

THE ONTARIOUNITÉTOBACCODE RECHERCHERESEARCHSUR LE TABACUNITDE L'ONTARIO

Flavour Regulations—Attitudes and Behaviours

A Synthesis of Findings from Health Canada Public Opinion Research

Daniel Jubas-Malz

March 2020

Citation: Jubas-Malz D. *Flavour Regulations—Attitudes and Behaviours. A Synthesis of Findings from Health Canada Public Opinion Research*. Special Report. Toronto ON: Ontario Tobacco Research Unit; March 2020.

Table of Contents

Introduction	1
Methodology	2
Notes to the Reader:	2
Key Terms	3
Findings	4
Why do Flavours Matter?	4
Youth and Young Adults	5
Never Smokers	6
Former Smokers	7
Dual Users	7
Infrequent and Occasional Vapers	8
One-Time Vapers	8
Non-Vapers	8
General Population	8
Which Flavour(s) Do Vapers Enjoy?	9
Use of a Single Flavour	9
Users of Multiple Flavours	10
Marketing and Regulations	11
Discussion and Conclusion	12
References	13
Appendix A – Annotated Resources List	14

Introduction

Vaping flavours have been identified as among the most significant incentives to start vaping [21]. Younger demographics are more likely to say that they vape because of the availability of flavours. Youth and young adults have been identified among those who are at greater risk of tobacco uptake by Canada's Tobacco Strategy. The strategy aims to reduce national tobacco use to less than 5% by 2035. This report assesses attitudes and behaviours regarding flavours from Health Canada Public Opinion Research.

The unpleasant smell and taste of cigarettes have persuaded many to take up vaping over smoking. Unlike cigarettes, vapers have access to a wide range of flavours to customize how they use the product. More pleasant flavours (e.g. fruit) may also influence perception of vaping and frame it as a healthier alternative to smoking cigarettes. It is essential we explore vaping attitudes and behaviours centered around flavour use to determine their influence in vaping uptake. This will support knowledge acquisition efforts and help stakeholders develop policy interventions to reduce overall tobacco use.

Methodology

This report was developed by use of public opinion research data. Recent public opinion data had been pulled from Health Canada's database, along with two private polls from The Angus Reid Institute and Research Co. A total of 23 reports were found and reviewed for this report. In the end, 11 of these were relevant and used in this report.

The authors of this report used an iterative approach to data extraction, reviewing articles multiple times and making amendments where necessary. First, reports were reviewed and key findings highlighted. Reports were then re-reviewed to look for data points missed upon first read-through and to evaluate relevance of data already highlighted. All relevant data were extracted. Data were then organized according to theme which, like the data extraction process, was iterative. Themes were created, re-named, and data re-organized as the report developed. The public opinion research was reviewed one final time to find other relevant pieces of data that might fit in with the themes in their most recent form.

Notes to the Reader:

- Public opinion research reports will be described when first mentioned in this report. This
 is to ensure the reader understands important background information such as method of
 data collection and the populations part of the research sample. Once initially described,
 opinion research will be referenced using both standard APA and Vancouver formats.
 Sources used in this report will be included in the reference list using the APA format.
 Vancouver in-text citations refer to sources as listed in a chart presented in Appendix A.
 This chart includes key details from each reviewed research report. Throughout this
 report, the authors use both formats simultaneously and interchangeably.
- Definitions of key terms were drawn from reports. Some definitions were used inconsistently between reports. Below is a list of key terms relevant to this document. Citations are included In the case of a term with inconsistent definitions or to clarify the term definition with a direct quote from a report.

Key Terms

Regular Users (e.g. regular smokers/regular vapers) - those who smoked/vaped at least once a week for the past four weeks [3,15]. Some reports did not explicitly define this term.

- Daily Users (e.g. daily smokers/daily vapers) those who smoke or vape every day
- Occasional users (e.g. occasional smokers/occasional vapers) or Infrequent users (infrequent smokers/vapers) - these were not used consistently across all polls but denoted non-daily use. Some polls [3,5,15] only made reference to occasional users (I.e. those who did smoke or vape but not on a daily basis). Others [21,22] identified occasional users as those who have used an e-cigarettes within the past 30 days but not daily and infrequent users as those who have not used an e-cigarette over the past 30 days. [6] made a distinction between occasional and infrequent vapers but did not clarify how they were different. Terms will be used in accordance with their sourced report.

