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**The 2020-2021 Youth and Young Adult Vaping Project**

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## RÉSUMÉ

**Contexte** : L'usage de la cigarette électronique (« vapoteuse ») est à la hausse. L'étude *2020-2021 Youth and Young Adult Vaping Project*, menée par la Lung Association of Nova Scotia et Smoke-Free Nova Scotia avec l'appui financier de Cœur + AVC, visait à examiner les habitudes et expériences de vapotage ainsi que les préférences de consommation des jeunes et des jeunes adultes vapoteurs au Canada.

**Méthodologie** : Au moyen d'un sondage en ligne, 3034 vapoteurs réguliers (ayant consommé un produit de vapotage au moins une fois par semaine au cours des trois derniers mois), âgés de 16 à 24 ans et résidant dans l'une des 10 provinces canadiennes (Alberta, Colombie-Britannique, Manitoba, Nouveau-Brunswick, Terre-Neuve-et-Labrador, Nouvelle-Écosse, Ontario, Île-du-Prince-Édouard, Québec et Saskatchewan) ont été interrogés sur leurs habitudes de vapotage (p. ex., nombre de journées de vapotage par semaine, nombre de séances de vapotage par jour et nombre de bouffées par séance de vapotage), leurs expériences (p. ex., consommation combinée d'autres substances), ainsi que leurs préférences de consommation en ce qui a trait aux produits (p. ex., taux de nicotine). Ce rapport présente les réponses détaillées de l'ensemble de l'échantillon, ainsi que les résultats répartis par âge, genre et région.

**Résultats** : L'échantillon analysé était constitué de 3 009 répondants. En moyenne, ils ont commencé à vapoter à l'âge de 15,79 ans. Plus de la moitié d'entre eux (53,1 %) disent avoir tenté d'arrêter de vapoter, souvent à plusieurs reprises, en vain. Le vapoteur moyen vapote six jours par semaine et 30 fois par jour, prenant environ six bouffées par séance. Depuis le déclenchement de la pandémie de COVID-19, les répondants affirment vapoter moins souvent au cours d'une semaine (cinq jours de vapotage) et par jour (23 séances quotidiennes, une baisse marquée), mais le nombre de bouffées par séance demeure essentiellement le même. Les répondants dépensent en moyenne entre 13 \$ et 22 \$ par semaine sur les produits de vapotage. L'écrasante majorité d'entre eux disent avoir utilisé la vapoteuse d'un autre consommateur (97,8 %) et avoir prêté leur propre vapoteuse (92,2 %). Ces derniers estiment que le nombre moyen de personnes ayant utilisé leur vapoteuse prêtée s'élève à 20. La moitié (50,6 %) des répondants affirment par ailleurs avoir ressenti un effet néfaste du vapotage sur leur santé. La majorité des jeunes déclarent avoir été exposés à des publicités liées au vapotage sur les plateformes des médias sociaux (70,5 %). Une majorité de répondants utilisent des dispositifs de vapotage de type « pods » (64,9 %). La quasi-totalité des vapoteurs se sont initiés au vapotage en consommant un liquide à vapoter aromatisé (91,9 %) et continuent d'en consommer aujourd'hui (90,3 %). Dans la plupart des provinces, les arômes les plus populaires auprès des jeunes – au moment de leur initiation et dans leur consommation actuelle – sont les baies, la mangue et la menthe ou le menthol. La majorité des vapoteurs consomment du liquide à vapoter contenant le taux de nicotine le plus élevé sur le marché (50 à 60 mg/ml)<sup>1</sup> (64,3 %). En ce qui a trait à la consommation de tabac, 64,1 % des répondants sont d'anciens fumeurs et 11,8 % continuent de fumer le tabac, ces derniers consommant en moyenne 17 cigarettes par semaine. Une proportion notable de répondants (36,4 %) disent connaître une personne ayant commencé à fumer du tabac après avoir été initiée au vapotage. Au cours des 30 derniers jours, la consommation de cannabis (17 jours de consommation) est plus courante que la consommation d'alcool (7 jours de consommation).

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<sup>1</sup>Pour ceux spécifiant la teneur exacte de nicotine dans leur liquide à vapoter.

**Conclusion** : Il s'agit du premier échantillon de recherche constitué de répondants provenant de toutes les provinces canadiennes. L'analyse de l'échantillon entier révèle des habitudes de vapotage préoccupantes chez les jeunes et les jeunes adultes. Les vapoteurs réguliers rapportent des habitudes et expériences de vapotage similaires d'une province à l'autre, bien que l'on constate un certain nombre de différences notables sur le plan individuel et régional. Dans le présent rapport, nous discutons de nos résultats et de leur application possible dans l'élaboration d'options viables en matière de politiques visant à limiter l'attrait du vapotage et à restreindre l'usage de la cigarette électronique chez les jeunes et les jeunes adultes canadiens. Ces politiques pourraient comprendre l'interdiction complète des arômes, l'imposition d'une limite du taux de nicotine à 20 mg/ml, l'augmentation des taxes sur les produits de vapotage et la hausse de l'âge minimum d'achat à 21 ans.

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## BACKGROUND

E-cigarette use (“vaping”) among youth and young adults is a crisis. Between 2017 and 2018, vaping among Canadians aged 16 to 19 increased by 74% (1). This trajectory signifies a red alert state. Twenty percent of Canadian students in grades 7 to 12 are current e-cigarette users, and 40% of those are daily/almost daily users (2). Comparatively, 15% of young adults (aged 20-24) are current e-cigarette users, whereas the vaping rate for the entire population (aged 15+) is only five percent (2). In response to these findings, the *2019 Youth and Young Adult Vaping Survey* was conducted by Smoke-Free Nova Scotia to better understand vaping behaviour among regular e-cigarette users between the ages of 16 and 24 in Nova Scotia. From these findings came the recommendation of five policy actions including a flavour ban, taxation, stronger enforcement of sales regulations, increasing the minimum legal age, and increasing awareness of the potential for vaping to translate into cigarette smoking. The 2019 research project has been further expanded into all provinces throughout 2020 and 2021.

### Aim and objectives

The aim of the *2020-2021 Youth and Young Adult Vaping Project* was to better understand vaping behaviour, experiences, and product preferences among regular e-cigarette users between the ages of 16 and 24 across Canada. This project was meant to act as an extension of the *2019 Youth and Young Adult Vaping Survey* at a national level. The project was made possible through funding by Heart & Stroke. Other funders included the Canadian Cancer Society, Manitoba Tobacco Reduction Alliance (MANTRA), the Manitoba Lung Association, the New Brunswick Anti-Tobacco Coalition, and the PEI Tobacco Reduction Alliance.

## METHODS

The vaping survey was pilot tested with five participants, revised, and then tested again with five volunteers to confirm that the questions were clear, and that the length of the survey did not lead to participant fatigue. Further, the answers to the pilot surveys were examined to determine whether they contained meaningful and coherent responses.

