response, but please do not use a picture of yourself. [image upload option]

2. Vaping & smoking habits

(ASK ALL) In your survey answers, you indicated you vape or have vaped in the past. Please tell me a bit about your current (or previous) vaping habits.

- A. How often do you (or did you) vape? (how many days per week, how many times per day)
- B. Where and when do you (or did you) vape? Which situations? (At home, at school, alone, social settings)? What are your cues for vaping?
- C. What vaping products do you (or did you) use? Do they (or did they) contain nicotine or not? Why do (did) you choose that product?

•

D. Do you (or did you) typically vape with someone, a group of people, etc.? If yes, please describe their relationship with you (e.g., family member, spouse, friend, colleague) (please do not identify them by name).

[Separate page]

(Ask QA-D of current/previous smokers. FINAL2021SMOKETYPE=01-05,07,09-13,15,17,18,20,21,23,27,29,33,36,39,41,43) In your survey answers, you indicated you smoke cigarettes or have done so in the past. Please tell me a bit about your current (or previous) smoking habits.

A. How often do you (or did you) smoke? (how many days per week, how many times per day)

•

B. Where and when do you (did you) smoke? Which situations? (At home, at school, alone, social settings)? What are your cues for smoking?

•

C. What cigarettes do you (or did you) smoke?

•

D. Do you typically smoke with someone, a group of people, etc.? If yes, please describe their relationship with you (e.g., family member, spouse, friend, colleague) (please do not identify them by name).

2. Transitions

A. The following list describes **transitions** or **shifts** you may have experienced in either vaping or smoking at any time in the past 12 months (between April 2020 and now). For instance, someone may have tried to quit smoking, started vaping for the first time (to help you quit), and then stopped vaping (when quitting did not work) – if this applies to you, you would select all three of those transitions.

•

• Please select the transitions that apply to you (in the past 12 months).

•

• SHOW IN ORDER, DO NOT RANDOMIZE

•

- 01-Started vaping for the first time
- 02-Resumed vaping (after a break)
- 03-Stopped vaping (successfully)
- 04-Tried/trying to stop vaping
- 05-Tried/trying to reduce vaping (frequency or strength)
- 06-Started smoking for the first time
- 07-Resumed smoking (after a break)

08-Quit smoking (successfully)

09-Tried/trying to quit smoking

10-Tried/trying to reduce smoking (frequency or amount)

11-None of the above [SINGLE SELECT]

B. [ASK ALL] Did you have any other transitions related to vaping or smoking (if applicable) in the past 12 months that are not included in this list?

01-Yes - please explain (open text box)

02-No

ASK SECTIONS 3-6 IF EXPERIENCED RELEVANT TRANSITIONS AT Q2a. IF NONE (CODE 11), SKIP TO Q7.

3. Started/resumed smoking (06,07)

I'd like you think back to the transition period this year when you started or resumed smoking. I'd like you to walk me step by step through what that transition looked like, in as much detail as possible.

- A. Why did you start/resume smoking?
- B. What was happening in your life at that time? What were you feeling, experiencing, thinking? If you wish, please upload an image that captures your mood at that time. [image upload option]
- C. How did starting/resuming smoking come about? What led up to the first day you started/resume?
- D. Looking back, what factors contributed to you starting/resuming when you did?
- E. Were there any supports that could have helped you avoid starting/resuming?
- F. Looking back, is there anything you would or could have done differently? Any advice you would give to others to avoid starting/resuming?

(Moderator note: If picked up smoking for 1st time (2a=06), probe on Day 2: to what extent did vaping contribute? Why or why not?)

4. Quit/tried to quit/reduce smoking (08-10)

I'd like you think back to the transition period this year when you quit, tried to quit or tried to reduce your smoking. I'd like you to walk me step by step through what that transition looked like, in as much detail as possible.

- A. Why did you quit/try to quit/reduce smoking?
- B. What was happening in your life at that time? What were you feeling, experiencing, thinking? If you wish, please upload an image that captures your mood at that time. [image upload option]

- C. How did quitting/reducing smoking come about? What led up to the first day you quit/reduced?
- D. What did you do first to help you quit/reduce your smoking? What other steps, if any, did you take after that?
- E. Looking back, what factors contributed to you quitting/reducing when you did?
- F. Did you notice any benefits or improvements to your life (this could be physical health, mental health, socializing, finances, etc.) upon reducing, trying to quit or quitting?
- G. Did you encounter any challenges sticking to your goal to reduce or quit smoking? What were they? What roadblocks/barriers were in your way?
- H. Looking back, is there anything you would or could have done differently? Any advice you would give to help others?

5. Quit/tried to quit/reduce vaping (03-05)

I'd like you think back to the transition period this year when you <u>quit, tried to quit or tried to reduce your vaping</u>. I'd like you to walk me step by step through what that transition looked like, in as much detail as possible.