One-Time Users (e.g. one-time smokers/one-time vapers) – those who have smoked/vape one time over the course of their lifetime

Ever Users (e.g. ever smokers/ever vapers) – those who have ever tried a cigarette/e-cigarette

Dual Users - those who currently smoke and vape daily or occasionally

Non-Users (e.g. non-smokers/non-vapers) - those who do not currently smoke/vape

- Never-Users (e.g. never-smokers/never-vapers) those who have never smoked/vaped.
 In particular, one poll [3] defined *never* smokers as those who are "not currently smoking and have not smoked 100 cigarettes over their lifetime" (p.5)
- Former Users (e.g. former smokers/former vapers) those who were not smokers/vapers at the time research was conducted but have used either in the past. In particular, one poll [3] defined *former smokers* as those who are "not currently smoking, but have smoked 100 cigarettes over their lifetime" (p.5)

Findings

Why do Flavours Matter?

Earnscliffe Strategy Group completed a report in March 2019 that gathered information from Canadians on their knowledge of smoking- and nicotine-related risks [2]. The research project was completed in three phases. The first phase used 15 focus groups with youth (age 16-19), young adult non-smokers (age 20-24), and adult smokers (age 40-55). Three focus groups took place in Toronto, Halifax, Montreal, Winnipeg, and Vancouver each run entirely with youth, young adult non-smokers, or adult smokers. There was a combined total of 128 participants in this stage. Phase two distributed a survey to Canadians age 13 and older from Leger's online panel. They had 4190 participants in this stage. Finally, phase three was used to conduct follow-up research with youth (age 16-18) and young adults (age 19-24) who vape or are vulnerable to trying it. One focus group was run with youth and the other with young adults, both in Toronto on March 19, 2019. There were 17 participants in all.

Environics Research submitted a report in 2019 looking at vaping attitudes and behaviours of Canadians who are regular vapers 15 years of age or older [3]. Researchers disseminated an online survey to youth vapers (age 15-19), young adult vapers (age 20-24), and adults (age 25+) between February 4 and 26, 2019. They received 2027 responses.

Phoenix Strategic Perspectives Inc. (Phoenix SPI) (2017) [22] explored youth and young adult perceptions of e-cigarette flavours and associated harms of e-cigarette use. The research component used both qualitative and quantitative data collection methods. Twelve focus groups were run with both youth (age 15-19) and young adults (age 20-24). They conducted half with vapers and half with non-vapers. These took place in Toronto, Montreal, and Vancouver between January 30 and February 2, 2017. A survey was later distributed to a sample from Research Now's panel of online Canadians. A total of 1509 participants were included in this stage.

Over half (55%) of regular vapers 15 years and older consider their devices' flavours among the top features of vaping products [3]. Many vapers use vape flavours that imitate the foods they enjoy, and they frequently report enjoying the taste and smells of these flavours [22]. Pleasant

vaping smells is a contributing factor to the perception that vaping is less harmful than cigarette smoking [2]. Focus group participants in Phoenix SPI (2017) have reported seeing advertisements that display fruits next to their corresponding flavours [22]. This may cause consumers to associate vaping with healthy behaviours.

Youth and Young Adults

Corporate Research Associates Inc. submitted a report in 2018 that explored regulatory requirements for labelling vaping products across two phases of research [6]. Only phase one is relevant to the current report. Participants were recruited in Toronto, Vancouver, and Montreal between March 19 and 26, 2018. Researchers held one focus group with vapers and one with smokers in each city. All participants were aged 18 or older. A total of 53 participants took part in this phase.

Environics Research completed a survey in July 2019 that received feedback on vaping- and tobacco-related attitudes and behaviours from Canadian vapers age 15 and older [15]. Data was collected from Canadians between May 27 and June 25, 2019. The survey received 2043 respondents.

Environics Research Group (2018) looked at vaping-related attitudes and behaviours of Canadian vapers and those who have ever vaped aged 15 and older [19]. Data was collected using an online survey and was distributed between December 2017 and February 2018 in two waves. The first wave received 1312 responses and was used as a benchmark. The second wave received 950 new responses and 779 from those who had also participated in the first wave. Between both waves, 3041 surveys were completed.