A single, comprehensive, cross-sectional survey in English was used to generate a report to better understand the issue of vaping in Canada. A French language version of the survey was

offered in both New Brunswick and Quebec. Participants had to be between the ages of 16 and 24, to have vaped at least once a week over the past three months, and to have resided in one of the regions of interest at the time of the survey. The first wave of data collection was completed in Nova Scotia between April-May 2019 and generated 543 participants. Data collection then occurred outside of Nova Scotia in two phases. The first was completed between April-May 2020 in British Columbia, Manitoba, Ontario, and the Prairies (Alberta and Saskatchewan combined) and generated 1328 participants. The second was completed between November 2020 and January 2021 in New Brunswick, Newfoundland and Labrador, Prince Edward Island, and Quebec and generated 1163 participants. The total sample consisted of 3034 participants.

Participants were recruited online using paid Facebook and Instagram ads targeted to their age and location. If they responded to the ad, they were directed to the survey landing page on Qualtrics (an online survey platform). Participants viewed an online informed consent document and were asked to provide their consent by responding “yes” or “no” to participate in the study. If they clicked “yes”, they were directed to complete the survey.

The survey included demographic questions, questions about the participants’ vaping behaviour, product preferences, and experiences, as well as a personality questionnaire and a substance use motives questionnaire. On average, the survey took approximately 20 minutes to complete. Participants who completed the survey in its entirety were offered a \$10 electronic gift card to Starbucks as remuneration. Further, all participants were invited to share their email address to be entered to win one of five \$100 gift cards from a prize draw, regardless as to whether they completed the survey.

Regional analyses were planned for British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Ontario, the Prairies region (Saskatchewan and Alberta), Prince Edward Island, and Quebec. Further, a total sample analysis of all participants was performed. The results of the data analyses will be synthesized and translated into various deliverables.

## **RESULTS**

### **Demographic information**

A total of 3034 participants completed to the end of the survey. Table 1 depicts the demographic information for the sample segmented by region. 25 participants indicated their gender as “other” and were required to specify (e.g., trans male). Since the proportion of these participants was too low (0.8%) to permit meaningful subgroup analyses, we were not able to include them where subgroup estimates were presented (Tables 2-31). The remaining sample consisted of 3009 participants. The mean age of this sample was 18.63 years. The sample was evenly distributed in terms of both age and gender (youth = 53.4%; males = 46.7%). Employed respondents were overrepresented in the sample overall (64.7%). Further, most respondents reported living in urban areas at the time of the survey (82.9%). This was especially prevalent in British Columbia (93.0%).

### **Vaping behaviour**

Table 2 reports vaping behaviour for all respondents. The average age of vaping onset among all respondents was 15.79 years. Of the 53.1% of respondents that reported a vaping quit attempt, the average number of serious quit attempts (those lasting for at least 24 hours) was 4.18. Respondents reported that since they began vaping, they engaged in vaping behaviour an average of six days per week and around 30 times per day, with approximately six puffs per vaping episode. Vaping behaviour since the onset of the COVID-19 pandemic (minus Nova Scotia as results here were collected before the pandemic) was measured and showed a difference in vaping frequency across the entire sample (averaging five days vaped per week, 23 vaping episodes per day, and less than six puffs per episode) compared to the period preceding the pandemic. Spending per week on vaping products varied by province, with the average across all regions being \$16.90. The strongest influence to start vaping for the whole sample was friends ( $n = 2037$ ), followed by wanting to quit smoking ( $n = 523$ ) and social media exposure ( $n = 143$ ). The overwhelming majority of the sample disclosed sharing behaviours in that they both had been offered to use someone else's e-cigarette (97.8%) as well as shared their own with others (92.2%). For those that have offered to share their e-cigarette, the average estimate for the number of people it was shared with was 20.33. Of the 64.9% of respondents that reported using pod-based devices, an average of 2.64 pods were used per week. Around half (50.6%) of all respondents reported experiencing negative health effects related to vaping, and 29.8% of respondents had been pressured by others to vape. Fifty-six percent of youth reported that their parents were aware of their vaping behaviour. Social media advertisement exposure was prominent across the sample (70.5%). Instagram ( $n = 760$ ), Snapchat ( $n = 604$ ), and YouTube ( $n = 454$ ) were the top three platforms of marketing exposure, respectively.

#### *Age/gender differences in vaping behaviour for the total sample*

Table 2 shows differences in vaping behaviour for the total sample segmented by age and gender. Male youth and young adults reported greater average numbers of quit attempts than female youth and young adults, with male young adults having the most (4.88). Female youth had the fewest number of days vaped per week (5.65) and male young adults had the most (6.21). Female young adults had the fewest number of vaping episodes per day (27.20), while male young adults had the most (32.99). Female young adults also had the fewest number of puffs per episode (6.03), whereas female youth had the most (6.70). Since the onset of the COVID-19 pandemic, days vaped per week decreased most notably for female youth (4.92), and vaping episodes per day decreased the most for this same group (22.48), while the number of puffs per episode decreased the most for male young adults (5.10) and, in fact, increased slightly for female young adults (6.45). Male (\$19.58) and female (\$17.60) young adults spent more per week on vaping products on average than male and female youth, with male young adults spending the most. Female youth ( $n = 702$ ) more frequently reported friends as the strongest influence to start vaping, whereas male young adults ( $n = 201$ ) more frequently reported wanting to quit smoking as being the strongest influence. Male and female youth reported sharing their vape with someone else (92.5% and 96.0%, respectively) and using someone else's vape (99.2% and 99.0%, respectively) slightly more often than male and female young adults. Male and female youth more often reported both social media (73.4% and 84.5%, respectively) and general advertisement ( $n = 491$  and  $n = 673$ , respectively) exposure than male and female young adults. Female youth more often reported negative health effects compared to the other groups (56.3%).

### *Regional differences in vaping behaviour for the total sample*

Tables 3-11 depict the vaping behaviour of the sample separated by province and segmented by age and gender. Both days vaped per week (6.32; Table 9) and vaping episodes per day (36.83; Table 9) were highest in the Prairies, whereas the number of puffs per vaping episode was highest in Nova Scotia (7.11; Table 7). After the onset of COVID-19, Ontario saw the largest decrease in days vaped per week (4.68; Table 8), the Prairies in vaping episodes per day (24.26; Table 9), and British Columbia in puffs per vaping episode (5.16; Table 3). The average spending per week on vaping products was lowest in British Columbia (\$13.03; Table 3) and highest in New Brunswick (\$21.78; Table 5), with weekly averages being comparable elsewhere.

### **Product information**

Table 12 reports product information for all respondents. Regarding the type of device, pod-based devices that contain disposable cartridges of vape juice (e.g., JUUL, Vype) were the most popular among all respondents (64.9%). Almost all users reported the use of flavoured vape juice at initiation (91.9%), as well as a preference for flavoured vape juice at present (90.3%). In most provinces, berry, mango, and mint/menthol were the most reported flavours used at initiation and at present. In general, just less than half (44.5%) of users claimed they would cease vaping if flavours were to be removed from vape juice. Of note is that 18.1% of respondents reported adding content as unintended by the product manufacturer (e.g., water) to their vape juice. Most respondents reported using vape juice containing nicotine at present (91.3%), and, among those, almost all knew the concentration of nicotine they used (97.2%). In terms of nicotine concentration, most respondents reported using between 50-60 mg/mL of nicotine (64.3%)<sup>2</sup>, the highest concentrations available.