- A. Why did you quit/try to quit/reduce vaping?
- B. What was happening in your life at that time? What were you feeling, experiencing, thinking? If you wish, please upload an image that captures your mood at that time. [image upload option]
- C. How did quitting/reducing come about? What led up to the first day you quit/reduced?
- D. What did you do first to help you quit/reduce your vaping? What other steps, if any, did you take after that?
- E. Looking back, what factors contributed to you quitting/reducing when you did?
- F. Did you notice any benefits or improvements to your life (this could be physical health, mental health, socializing, finances, etc.) upon reducing, trying to quit or quitting?
- G. Did you encounter any challenges sticking to your goal to reduce or quit vaping? What were they? What roadblocks/barriers were in your way?
- H. Looking back, is there anything you would or could have done differently? Any advice you would give to help others?

6. Resumed vaping (02)

I'd like you think back to the transition period this year when you <u>resumed vaping</u>. I'd like you to walk me step by step through what that transition looked like, in as much detail as possible.

- A. Why did you resume vaping?
- B. What was happening in your life at that time? What were you feeling, experiencing, thinking? If you wish, please upload an image that captures your mood at that time. [image upload option]
- C. How did resuming vaping come about? What led up to the first day you resumed?
- D. Looking back, what factors contributed to you resuming when you did?
- E. Were there any supports that could have helped you avoid resuming?
- F. Looking back, is there anything you would or could have done differently? Any advice you would give to others to avoid resuming?
- 7. [ASK ALL] Is there anything else you would like to add about the vaping and/or smoking transitions you have experienced over the past year?

That's all for today – thank you so much for this discussion and for your valuable input!

Tomorrow I will have some new questions for you to answer. I may also have some follow-up questions from today. You can check back at any time to see if there are any, or you can wait until tomorrow when you come back for the new questions.

Day 2: Factors influencing transitions

Welcome back! Yesterday we talked a lot about transitions related to vaping and/or smoking (if applicable). Today is about digging a bit deeper into the factors that could influence those shifts or transitions. Once again, please provide as much detail as you can about your own experiences, thoughts and feelings.

1. Fluidity of behaviour (asked only of those who have smoked and vaped at some point)

SKIP TO Q2 IF FINAL2021SMOKETYPE=38,40,46,48 (never smoked)

Previous research has shown that many people move back and forth between smoking and vaping at different times, or even within the same day or week or month, depending on a variety of factors. We'd like to know more about your own personal experiences (even if you are not currently vaping or smoking).

- A. How does it make you feel to smoke? How does it make you feel to vape? What are the differences between the two? What are the similarities? If you wish, please upload an image that captures how it feels to smoke and another that capture how it feels to vape. [image upload option]
- B. Which feeling do you prefer and why? Which feeling do you dislike the most and why?
- C. How does smoking affect you physically? How does vaping affect you physically? For example, cravings, relaxation, nicotine rush. What are the differences? Similarities?

- D. Which physical reaction do you prefer and why? Which physical reaction do you dislike the most and why?
- E. What about the situation/context in which you smoke and vape? Time of day, day of week, location, with or without others? How does context affect if you smoke or vape?
- F. Are there any other important differences for you between smoking and vaping?

2. Vaping flavours

Let's talk about the vaping flavours you currently use/were using when you were vaping.

- A. What flavours do/did you use? Do/did you have a preferred flavour or flavours?
- B. [SKIP IF DAY 1 Q2a=11] Thinking back to the transitions we talked about yesterday, how did vaping flavours factor into these transitions? Did it make it easier or harder to quit or reduce vaping or smoking, or to start or resume vaping or smoking? In what ways?
- C. In your view, what impact would it have on you and your vaping habits if your preferred flavour stopped being available?

3. Pandemic

A. Has your vaping increased or decreased during the COVID-19 pandemic?

Increased vaping

No change in vaping

Decreased vaping

Does not apply/have not vaped in past 12 months

B. Has your smoking increased or decreased during the COVID-19 pandemic?

Increased smoking

No change in smoking

Decreased smoking

Does not apply/have not smoked in past 12 months

- C. Please explain how the pandemic has affected (or has not affected) your vaping or smoking (if applicable) behaviour.
- D. [SKIP IF DAY 1 Q2a=11] Did the pandemic contribute to any of the transitions we discussed yesterday, and how so?

4. Wrap-up

- A. After completing multiple waves of the survey (2019, 2020 and 2021) and completing this qualitative exercise, do you have any thoughts to share about the questions asked and/or the information gathered?
- B. Is there anything we didn't ask that could be relevant to better understanding vaping, smoking (if applicable) and/or the transitions (be it between the two, reducing, increasing, or quitting)? If yes, please explain.

End and thank.

Thank you very much for completing these activities over the last two days and for sharing your thoughts with us. We appreciate your time! We hope you have a great day!