Phoenix SPI (2018) gathered data on groups who were at-risk for smoking and vaping uptake [21]. The report used a focus group series, surveys, and a literature review. Eight focus groups and eight triads (groups of three) were held across Canada. Four focus groups were held in each Toronto and Montreal: one with smokers/vapers (age 20-24), one with non-smokers/non-vapers (age 20-24), one with smokers/vapers (age 16-19), and one with non-smokers/non-vapers (age 16-19). Four triads were held with non-smokers and non-vapers between 13 and 15 years of age - two in Toronto and two in Montreal. Four triads were held a little later - two in Toronto and two in Ottawa – with smokers and vapers. A total of 88 participants took part in this qualitative phase. The survey was distributed to Canadians between 13 and 24 years of age. They received 3004 responses.

Youth and young adult focus group and triad participants suggested that taste and aroma were incentives for vape use among these groups [21,22]. Further, both youth and young adult demographics are more likely than adults to vape because of the available flavours [15]. Those below the provincial legal age to purchase vaping products place equal or greater importance on flavour options compared to those who are of legal age [3], but both youth (age 16-18) and young adults (age 19-24) have identified flavours as a contributing factor to vaping uptake [2]. A survey with vapers within a similar age range (age 15-24) found that flavour and aroma was the most frequently reported reason this group uses e-cigarettes (45%) [22]. A different poll from Environics Research Group (2018) found youth (age 15-19) and young adults (age 20-24) are more likely than adults (age 25+) to be motivated to vape because of the available flavours (51% vs. 54% vs. 30%, respectively) [19]. Lastly, Phoenix (2018) reported that flavours were the second most frequent reason youth and young adults took up vaping (39%), behind vaping because their friends were doing it (44%) [21]. Other incentivizing reasons for vape use include the variety of available flavours and that vape use does not make clothing smell, although these were mentioned less frequently [22].

When shopping for new products, young adults 18 and older rely on flavouring choices, along with price, to inform which they buy [6]. Flavour names are among nicotine content, usage guidelines, and possible health risks as the most important information on e-liquid labels [6].

Never Smokers

Environics Research (2019a) asked survey respondents to identify the reasons they started vaping from a pre-determined list [3]. Participants were able to choose multiple responses. Responses were separated into one of three groups – dual users, former smokers, or never smokers – and their data aggregated accordingly. From this list, never smokers most commonly rated vaping flavours/smells as the main reason they vape (55%) [3]. This was the most common response out of all reasons for vaping between never smokers, dual users, and former smokers [3]. A similar poll from Environics Research (2019b) also found that, compared to dual users and former smokers, never smokers most frequently identified vaping flavours/smells as one of the main reasons they vape [15]. Out of all possible listed responses across the three groups, vaping flavours/smells were the second most common reason for vaping tied with dual users saying they are "trying to quit smoking". Between age groups, youth never smokers are more likely to cite flavours/smells as their reason for vaping (57%) compared to young adults and adults [15].

Former Smokers

Phoenix SPI (2019a) published findings from a Canada-wide survey looking at attitudes and behaviours of cigarette smokers and recent quitters in regard to other nicotine and tobacco products [8]. A total of 3006 respondents participated in the survey. Criteria for participation required participants be a current or former smoker 18 years of age or older.

Flavours were identified among the top reasons former smokers vape. In fact, former smokers as well as current smokers believe e-cigarettes with nicotine are one of the few tobacco products considered to have a more satisfying taste than cigarettes [8]. In Environics Research (2019a) [3], the flavours/smells were the third most popular reason former smokers started vaping (40%) behind using vaping to quit smoking (63%) and believing it is less harmful than smoking (50%). Similarly, Environics Research (2019b) [15] found that flavours/smells were tied along with vaping being cheaper than smoking as the fourth most common reason for starting to vape (32%) behind helping former smokers quit smoking (67%), believing it is less harmful to their health (45%), and to avoid cigarette smoking relapse (44%).

Dual Users

Out of the three groups, dual users identified flavours and smells as the reason they started vaping the least frequently (27%). This was the fourth most common reason listed by dual users behind trying to quit smoking (48%), reducing the number of cigarettes smoked (44%), and that vaping is less harmful to health than smoking (28%) [15]. Across age groups, youth and young adult dual users were more likely than adults to say they vape because of the flavours/smells (each 40%) [15].

Infrequent and Occasional Vapers

Non-regular vapers most commonly rank the flavours/smells as the reason they vape [19]. Approximately half of infrequent (50%) and occasional (52%) users said they vape because they enjoy the flavours and smell [22]. Only 30% of daily users agreed with this statement [22].

One-Time Vapers

Participants from Phoenix SPI (2017) who identified as a one-time e-cigarette user were asked to give all of the reasons they tried vaping from a pre-determined list [22]. Flavours and smell were the second most common response (40%), following deciding to vape because their friends were doing it (43%) [22].