### *Age/gender differences in product information for the total sample*

Table 12 shows the product information responses for the total sample segmented by age and gender. The preference for flavours, although common in all groups, was most prevalent for female youth respondents (93.9%). Similarly, female youth (95.1%) and young adults (91.6%) more commonly reported the use of flavours at initiation than male youth and young adults. Female young adults more often responded that they would not continue to vape if flavours were to be removed from vape juice (52.8%), whereas male youth less commonly reported this (35.3%). Across all regions, male and female youth more commonly reported using nicotine concentrations between 50-60 mg/mL in their vape juice<sup>2</sup> (73.8% and 69.0%, respectively) than male and female young adults. Male (70.3%) and female (73.8%) young adults more commonly reported using nicotine at onset, whereas male (33.5%) and female (31.7%) youth more commonly reported the use of vape juice without nicotine (this group trended more toward nicotine products after prolonged use). In general, female young adults more often used nicotine at onset, whereas male youth less often used nicotine at onset. Social sourcing of vaping products was more prevalent among youth than young adults in all regions (Tables 13-21).

### *Regional differences in product information for the total sample*

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<sup>2</sup>For those specifying the exact range of nicotine concentration used in their device.

Tables 13-21 depict product information for the sample separated by province and segmented by age and gender. Regarding regional differences, respondents in Newfoundland and Labrador more commonly reported that they would not continue to vape if flavours were removed from vape juice (54.5%; Table 16). Prince Edward Island, Nova Scotia, and Ontario were the regions with the most respondents who reported using nicotine concentrations of 50-60 mg/mL<sup>2</sup> (75.0%, 70.3%, and 69.5%, respectively; Tables 20, 17, and 18, respectively). In all regions except Newfoundland and Labrador and Ontario, participants most often purchased their vaping supplies from specialty vape shops. Purchasing or obtaining vaping products from friends was the most common mode of access in Newfoundland and Labrador (Table 16) and from retail outlets (e.g., convenience stores) was the most common mode of access in Ontario (Table 17).

### **Other substance use behaviour**

Table 22 reports substance use behaviour besides vaping for all respondents. 64.1% of respondents were former tobacco users and 11.8% were current users. The number of cigarettes smoked per week for current tobacco users ranged between 6-29 among all regions with an average of around 17. Most respondents (54.1%) with a history of tobacco use reported smoking before the onset of vaping, but a notable proportion of them reported tobacco initiation following vaping (27.1%). While many (63.6%) reported they did not know anyone who began smoking after vaping, a notable proportion (36.4%) acknowledged having peers that first vaped and then began smoking. In the last 30 days, the number of days on which cannabis was used exceeded that of alcohol across all regions, with cannabis use averaging 17 days compared to 7 days of alcohol use. Regarding alcohol consumption, occasional drinkers made up most of the sample ( $n = 1036$ ), followed by light ( $n = 552$ ) and moderate ( $n = 347$ ) drinkers.

#### *Age/gender differences in other substance use behaviour for the total sample*

Table 22 shows differences in other substance use behaviour for the total sample segmented by age and gender. On average, male (24.11 cigarettes/week) and female (21.77 cigarettes/week) young adults reported greater cigarette smoking rates compared to male and female youth. Female youth most often reported no history of tobacco use (35.5%), whereas male young adults most often reported being former tobacco users (75.0%). Male youth made up most of the current tobacco user category (13.6%). Male (38.1%) and female (31.0%) youth most often reported tobacco use as beginning after the onset of vaping, whereas male (60.9%) and female (68.8%) young adults most often reported tobacco use as preceding vaping. Cannabis use and alcohol use in the last 30 days were also higher on average among male (19.94 days and 8.59 days, respectively) and female (17.32 days and 7.18 days, respectively) young adults.

#### *Regional differences in other substance use behaviour for the total sample*

Tables 23-31 depict other substance use behaviour for the sample separated by province and segmented by age and gender. Newfoundland and Labrador had the highest levels of tobacco use overall (28.90 cigarettes/week; Table 26), whereas British Columbia reported the lowest levels (6.94 cigarettes/week; Table 23). New Brunswick reported the highest levels of cannabis use (19.13 days; Table 25), whereas Quebec reported the lowest levels (8.82 days; Table 31). In



terms of alcohol consumption, Ontario reported the largest proportion of occasional drinkers ( $n = 178$ ), British Columbia light drinkers ( $n = 90$ ), and the Prairies moderate drinkers ( $n = 63$ ) (Tables 28, 23, & 29, respectively). Only New Brunswick ( $n = 45$ ; Table 25), Newfoundland and Labrador ( $n = 35$ ; Table 26), and Quebec ( $n = 56$ ; Table 31) had participants who reported no longer consuming any alcohol.

## DISCUSSION

This study represents the first research project to assess vaping motivations and behaviours of youth and young adults in each Canadian province. The findings of this survey have generated evidence for numerous policy actions that could reduce the prevalence of vaping among youth and young adults. Our findings identified notable regional differences in vaping behaviour, including differences in days vaped, vaping episodes per day, and puffs per vaping episode. These differences call for cessation strategies to be implemented in all regions, with a particular focus being placed on those regions with the highest vaping frequencies. It is important to note that many respondents indicated a lower vaping frequency after the onset of the COVID-19 pandemic, most notably in British Columbia and Ontario. This may be related to their higher socioeconomic status/level of education, which may in turn facilitate their receptivity to warnings related to potential complications from COVID-19 for smokers and e-cigarette users compared to non-users. Alternatively, it may reflect the active initiatives of the British Columbia Centre for Disease Control and the Ontario Tobacco Research Unit to warn consumers about vaping and COVID-19 complications (3,4), or perhaps a greater difficulty in accessing vaping products amid the pandemic restrictions in these provinces.

The product information section of the survey produced consistent results across the sample with respect to high nicotine concentration, a preference for non-tobacco flavours, and the low cost of vaping. These findings highlight the need for three universal policies: Nicotine concentration caps, flavour bans, and higher taxation in all jurisdictions. Below we outline each of these policy recommendations with support from our findings. We also identify other areas of concern that could inform additional interventions targeted at youth and young adult vaping.

### **Nicotine concentration**

Our findings suggest that not only do youth and young adult e-cigarette users use mostly nicotine-based products, but they most often choose products with some of the highest nicotine concentrations (50-60 mg/mL). The importance of this issue cannot be overstated as our results show that youth more commonly select vape juice with the highest available nicotine concentrations as compared to young adults. This evidence culminates in the need for nicotine caps. The European Union precedent of capping nicotine content to 20 mg/mL has been introduced in British Columbia and Nova Scotia in 2020 and can effectively address this issue (5). Nicotine caps have been proposed at the federal level and have been pledged in Quebec, as well as being discussed as a potential policy initiative in Prince Edward Island.

### **Preference for flavoured products**

Both the preference for and importance of non-tobacco flavours among youth and young adults is evident from their willingness to quit vaping if flavours were removed, especially among female young adults. Of note are the preferences of berry, mango, and menthol flavours in this demographic. By comparison, adult vapers are more likely to equally prefer tobacco and non-tobacco flavours (6). These findings suggest that flavour bans are both important and likely to be very impactful in decreasing vaping behaviour within this demographic. This recommendation and set of findings are consistent with past literature that has demonstrated the importance of flavours, the reluctance to continue to vape in their absence, and the likely impact of a flavour ban on vaping behaviour in this demographic, underscoring the importance of flavour bans in reducing the appeal of vaping to young persons (6). Flavour bans were introduced in Nova Scotia in 2020, and in Prince Edward Island in 2021. Quebec has pledged to ban flavoured vape products and a national flavour ban has also been discussed by Health Canada. Other nations, such as the United Kingdom, have also banned or restricted flavours.