Non-Vapers

Non-vapers involved in the survey distributed in Phoenix (2018) said flavours were the biggest incentive for those who claimed they might start vaping [21]. The survey welcomed multiple answers and almost half (48%) of respondents agreed the flavours were a motivator to pick up vaping [21]. This was followed by curiosity (30%) [21].

General Population

Phoenix SPI (2019b) collected feedback on attitudes and concerns from the general Canadian population on a wide range of topics [16]. The study was done over three phases, however, only the third had content relevant to vaping. Twelve focus groups with adults (age 18+) were conducted across Canada in Surrey, Fredericton, Sorel, Belleville, Edmonton, and Victoria. Focus groups were run between June 6 and 26, 2019. In total, 109 participants took part in these focus groups.

The Phoenix SPI focus group session asked a sample of the general Canadian population to identify potential benefits of vaping [16]. Among these, participants said that vaping does not smell bad or make clothing smell bad [16].

Which Flavour(s) Do Vapers Enjoy?

Use of a Single Flavour

The majority of vapers tend to stick to a single flavor when vaping (59%) [3] and vapers tend to have at least one favourite flavor [22]. They may also stick to a single flavour out of habit or due to limited use of vaping devices [22]. In general, fruit is the most popular flavor among vapers with approximately a third of users saying it is their favourite [3,22] twice as many as the tobacco flavour – the second most popular flavor [3]. Preference for fruit flavours is higher among youth (45%) and young adult vapers (39%), as well as never smokers (42%) compared to adult vapers (24%) [3]. Adult vapers have greater preference for tobacco flavours and 21% say it is their favourite flavor compared to 3% of youth and 5% of young adults [3]. A survey from Environics Research Group (2018) [19] found a similar trend: 29% of youth and 30% of young adult vapers prefer fruit flavours compared to 19% of adult vapers [19]. Adult vapers tend to prefer tobacco flavouring (23%), much more than youth (5%) and young adults (7%) [19]. Similarly, this same poll found 16% of adults enjoy mint/menthol flavours compared to youth (9%) and young adults (12%) [19].

In a series of focus groups conducted by Corporate Research Associates Inc. (2018), vapers had a preference for sweet flavours which, in addition to fruit, include candy, marshmallow, and root beer [6]. Favourite flavours were identified in a series of focus groups from Phoenix SPI (2017) The entire list is presented here, alphabetically [22]: black classic (tobacco taste), blueberry, bubble-gum, cappuccino, cherry, chocolate, coffee, cotton candy, dessert, menthol, mint, peach, pina colada, pudding, strawberry, and watermelon.

Vaping focus group participants from Phoenix (2017) also mentioned that they enjoy the aftertaste from their use of flavours [22]. Users claimed that flavours made their "mouth feel clean and/or their breath feel fresh" [22] (p.17).

Users of Multiple Flavours

The vast majority of regular vapers have tried switching flavours since starting to vape [15,22]. This is common among all age groups but more so for youth and young adult vapers [15]. Indeed, nearly half of youth vapers (48%) said they use multiple flavours throughout the week, compared to 36% of adult vapers [3]. Youth and young adult vapers are also more likely than adults to buy whichever flavour is available (23%, 23%, and 17%, respectively) [15], which would increase the likelihood users will try a new flavour. In the focus group series run by Phoenix SPI (2017), participants often tried somewhere between 2-5 flavours, but many have used more than 10 [22]. Both Environics Research (2019a) [3] and Environics Research (2019b) [15] asked survey participants to comment on their reasons for switching flavours while vaping. In both surveys, the most common response is to experiment with the flavours (53% and 62%, respectfully) [3][15]. Other frequent reasons cited in Environics Research (2019a) [3] include changing flavours depending on mood (35%), the price of flavours (25%), to help reduce cigarette smoking (24%), and buying whatever is available (18%) [3]. In Environics Research (2019b) [15], participants often said they switch flavours depending on their mood (33%), to help reduce or quit smoking (22%), buying what is available to them (19%), or buying whatever is cheapest (17%).

Flavours were identified by former smokers and dual users trying to cut down on cigarettes as a helpful tool in cessation efforts. Nearly seven in ten former smokers (67%) and most dual users (70%) agreed that a range of vaping flavours is important in helping them stop smoking [15]. Environics Research (2019a) [3] found identical results in their research: 67% of former smokers agreed that the range of flavours was important while working to quit smoking and 69% of dual users said the same. Adult vapers, current smokers, and former smokers were more likely than youth and young adult vapers to switch flavours in order to help reduce smoking or quit altogether [15].

Some participants in Phoenix SPI (2017) reported they enjoy experimenting with different flavours and try new flavours because they desired more variety [22]. Use of multiple flavours may also be dependant on occasional vape use [22]. Occasional smokers may borrow e-cigarettes from friends and will use whichever flavor is offered [22]. Few vapers in Phoenix SPI (2017) said they change flavours often but those who do suggested it was because they were running out of their e-liquid, curiosity to try other flavours, or wanting a change of taste [22].

Marketing and Regulations

On November 2019, Research Co. Shared results from a poll asking respondents if they would support certain regulations on e-cigarettes [11]. Data was collected between October 21 and 23, 2019. The survey was administered in Canada and sampled 1000 Canadian adults (age 18+).

The Angus Reid Institute conducted a private poll on vaping behaviours in Canada with a special focus on youth habits [18]. Results were shared in January 2020 and the data collected between December 2 and 4, 2019. A total of 1655 Canadian adults (age 18+) were sampled from the Angus Reid Forum.

Youth are seen as one of the main targets of e-cigarette marketing by vapers and non-vapers between ages 15-24 years [22]. Focus group participants from Phoenix SPI (2018) said they believe e-cigarette flavours with non-descript names are also marketed toward youth [22]. These include "island breeze", "unicorn puke", and "golden ticket". [22]. Youth have shown a preference for fruit flavours compared to adult demographics [3,15], and advertisements feature available vaping flavours [2]. When asked about ad content, focus group participants said they recall seeing promotional material that show pictures of vaping devices and flavours next to pictures of fruit [22].

The recent Research Co. Survey found a majority of Canadians want stricter regulations on vaping flavours: 57% of Canadians believe that flavoured vaping products should be outright banned [11]. Similarly, a survey from the Angus Reid Institute showed that 60% of Canadians agree that banning flavoured vaping products is a good idea [18]. Support for this, however, is lower among those between the ages 18-34 [18]. In comparison, more than eight in ten (82%) participants supported restricting flavoured vaping products to adult-only stores [18].

Discussion and Conclusion

As demonstrated in this report, flavours are among the most significant factors in deciding to take up vaping. This was true across all identified smoking/vaping groups presented here: never smokers, former smokers, one-time vapers, infrequent vapers, and dual users. Unsurprisingly, non-vapers cited available flavours as the primary reason they would pick up vaping.

Fruit flavours were consistently ranked as the top flavour, but this was higher among youth and young adults. Younger populations said they were more likely to be motivated to vape compared to their older counterparts. Youth and young adults tend to prefer fruit flavours and adults prefer tobacco flavours. Even so, a similar proportion of adult vapers like fruit flavours as adult vapers who prefer tobacco flavours. Generally, many vapers preferred flavours that imitated food they most enjoy. Vapers who switched flavours often said they would do so to experiment with different flavours. It seems that, together, available flavours make vaping more exciting or interesting, and switching flavours offers users variety in their vape use. Switching flavours has a very clear upside: the majority of dual users and former smokers said a range of flavours was important when trying to quit. Indeed, using vaping as a cessation tool is frequently cited as a reason for uptake.

Even with the potential benefits for those interested to quit smoking, the Canadian public seems to believe vaping flavours are a strong incentive for youth to take up vaping. The current opinion research suggest Canadians want to limit youth accessibility to vaping flavours. Regulations with the most support restrict flavoured products to adult-only stores and prohibit advertisements in areas frequented by youth. An outright ban received a mixed reaction from study participants. Opinion research presented in this report suggest that most of the concern about vaping flavours from Canadians are directed at youth, possibly because they are seen as having a higher risk of vaping uptake or as more susceptible to vaping marketing.

Vaping is perceived as a healthier alternative to smoking products, which can be tied to flavour marketing. Fruit flavours, in particular, may influence the perception that vaping is healthier than it actually is. Participants recalled advertisements that displayed pictures of fruit next to their corresponding flavour – and this may, unsurprisingly, imply vaping is a healthy product.

References

Angus Reid Institute. (2020). *Vanquishing Vaping? Support for Tougher Regulations Rise as Positive Views of E-Cigarettes Go Up in Smoke*. Reference number from annotated list: [18].

Corporate Research Associates Inc. (2018). *Evaluation of Possible Labelling Elements for Vaping Products - Phase 1 and Phase II: Final Report*. (POR 099-17). Reference number from annotated list: [6].