### **Affordability of vaping**

The average spending per week across the sample demonstrates the affordability of e-cigarettes in comparison to traditional cigarettes. On average, participants reported spending approximately \$17 per week on vaping, which is less than a single pack of cigarettes in most Canadian regions. Thus, we would expect a regular smoker who uses a pack of cigarettes per day to spend at least six-times more than that per week. This minimal weekly spending warrants greater taxation on vaping products in all jurisdictions to decrease its affordability within this population, especially among youth as they are the most price sensitive. Evidence on the effectiveness of taxation has been demonstrated with tobacco and alcohol products (7). British Columbia and Nova Scotia introduced new taxation on vaping products in 2020, and Newfoundland and Labrador did so in 2021. More than 50 jurisdictions around the world have implemented a tax on vaping products as a means to deter youth initiation.

### **Co-use of other substances**

The prevalence of smoking and cannabis use within the sample demonstrates a pattern of co-use that exists between e-cigarettes and other substances. In Nova Scotia, the proportion of dual e-cigarette users and smokers far exceeds those of the other regions that were surveyed. Smoking is also more common on average among young adults in Manitoba, New Brunswick, and Newfoundland and Labrador, and female young adults in Prince Edward Island and Quebec. Further, cannabis use is higher among young adults than youth across all regions. It should be noted that cannabis use far exceeds alcohol use in all regions, and that three provinces with high rates of cannabis use had respondents who reported no longer consuming alcohol. These results are consistent with past literature that demonstrates a link between e-cigarette, tobacco, and cannabis use among adolescents (8) and that alcohol use in this demographic is decreasing while cannabis use remains consistent (2). These regions would benefit from a multi-faceted smoking cessation approach that targets substance co-use, focusing on young adults in particular. Smoking cessation strategies must target both traditional cigarettes and cannabis to be maximally effective in limiting their co-use with e-cigarettes.

### **Underage access to vaping products**

The role of specialty vape shops in permitting underage access to vaping products is of utmost concern. It is clear from our findings that youth are either themselves, or through an adult source, acquiring vaping products through these outlets. Our results demonstrate that specialty vape shops are the primary means of purchase for both e-cigarettes and vape juice in all provinces except Newfoundland and Labrador and Ontario. Further, a sizeable portion of youth respondents in our survey disclosed purchasing their vaping products from these locations. Enforcement rights for peace officers and very high penalties for shops found in violation of minor sale compliance are needed. Also needed is a requirement for licensing to sell vaping products to easily track violators and implement an escalating penalty for each consecutive violation. The United States Surgeon General report on youth and young adult e-cigarette use provides support for giving individual jurisdictions the right to take action to regulate how sales to minors are policed (9).

### **Negative health effects**

A significant proportion of all respondents reported experiencing negative health effects related to their e-cigarette use. The fact that our survey respondents reported negative health effects is consistent with emerging literature on e-cigarette or vaping product use-associated lung injury (EVALI). Over 2800 hospitalizations have occurred in the United States due to EVALI as of February 2020. Of those experiencing EVALI, over half are under the age of 24. Vitamin E acetate has been identified as a key causal factor of EVALI and further efforts should be made to remove this substance from all vape juices. Further, the fact that our results demonstrate a similar proportion of respondents who reported both negative health effects and the use of high levels of nicotine is consistent with the finding that over half of all EVALI patients are nicotine users (10). In all, this suggests that negative effects related to nicotine are possible, and this relationship has been emerging in recent studies (11).

### **Transition from vaping to smoking**

The knowledge of someone who initiated smoking after using e-cigarettes was common among respondents, especially youth. This speaks to the existing literature that suggests regular e-cigarette users are five-times more likely than non-e-cigarette users to become regular smokers in the absence of any tobacco use history (12). This further strengthens the need for prevention efforts, vaping cessation programs, and services that are aimed at both youth and young adults to prevent the initiation of e-cigarette use and the subsequent use of traditional cigarettes. As great strides have been made to reduce youth and young adult smoking rates, it is important to target this new potential gateway into smoking within this demographic.

### **Parental knowledge of vaping and social sources of vaping products**

A troublingly large percentage of parents of youth respondents were aware of their children's vaping behaviour. In general, around half of all youth surveyed reported that their parents were aware that they vape, although parental support was not measured. Related to this point is access to vaping products through social sources. More youths than young adults in our sample reported purchasing their vaping supplies from a social source. This finding identifies friends as a notable access point and speaks to the need for increasing the legal age for purchasing vaping products to

21 years, effectively minimizing the opportunity for social sourcing among youth. This step has been taken in Prince Edward Island and various American jurisdictions where the legal age has been raised to 21 years (13).

### **Advertisement of vaping products**

As it relates to advertisements, a notable percentage of all respondents in our sample reported being exposed to ads for vaping products on several mediums, most notably Instagram and Snapchat. This highlights the need to implement federal restrictions on social media content (both industry- and user-generated) that concerns vaping, while also being mindful of cross-border content that is viewable in Canada.

### **Pod-based devices**

Pod-based devices were the most popular type of device used by our sample by a significant margin. This result is consistent with past literature that demonstrates how pod-based devices are appealing to adolescent e-cigarette users for reasons that include flavours, higher nicotine concentrations, discreteness, and attractive product design (14). They are also cheaper than third-generation mod devices and are therefore appealing to price sensitive youth. The literature relating to pod-based devices further supports the need for nicotine concentration caps, flavour bans, and higher taxation as these elements have been identified as part of the appeal of these devices. The popularity of these devices calls for regulatory measures that limit their accessibility to young e-cigarette users.

### **A note on vaping policy implementation**

It should be noted that despite the implementation of vaping policies in certain Canadian jurisdictions, frequency of vaping behaviour, a preference for non-tobacco flavours, the use of high nicotine concentrations, and high levels of weekly spending on vaping were consistent across all surveyed regions. This finding is expected given that the timelines of data collection often coincided with or preceded the implementation of these policies. For example, data collection in Nova Scotia preceded the implementation of the flavour ban, nicotine cap, and taxation. Further, policies that were implemented elsewhere (nicotine caps in British Columbia, flavour bans in Prince Edward Island, and taxation increases in British Columbia and Newfoundland and Labrador) all came either during the months immediately before or after data collection was carried out. Past evidence on substance use initiatives demonstrate that it can take up to 3 years to begin to recognize notable changes in substance use behaviour (15).

## **CONCLUSION**

The *2020-2021 Youth and Young Adult Vaping Survey* was conducted to better understand the vaping behaviour, experiences, and product preferences of youth and young adult e-cigarette users across several Canadian regions. The survey identified key differences that exist between provinces and within age and gender groups. Importantly, the survey identified key areas for policy and regulatory action to target the vaping crisis in youth and young adults. Our study highlights the need for nicotine concentration caps to limit the addictive potential of e-cigarettes.

Flavour bans may reduce the prevalence of vaping within this population by reducing the desirability of vaping to those who prefer flavours. Taxation and further regulatory measures aimed at specialty vape shops are needed to both deter youth and reduce the likelihood of them acquiring vaping products through this outlet. Raising the minimum age of purchase to 21 years will allow underage youth fewer opportunities to access vaping products through social sources. As is the case with traditional tobacco products, both prevention and cessation strategies must be employed alongside federal regulations concerning social media content and advertising to reduce the social acceptability of vaping, encourage youth and young adults to abstain from vaping, and prevent the onset of tobacco use. In sum, e-cigarette use among youth and young adults represents a red alert state. This evidence must be taken into account and mobilized through proper resources and policies to reduce the use of e-cigarettes within this population.

### **LIMITATIONS**

The findings of this project are subject to some limitations. Firstly, participants were all regular e-cigarette users (once a week over the last three months) and thus our conclusions cannot be extended to infrequent or experimental e-cigarette users. Secondly, the survey was cross-sectional and thus cause-effect relationships cannot be determined. Third, data collection occurred in various stages and therefore falls victim to potential variability over time in terms of vaping behaviour. Since the results of our study are consistent across all regions, this limitation does not take away from the reliability or validity of the study. Fourth, this study did not examine vaping among racial, ethnic, and gender diverse groups. While we recognize the importance of diversity and acknowledge that vapers may differ based on these variables, financial restraints restricted our ability to conduct such analyses. Lastly, this study examined frequency and not prevalence. Changes in vaping behaviour are more likely to be identified by measuring prevalence and should be reflected in the next CSTADS/CTADS. Further, the COVID-19 pandemic has diverted public health attention away from policy enforcement due to a shifting need for resources in other areas. For this reason, noticeable changes may not occur for at least 12-18 months after several policies have been implemented.

### **FUNDING AND ACKNOWLEDGEMENTS**

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## **REVISION HISTORY**

Version: November 3, 2020

- This version required changes to Tables 1-19. We discovered that the designation for male youth (16-18) was incorrectly coded during analysis and, as a result, 25 cases that were not eligible for analysis were incorrectly assigned as male youth. The estimates for male youth, along with the total column, have been corrected and the in-text references to the above mentioned were also corrected in the results and discussion sections of the report. Once corrected, there were no changes to the in-text interpretation of the estimates in the results or discussion sections of the report. We performed a thorough check of all estimates to ensure no other errors were made.
- Added a limitation to the report concerning the generalizability of our findings to ethnic, racial, and gender diverse groups.

- A footnote in Table 1 was revised to provide clarification concerning gender-based analysis and a more detailed description of it was added in the results section.
- Added recognition for additional project funders in the background and funding and acknowledgements sections.

Version: March 1, 2021

- Data and tables for New Brunswick, Newfoundland and Labrador, Prince Edward Island, and Quebec were added. The tables were then renumbered accordingly (1-31).
- Estimates for questions pertaining to cannabis and alcohol use in the last 30 days have been modified (Tables 22-31). Respondents who answered no use (0 days) in the last 30 days were excluded from analysis. This produces a more meaningful estimate of e-cigarette users who use cannabis and/or alcohol.
- Product and e-juice purchase location were added to Table 12.
- The body of the report was modified to reflect the added data.

Version: March 12, 2021

- The body of the report was modified and finalized.

Table 1. Demographic information of youth and young adult e-cigarette users by region.

Variables	Region									
	British Columbia, <i>M (SD)</i>	Manitoba, <i>M (SD)</i>	New Brunswick, <i>M (SD)</i>	Newfoundland and Labrador, <i>M (SD)</i>	Nova Scotia, <i>M (SD)</i>	Ontario, <i>M (SD)</i>	Prairies, <i>M (SD)</i>	Prince Edward Island, <i>M (SD)</i>	Quebec, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Age</b>	18.46 (1.93)	18.37 (2.03)	19.58 (2.53)	18.62 (2.25)	18.55 (2.22)	18.5 (1.91)	18.19 (1.79)	18.98 (2.36)	18.51 (2.25)	18.63 (2.17)
Variables	Region									
	British Columbia, <i>N (%)</i>	Manitoba, <i>N (%)</i>	New Brunswick, <i>N (%)</i>	Newfoundland and Labrador, <i>N (%)</i>	Nova Scotia, <i>N (%)</i>	Ontario, <i>N (%)</i>	Prairies, <i>N (%)</i>	Prince Edward Island, <i>N (%)</i>	Quebec, <i>N (%)</i>	Total, <i>N (%)</i>
<b>Age by category</b>										
Youth (16-18)	159 (50.5)	146 (58.9)	119 (39.1)	168 (58.5)	302 (55.6)	198 (49.3)	212 (58.4)	140 (51.3)	175 (58.5)	1606 (53.4)
Young adult (19-24)	156 (49.5)	102 (41.1)	185 (60.9)	119 (41.5)	241 (44.4)	204 (50.7)	151 (41.6)	133 (48.7)	124 (41.5)	1403 (46.6)
<b>Gender<sup>2</sup></b>										
Male	161 (51.1)	122 (49.2)	114 (37.5)	95 (33.1)	286 (52.7)	201 (50.0)	185 (51.0)	94 (34.4)	148 (49.5)	1406 (46.7)
Female	149 (47.3)	120 (48.4)	190 (62.5)	192 (66.9)	252 (46.4)	196 (48.8)	174 (47.9)	179 (65.6)	151 (50.5)	1603 (53.3)
<b>Currently employed</b>										
Yes	183 (58.1)	164 (66.1)	197 (64.8)	170 (59.2)	418 (77.0)	236 (58.7)	213 (58.7)	159 (58.2)	219 (73.2)	1948 (64.7)
No	132 (41.9)	84 (33.9)	107 (35.2)	117 (40.8)	125 (23.0)	166 (41.3)	150 (41.3)	114 (41.8)	80 (26.8)	1061 (35.3)
<b>Geographical location*<sup>1</sup></b>										
Rural	22	53	67	58	---	52	48	88	35	422



	(7.0)	(21.4)	(22.1)	(20.4)	---	(12.9)	(13.3)	(32.4)	(11.7)	(17.1)
Urban	293	195	236	227		350	314	184	264	2044
	(93.0)	(78.6)	(77.9)	(79.6)		(87.1)	(86.7)	(67.6)	(88.3)	(82.9)

*Note.* Prairies: Alberta (N = 205) and Saskatchewan (N = 154). \*Denotes a question not asked in or not measured in the same manner as the Nova Scotia survey and thus Nova Scotia data is excluded from these responses. <sup>1</sup>Question was not answered by all participants. <sup>2</sup>Participants that entered gender as “other” were required to specify (e.g., trans male). Because the proportion of these participants was too low to produce meaningful subgroup estimates, they were not included in in tables 2-31.