Earnscliffe Strategy Group. (2019). *Qualitative and Quantitative Research on Perceptions of Nicotine: Final Report*. (POR 067-18). Reference number from annotated list: [2].

Environics Research. (2019a). *Vapers Panel Survey to Measure Attitudes and Behaviours Regarding Vaping Products: Final Report*. (POR 083-18). Reference number from annotated list: [3].

Environics Research. (2019b). *Vapers' Panel Survey to Measure Attitudes and Behaviours Regarding Vaping Products*. (POR 141-18). Reference number from annotated list: [15]

Environics Research Group. (2018). *Longitudinal Vaper Panel Survey to Measure Attitudes and Behaviours regarding Vaping Products*. (POR 047-17). Reference number from annotated list: [19].

Phoenix SPI. (2019a). *Smokers and Recent Quitters' Awareness and Perceptions of Options to Minimize Harms from Tobacco Products*. (POR 093-18). Reference number from annotated list: [8]

Phoenix SPI. (2019b). *Privy Council focus groups asking about smoking and vaping, among other things*. (Available in three separate reports) (POR 139-18). Reference number from annotated list: [16].

Phoenix SPI (2018). *Peer Crowd Analysis and Segmentation for Vaping and Tobacco*. (POR 074-17). Reference number from annotated list: [21].

Phoenix SPI. (2017). *Qualitative/Quantitative Research on E-cigarette Flavours and Risk Perception*. (POR 088-16). Reference number from annotated list: [22].

Research Co. (2019). *Three-in-Four Canadians Back Temporary Ban on Vaping Products. Private Poll*. Reference number from annotated list: [11].

Appendix A – Annotated Resources List

Reference #	Code	Title	Objective	Publish Date	Research Methods	Inclusion Criteria	Sample Size	Author	Timeline	Locations
1	POR 013-18	Break It Off: Tobacco Cessation Creative Concepts Testing	This research aimed to gather feedback on the Break It off campaign, including message effectiveness.	Sep-18	Focus groups (6)	Young adult smokers (age 20-24) living in Canada	n=44	Phoenix SPI	July 24-26, 2018	St. Johns, Montreal, Saskatoon
2	POR 067-18	Qualitative and quantitative research on perceptions of nicotine: final report	The specific objectives of the research were to gather information from Canadians about their knowledge of the health hazards and risks associated with smoking and nicotine, as well as test reactions to the hypothetical concept of a very low nicotine content cigarette. The project was divided into three phases.	Mar-19	Qualitative: Phase one - focus groups (15); Phase Three - focus groups (2); Quantitative: Phase two - surveys	Phase one: youth (16-19) non- smokers; young adult (20-24) non- smokers; and, adult (40-55) smokers. Phase two: youth (aged 13-14), youth (age 15-19), young adults (age 20-24) and smokers. Phase three: youth (16-18) and young adults (19-24) who occasionally vape or may be susceptible to trying it.	Phase one, n=126; Phase two, n=3234; Phase three, n=17	Earnscliffe Strategy Group	Qualitative phase: December 3-6, 2018; follow-up quantitative phase: March 19, 2019; Quantitative phase: February 11-March 7, 2019	Qualitative phase: Toronto, Halifax, Montreal, Winnipeg, Vancouver; Quantitative phase: Canada (online); follow-up qualitative phase: Toronto
3	POR 083-18	Vapers panel survey to measure attitudes and behaviours regarding vaping products : final report	The research aimed to gather information on the attitudes and behaviours of Canadians who are regular vapers aged 15 years and older with respect to vaping products. This includes awareness and knowledge of vaping products, vaping behaviours, and devices and e-liquids used by Canadian vapers.	Mar-19	Surveys	Youth vapers (age 15-19), young adult vapers (age 20-24), and adult vapers (age 25+)	n=2027	Environics Research	February 4-26, 2019	Canada (online)
4	POR 037-18	Vaping Prevention Concepts Testing : final report	Researchers assessed reactions to concepts considered for Health Canada's Health Risks of Vaping Products Public Awareness Marketing Campaign from their target audience.	Apr-18	Focus groups	Phase one: youth 13-15, and one with non-vaper and non-smoker at-risk youth; and phase 2 used six focus groups with youth (13-15) and youth (16-18) who do not currently smoke cigarettes or vape	Phase two, n=54	Corporate Research Associates Inc.	Phase One: September 17-20, 2018; Phase Two: November 26-28, 2018	Phase one: Vancouver, Winnipeg, Toronto, Montreal, and Halifax; Phase Two: Montreal, Toronto, and Moncton