Table 2. *Vaping behaviour for the total sample.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Age of onset</b>	14.49 (1.29)	16.92 (2.02)	14.59 (1.28)	17.48 (2.20)	15.79 (2.18)
<b>Number of serious quit attempts (&gt;24 hours)</b>	4.60 (8.96)	4.88 (8.45)	3.97 (8.00)	3.13 (3.74)	4.18 (7.75)
<b>Days vaped per week</b>	6.02 (1.88)	6.21 (1.68)	5.65 (2.05)	5.91 (1.89)	5.93 (1.90)
<b>Vaping episodes per day</b>	31.49 (32.67)	32.99 (32.72)	28.82 (31.80)	27.20 (30.03)	30.04 (31.88)
<b>Number of puffs per episode</b>	6.52 (5.62)	6.27 (5.45)	6.70 (5.45)	6.03 (4.71)	6.40 (5.33)
<b>Since the onset of COVID-19*</b>					
Days vaped per week	5.30 (2.40)	5.20 (2.33)	4.92 (2.43)	5.41 (2.21)	5.19 (2.35)
Vaping episodes per day	23.54 (30.94)	22.64 (29.31)	22.48 (30.04)	22.55 (28.03)	22.78 (29.57)
Number of puffs per episode	5.45 (5.08)	5.10 (4.78)	6.06 (5.50)	6.45 (6.03)	5.83 (5.43)
<b>Number of people who have used your e-cigarette</b>	26.53 (33.05)	21.96 (34.52)	19.74 (25.92)	13.28 (20.04)	20.33 (29.09)
<b>Average spending per week on vaping products</b>	15.63 (14.73)	19.58 (16.69)	14.63 (14.29)	17.60 (16.32)	16.90 (15.67)
<b>Pods used per week (pod-based devices)*</b>	2.81 (2.65)	3.22 (2.60)	2.26 (2.19)	2.49 (2.00)	2.64 (2.38)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. \*Denotes a question not asked in or not measured in the same manner as the Nova Scotia survey and thus Nova Scotia data is excluded from these responses.

Table 2. Vaping behaviour for the total sample (continued).

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Ever tried to quit vaping</b>					
Yes	420 (59.4)	375 (53.6)	477 (53.1)	326 (46.3)	1598 (53.1)
No	287 (40.6)	324 (46.4)	422 (46.9)	378 (53.7)	1411 (46.9)
<b>Strongest influence to start vaping<sup>1</sup></b>					
Friends	520	379	702	436	2037
Wanting to quit smoking	83	201	62	177	523
Social media exposure	26	23	64	30	143
<b>Negative side-effects<sup>2</sup></b>					
Yes	298 (48.6)	301 (48.8)	418 (56.3)	282 (47.6)	1299 (50.6)
No	315 (51.4)	316 (51.2)	325 (43.7)	311 (52.4)	1267 (49.4)
<b>Pressure from others to vape</b>					
Yes	230 (32.5)	182 (26.0)	302 (33.6)	183 (26.0)	897 (29.8)
No	477 (67.5)	517 (74.0)	597 (66.4)	521 (74.0)	2112 (70.2)
<b>Offered to share your e-cigarette<sup>2</sup></b>					
Yes	628 (92.5)	609 (88.9)	816 (96.0)	625 (90.3)	2678 (92.2)
No	51 (7.5)	76 (11.1)	34 (4.0)	67 (9.7)	228 (7.8)
<b>Have been offered to use someone else's e-cigarette</b>					
Yes	701 (99.2)	673 (96.3)	890 (99.0)	680 (96.6)	2944 (97.8)
No	6 (0.8)	26 (3.7)	9 (1.0)	24 (3.4)	65 (2.2)
<b>Parental knowledge of vaping behaviour<sup>2,3</sup></b>					
Yes	365 (61.9)	---	391 (51.4)	---	756 (56.0)
No	225 (38.1)	---	370 (48.6)	---	595 (44.0)
<b>Social media advertisement exposure</b>					
Yes	519 (73.4)	376 (53.8)	760 (84.5)	465 (66.1)	2120 (70.5)
No	188 (26.4)	323 (46.2)	139 (15.5)	239 (33.9)	889 (29.5)
<b>Top advertisement exposure platforms<sup>1</sup></b>					
Instagram	208	165	246	141	760
Snapchat	158	115	247	84	604
YouTube	125	85	180	64	454
No exposure	372	418	471	449	1710

Note. Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported. <sup>2</sup>Participants who answered "I don't know" to this question were not included in this estimate. <sup>3</sup>Question not asked to young adults.

Table 3. *Vaping behaviour for British Columbia respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Age of onset</b>	14.38 (1.36)	16.68 (1.97)	14.53 (1.20)	17.08 (2.11)	15.65 (2.09)
<b>Number of serious quit attempts (&gt; 24 hours)</b>	13.01 (66.33)	5.43 (7.38)	3.22 (2.78)	2.69 (1.79)	6.52 (36.30)
<b>Days vaped per week</b>	5.91 (1.96)	5.89 (2.00)	5.84 (1.85)	6.11 (1.80)	5.94 (1.90)
<b>Vaping episodes per day</b>	27.15 (31.61)	27.41 (29.78)	28.44 (29.46)	27.73 (30.51)	27.67 (30.22)
<b>Number of puffs per episode</b>	5.69 (4.54)	5.58 (4.79)	5.92 (4.21)	6.70 (4.53)	5.96 (4.52)
<b>Since the onset of COVID-19</b>					
Days vaped per week	5.18 (2.39)	4.56 (2.74)	4.46 (2.40)	5.22 (2.32)	4.88 (2.44)
Vaping episodes per day	18.42 (26.61)	13.93 (20.24)	13.69 (23.02)	15.56 (19.43)	15.64 (22.77)
Number of puffs per episode	4.00 (2.52)	6.04 (6.96)	4.90 (2.93)	6.25 (4.08)	5.16 (4.20)
<b>Number of people who have used your e-cigarette</b>	27.40 (31.82)	29.56 (39.86)	23.75 (27.69)	16.82 (22.84)	24.43 (31.37)
<b>Average spending per week on vaping products</b>	12.39 (13.45)	15.24 (13.85)	8.75 (7.94)	14.68 (9.39)	13.03 (11.79)
<b>Pods used per week (pod-based devices)</b>	2.54 (2.65)	2.86 (1.83)	2.00 (1.51)	2.38 (1.86)	2.47 (2.03)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24.

Table 3. Vaping behaviour for British Columbia respondents (continued).