Reference #	Code	Title	Objective	Publish Date	Research Methods	Inclusion Criteria	Sample Size	Author	Timeline	Locations
5	POR 054-18	Exploratory research on smoking cessation : final report	The purpose of this poll is to explore experiences related to smoking and cessation.	Dec-18	Focus groups	Adult smokers and former smokers	n=164	Phoenix SPI	October 29 - November 20, 2018	Mississauga, Winnipeg, Edmonton, Montreal, and St. John's
6	POR 099-17	Evaluation of possible labelling elements for vaping products - phase 1 and phase II : final report	Researchers explored regulatory requirements for the labelling of vaping products.	Apr-18	Focus groups	Smokers/vapers age 18+	Phase one, n=53; Phase two, n=46	Corporate Research Associates Inc.	Phase one: March 19-26, 2018; Phase two: June 25-28, 2018	Phase one: Toronto, Vancouver, and Montreal; Phase two: Toronto, Montreal, Vancouver
7	POR 119-18	Smoking Behaviour Journey Map	Researchers were looking at ways to prevent tobacco use and methods of support for cessation.	Mar-19	Phase one - surveys; Phase two - quantitative journaling	Adult (age 18+) daily smokers who have been smoking for at least five years, Canadian		Environics Research	Quantitative phase: March 7-15, 2019; Qualitative phase: March 14-20, 2019.	Quantitative phase: Canada (online); qualitative phase: Canada (online)
8	POR 093-18	Quitters' Awareness and Perceptions of Options to Minimize	This research aimed to gather information on attitudes and behaviours of Canadian cigarette smokers and recent quitters toward other tobacco and nicotine products (e.g. e-cigarettes, nicotine patches).		Surveys	Current and former smokers at least 18 years of age	n=3006	Phoenix SPI	February 22 - March 14, 2019	Canada (online)
9	POR 126-18	Qualitative Testing of Revised Health Warnings for Cigarette Packages and on Cigarettes: 2019	This research looked at the effectiveness of different cigarette warnings to promote tobacco use awareness.	Apr-19	Focus groups (40)	Youth non-smokers aged 15-19, youth smokers aged 15-19, young adult smokers aged 20-24, or adult smokers aged 25 and older.	n=369	Corporate Research Associates Inc.	March 18-29, 2019	Toronto, Vancouver, Halifax, and Montreal

Reference #	Code	Title	Objective	Publish Date	Research Methods	Inclusion Criteria	Sample Size	Author	Timeline	Locations
10	POR 058-18	Public Opinion Research on Noticeability of Health Information Messages and Effectiveness of Health Warnings for Tobacco Labelling	The study looked at the effects of Health Information Messages and Health Warnings on impact factors such as ad recall and credibility/believability and the best way(s) to convey health hazards to improve messaging.	Mar-19	Survey	Canadians age 16+ who are daily or occasional smokers	n=3000	Environics Research	January 28 - March, 2019	Canada (online)
11	Private Poll	Three-in-Four Canadians Back Temporary Ban on Vaping Products. <i>Private Poll.</i>	This poll asked participants if they would support a ban on e- cigarettes in public spaces, want a warning sign on vaping products, and support a ban on flavoured vaping products.	Nov-19	Surveys	Canadian adults (age 18+)	n=1000	Research Co.	October 21-23, 2019	Canada (online)
12	POR 014-19	Advertising evaluation of Youth Vaping Prevention Campaign - post ACET : methodological report	Contacted Health Canada for full report. Summary not available.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
13	POR 026-19	Online qualitative testing of draft health warnings for cigars, pipe tobacco, smokeless tobacco and toxic statements for smokeless product packaging - 2019	This research looked at opinions toward health warning labels to ensure they are effective at informing Canadians on relevant hazards.	Aug-19	Focus groups (15)	Current or former cigar, pipe tobacco and smokeless tobacco users age 18+	n=111	Narrative Research	July 15-22, 2019	British Columbia, Alberta, Manitoba, Ontario, New Brunswick, Prince Edward Island, Nova Scotia, Newfoundland and Labrador, and Quebec.