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Ever tried to quit vaping</b>					
Yes	57 (70.4)	46 (57.5)	45 (60.0)	45 (60.8)	193 (62.3)
No	24 (29.6)	34 (42.5)	30 (40.0)	29 (39.2)	117 (37.7)
<b>Strongest influence to start vaping<sup>1</sup></b>					
Friends	53	49	54	56	212
Quitting smoking	11	18	7	13	49
Social media exposure	3	3	7	0	13
<b>Negative side-effects<sup>2</sup></b>					
Yes	35 (47.3)	39 (57.4)	40 (64.5)	32 (58.2)	146 (56.4)
No	39 (52.7)	29 (42.6)	22 (35.5)	23 (41.8)	113 (43.6)
<b>Pressure from others to vape</b>					
Yes	21 (25.9)	24 (30.0)	24 (32.0)	23 (31.1)	92 (29.7)
No	60 (74.1)	56 (60.0)	51 (68.0)	51 (68.9)	218 (70.3)
<b>Offered to share your e-cigarette<sup>2</sup></b>					
Yes	78 (100.0)	70 (89.7)	71 (97.3)	71 (95.9)	290 (95.7)
No	0 (0.0)	8 (10.3)	2 (2.7)	3 (4.1)	13 (4.3)
<b>Have used someone else's e-cigarette</b>					
Yes	81 (100.0)	76 (95.0)	75 (100.0)	74 (100.0)	306 (98.7)
No	0 (0.0)	4 (5.0)	0 (0.0)	0 (0.0)	4 (1.3)
<b>Parental knowledge of vaping behaviour<sup>2,3</sup></b>					
Yes	33 (48.5)	---	30 (50.0)	---	63 (49.2)
No	35 (51.5)	---	30 (50.0)	---	65 (50.8)
<b>Social media advertisement exposure</b>					
Yes	62 (76.5)	49 (61.3)	65 (86.7)	54 (73.0)	230 (74.2)
No	19 (23.5)	31 (38.7)	10 (13.3)	20 (27.0)	80 (25.8)
<b>Top advertisement exposure platforms<sup>1</sup></b>					
Instagram	26	28	15	16	85
Billboards	20	17	16	15	68
Snapchat	17	15	19	9	60
No exposure	36	34	37	36	143

Note. Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported. <sup>2</sup>Participants who answered "I don't know" to this question were not included in this estimate. <sup>3</sup>Question not asked to young adults.

Table 4. *Vaping behaviour for Manitoba respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Age of onset</b>	14.65 (1.14)	16.79 (2.23)	14.66 (1.22)	16.73 (2.05)	15.52 (1.94)
<b>Number of serious quit attempts (&gt; 24 hours)</b>	4.61 (5.76)	4.76 (8.83)	3.97 (10.98)	4.36 (6.00)	4.40 (8.35)
<b>Days vaped per week</b>	6.14 (1.71)	6.45 (1.35)	6.22 (1.67)	6.11 (1.74)	6.23 (1.62)
<b>Vaping episodes per day</b>	35.21 (34.24)	36.16 (32.53)	33.87 (33.96)	28.73 (30.94)	33.83 (33.07)
<b>Number of puffs per episode</b>	6.45 (4.82)	6.41 (5.56)	7.64 (4.80)	7.45 (5.93)	7.00 (5.21)
<b>Since the onset of COVID-19</b>					
Days vaped per week	5.26 (2.49)	4.53 (2.59)	5.08 (2.55)	5.50 (1.92)	5.10 (2.43)
Vaping episodes per day	20.27 (26.50)	19.84 (30.46)	27.95 (33.08)	14.61 (21.10)	21.94 (28.98)
Number of puffs per episode	5.55 (5.11)	4.68 (5.49)	7.11 (5.68)	10.94 (10.41)	6.87 (6.76)
<b>Number of people who have used your e-cigarette</b>	22.25 (32.10)	18.00 (20.50)	19.01 (23.05)	16.79 (22.92)	19.31 (25.36)
<b>Average spending per week on vaping products</b>	11.59 (11.24)	18.72 (14.01)	13.58 (14.58)	8.80 (6.41)	13.34 (12.71)
<b>Pods used per week (pod-based devices)</b>	2.89 (2.08)	4.35 (4.26)	2.50 (1.85)	1.63 (1.61)	2.90 (2.68)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24.

Table 4. Vaping behaviour for Manitoba respondents (continued).

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Ever tried to quit vaping</b>					
Yes	38 (57.6)	29 (51.8)	41 (53.9)	22 (50.0)	130 (53.7)
No	28 (42.4)	27 (48.2)	35 (46.1)	22 (50.0)	112 (46.3)
<b>Strongest influence to start vaping<sup>1</sup></b>					
Friends	52	25	57	27	161
Quitting smoking	6	21	6	8	41
Social media exposure	1	3	5	3	12
<b>Negative side-effects<sup>2</sup></b>					
Yes	31 (54.4)	21 (42.3)	38 (60.3)	19 (54.3)	109 (53.4)
No	26 (45.6)	28 (57.7)	25 (39.7)	16 (45.7)	95 (46.6)
<b>Pressure from others to vape</b>					
Yes	22 (33.3)	6 (10.7)	18 (23.7)	8 (18.2)	54 (22.3)
No	44 (66.7)	50 (89.3)	58 (72.3)	36 (81.8)	188 (77.7)
<b>Offered to share your e-cigarette<sup>2</sup></b>					
Yes	61 (95.3)	45 (81.8)	72 (97.3)	39 (90.7)	217 (91.9)
No	3 (4.7)	10 (18.2)	2 (2.7)	4 (9.3)	19 (8.1)
<b>Have used someone else's e-cigarette</b>					
Yes	66 (100.0)	51 (91.1)	76 (100.0)	43 (97.7)	236 (97.5)
No	0 (0.0)	5 (8.9)	0 (0.0)	1 (2.3)	6 (2.5)
<b>Parental knowledge of vaping behaviour<sup>2,3</sup></b>					
Yes	29 (55.8)	---	30 (46.2)	---	59 (50.4)
No	23 (44.2)	---	35 (53.8)	---	58 (49.6)
<b>Social media advertisement exposure</b>					
Yes	48 (72.7)	23 (41.1)	64 (84.2)	30 (68.2)	165 (68.2)
No	18 (27.3)	33 (58.9)	12 (15.8)	14 (31.8)	77 (31.8)
<b>Top advertisement exposure platforms<sup>1</sup></b>					
Instagram	24	8	21	7	60
YouTube	12	7	16	4	39
Snapchat	10	9	14	3	36
No exposure	40	40	44	35	159

Note. Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported. <sup>2</sup>Participants who answered "I don't know" to this question were not included in this estimate. <sup>3</sup>Question not asked to young adults.

Table 5. *Vaping behaviour for New Brunswick respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Age of onset</b>	14.15 (1.21)	17.14 (2.20)	14.46 (1.21)	17.89 (2.44)	16.31 (2.53)
<b>Number of serious quit attempts (&gt; 24 hours)</b>	6.43 (14.45)	10.37 (18.32)	3.49 (3.96)	3.15 (2.06)	5.79 (11.77)
<b>Days vaped per week</b>	6.32 (1.51)	6.26 (1.54)	5.71 (1.98)	6.30 (1.46)	6.13 (1.66)
<b>Vaping episodes per day</b>	43.62 (39.61)	32.39 (32.17)	35.35 (33.70)	27.29 (27.67)	32.71 (32.31)
<b>Number of puffs per episode</b>	7.85 (6.90)	5.69 (5.75)	5.85 (4.10)	5.57 (4.45)	5.93 (5.07)
<b>Since the onset of COVID-19</b>					
Days vaped per week	5.10 (2.28)	5.64 (1.97)	5.21 (2.21)	5.86 (1.96)	5.55 (2.06)
Vaping episodes per day	45.90 (46.96)	24.86 (28.79)	36.00 (37.43)	27.09 (32.54)	30.77 (34.73)
Number of puffs per episode	7.70 (8.35)	4.04 (3.07)	6.12 (5.99)	4.72 (4.83)	5.22 (5.28)
<b>Number of people who have used your e-cigarette</b>	35.09 (45.21)	20.93 (36.78)	23.03 (39.63)	10.64 (22.30)	19.76 (35.42)
<b>Average spending per week on vaping products</b>	19.76 (15.93)	26.45 (22.61)	15.89 (13.45)	22.60 (20.29)	21.78 (19.46)
<b>Pods used per week (pod-based devices)</b>	2.19 (1.82)	3.22 (2.10)	2.03 (1.73)	2.21 (1.56)	2.36 (1.81)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24.