Reference #	Code	Title	Objective	Publish Date	Research Methods	Inclusion Criteria	Sample Size	Author	Timeline	Locations
14	POR 025-19	Qualitative testing of new health information messages, including placement options, as well as the thematic linking of labelling elements – 2019 : final report	Participants were asked to give feedback on Health Information Messages mock-ups.	Oct-19	Focus groups (15)	Daily or occasional cigarette smokers age 15+	n=132	Quorus Consulti Group Inc.	ng July 13-27, 2019	Toronto, Winnipeg, Edmonton, St. John's and Quebec City
15	POR 141-18	Vapers' Panel Survey to Measure Attitudes and Behaviours Regarding Vaping Products	Researchers aimed to receive feedback on vaping- and tobacco- related attitudes and behaviours.	Jul-19	Surveys	Canadian vapers age 15+	n=2043	Environics Research	May 27 - June 25, 2019	Canada (online)
16	POR 139-18	smoking and vaping, among other	The study looked at attitudes and perceptions of current events such as the environment, vaccines, and vaping. (Note, only the third cycle was included for this report.)	Aug-19	Focus groups (12)	Canadians age 18+	n=109	Phoenix SPI	June 6-26, 2019	Surrey, Fredericton, Sorel, Belleville, Edmonton, Victoria
17	POR 130-18	2019 Canadian cannabis survey	The survey looks at Canadian cannabis use and habits	Jun-19	Surveys	Canadians aged 16+	n=10,000	Advanis Inc.	April 4 - June 17, 2019	Canada (online)
18	Private Poll		The survey looked for feedback on vaping behaviours in Canada, especially for youth.	Jan-20	Surveys	Canadian adults (age 18+)	n=1655	Angus Reid Institute	December 2-4, 2019	Canada (online)

Reference #	Code	Title	Objective	Publish Date	Research Methods	Inclusion Criteria	Sample Size	Author	Timeline	Locations
19	POR 047-17	Longitudinal Vaper Panel Survey to Measure Attitudes and Behaviours regarding Vaping Products	This project gathered information on attitudes and behaviours of Canadian vapers and ever users aged 15 and older on vaping products.	Apr-18	Surveys (two waves)	Canadian vapers and ever users aged 15+	First wave, n=1312; Second wave, n=1729	Environics Research Group	Wave 1: December 15- 29, 2017; Wave 2: February 1-14, 2018	Canada (online)
20	POR 014-18	Testing of Relative Risk Statements for Vaping Products	The main objective of this research is to evaluate perceptions of risk statements that can be used in the sale of vaping products.	Sep-18	Focus groups (16)	Adult vapers (18+), adult smokers (18+), youth never-users (age 15- 19), or young adult (20-24) non- users	n=124	Corporate Research Associates Inc.	August 1-16, 2018	Toronto, Vancouver, Saskatoon, Montreal
21	POR 074-17	and Segmentation for	The report aimed to highlight groups at-risk for smoking and vaping that Health Canada can use to inform tobacco/vaping strategies. (Note, the sample was drawn from the Asking Canadians online panel.)	Nov-18	Qualitative - focus groups (8) and triads (8); Quantitative - surveys	Qualitative - smoker/vapers and non-smokers/non-vapers between 13-24 years; Quantitative - Canadians between 13-24 years	Qualitative, n=88; Quantitative, n=3004	Phoenix SPI	Qualitative: February 12- 13, 2018; Triads: February 24, 2018 + June 2, 2018; Quantitative: March 26- April 24, 2018.	Qualitative: Toronto, Montreal, Ottawa; Quantitative: Canada (online)
22	POR 088-16	Qualitative/Quantit ative Research on E- cigarette Flavours and Risk Perception	This study explored Canadians' perceptions on e-cigarette flavours, and perceptions of harms associated with e-cigarette use with a special focus on youth and young adults. (Note, the sample was taken from Research Now's panel of online Canadians.)		Focus groups (12), surveys	Vapers and non-vapers between 15-24 years of age	Focus groups, n=N/A; surveys, n=1509	Phoenix SPI	Qualitative: January 30 - February 2, 2017; Quantitative: March 1- 20 2017	Qualitative: Toronto, Montreal, Vancouver; Quantitative: Canada (online)
23	POR 019-19	Health Care Providers' Views and Experiences with Smoking Cessation and Alternative Nicotine Products	Researchers wanted to gather I information on perspectives and experiences of healthcare providers with respect to nicotine products. (Note, participants were sampled from SmartPoint Research's online panel of providers.)	Nov-19	Surveys	Healthcare providers	n=1125	Phoenix SPI	August 2-30, 2019	Canada (online)