Table 5. *Vaping behaviour for New Brunswick respondents (continued).*

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Ever tried to quit vaping</b>					
Yes	23 (67.6)	49 (61.3)	49 (57.6)	48 (45.7)	169 (55.6)
No	11 (32.4)	31 (38.7)	36 (42.4)	57 (54.3)	135 (44.4)
<b>Strongest influence to start vaping<sup>1</sup></b>					
Friends	26	48	67	56	197
Quitting smoking	4	21	6	34	65
Social media exposure	2	2	7	3	14
<b>Negative side-effects<sup>2</sup></b>					
Yes	18 (56.3)	35 (49.3)	40 (58.8)	44 (47.3)	137 (51.9)
No	14 (43.7)	36 (50.7)	28 (41.2)	49 (52.7)	127 (48.1)
<b>Pressure from others to vape</b>					
Yes	10 (29.4)	17 (21.3)	37 (43.5)	22 (21.0)	86 (28.3)
No	24 (70.6)	63 (78.7)	48 (56.5)	83 (79.0)	218 (71.7)
<b>Offered to share your e-cigarette<sup>2</sup></b>					
Yes	32 (94.1)	68 (85.0)	80 (94.1)	91 (86.7)	271 (89.7)
No	2 (5.9)	11 (13.8)	4 (4.7)	14 (13.3)	31 (10.3)
<b>Have used someone else's e-cigarette</b>					
Yes	33 (97.1)	77 (96.3)	84 (98.8)	98 (93.3)	292 (96.1)
No	1 (2.9)	3 (3.7)	1 (1.2)	7 (6.7)	12 (3.9)
<b>Parental knowledge of vaping behaviour<sup>2,3</sup></b>					
Yes	20 (69.0)	---	50 (66.7)	---	70 (67.3)
No	9 (31.0)	---	25 (33.3)	---	34 (32.7)
<b>Social media advertisement exposure</b>					
Yes	23 (67.6)	37 (46.3)	71 (83.5)	60 (57.1)	191 (62.8)
No	11 (32.4)	43 (53.7)	14 (16.5)	45 (42.9)	113 (37.2)
<b>Top advertisement exposure platforms<sup>1</sup></b>					
Instagram	11	17	24	21	73
Facebook	5	13	17	16	51
Snapchat	7	10	22	12	51
No exposure	20	53	42	74	189

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported. <sup>2</sup>Participants who answered "I don't know" to this question were not included in this estimate. <sup>3</sup>Question not asked to young adults.

Table 6. *Vaping behaviour for Newfoundland and Labrador respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Age of onset</b>	14.03 (1.44)	16.74 (2.35)	14.38 (1.51)	17.47 (2.38)	15.50 (2.42)
<b>Number of serious quit attempts (&gt; 24 hours)</b>	3.69 (2.70)	2.86 (1.53)	4.00 (3.88)	2.88 (3.48)	3.52 (3.27)
<b>Days vaped per week</b>	5.97 (1.93)	5.26 (2.50)	5.61 (2.03)	5.41 (2.17)	5.59 (2.11)
<b>Vaping episodes per day</b>	35.85 (35.94)	26.74 (31.27)	33.25 (36.81)	24.55 (29.05)	30.46 (33.99)
<b>Number of puffs per episode</b>	6.90 (5.81)	6.09 (4.78)	8.10 (6.95)	7.54 (6.13)	7.44 (6.26)
<b>Since the onset of COVID-19</b>					
Days vaped per week	5.41 (2.30)	3.87 (2.64)	5.02 (2.14)	5.59 (2.11)	5.10 (2.26)
Vaping episodes per day	22.91 (28.75)	24.87 (36.36)	22.69 (31.82)	29.62 (34.66)	24.91 (32.40)
Number of puffs per episode	6.32 (4.36)	4.20 (2.88)	6.38 (6.32)	9.41 (7.75)	6.91 (6.29)
<b>Number of people who have used your e-cigarette</b>	35.27 (48.15)	17.00 (36.50)	21.60 (31.86)	12.54 (19.14)	21.23 (34.35)
<b>Average spending per week on vaping products</b>	19.02 (16.99)	17.81 (20.26)	15.88 (15.19)	23.34 (23.53)	19.34 (19.48)
<b>Pods used per week (pod-based devices)</b>	3.70 (4.23)	2.35 (1.81)	2.10 (1.78)	2.87 (2.35)	2.68 (2.67)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24.

Table 6. *Vaping behaviour for Newfoundland and Labrador respondents (continued).*

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Ever tried to quit vaping</b>					
Yes	39 (63.9)	21 (61.8)	59 (55.1)	32 (37.6)	151 (52.6)
No	22 (36.1)	13 (38.2)	48 (44.9)	53 (62.4)	136 (47.4)
<b>Strongest influence to start vaping<sup>1</sup></b>					
Friends	42	19	86	56	203
Quitting smoking	9	10	4	21	44
Social media exposure	4	2	8	3	17
<b>Negative side-effects<sup>2</sup></b>					
Yes	25 (49.0)	16 (53.3)	54 (62.1)	27 (39.1)	122 (51.5)
No	26 (51.0)	14 (46.7)	33 (37.9)	42 (60.9)	115 (48.5)
<b>Pressure from others to vape</b>					
Yes	24 (39.3)	6 (17.6)	50 (46.7)	26 (30.6)	106 (36.9)
No	37 (60.7)	28 (82.4)	57 (53.3)	59 (69.4)	181 (60.1)
<b>Offered to share your e-cigarette<sup>2</sup></b>					
Yes	52 (85.3)	29 (85.3)	97 (90.6)	74 (87.1)	252 (91.0)
No	6 (9.8)	4 (11.8)	5 (4.7)	10 (11.8)	25 (9.0)
<b>Have used someone else's e-cigarette</b>					
Yes	60 (98.4)	33 (97.1)	104 (97.2)	81 (95.3)	278 (96.9)
No	1 (1.6)	1 (2.9)	3 (2.8)	4 (4.7)	9 (3.1)
<b>Parental knowledge of vaping behaviour<sup>2,3</sup></b>					
Yes	28 (54.9)	---	34 (42.0)	---	62 (47.0)
No	23 (45.1)	---	47 (58.0)	---	70 (53.0)
<b>Social media advertisement exposure</b>					
Yes	46 (75.4)	19 (55.9)	94 (87.9)	66 (77.6)	225 (78.4)
No	15 (24.6)	15 (44.1)	13 (12.1)	19 (22.4)	62 (21.6)
<b>Top advertisement exposure platforms<sup>1</sup></b>					
Snapchat	23	8	36	11	78
Instagram	19	9	28	18	74
YouTube	19	8	23	7	57
No exposure	30	18	59	55	162

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported. <sup>2</sup>Participants who answered "I don't know" to this question were not included in this estimate. <sup>3</sup>Question not asked to young adults.

Table 7. *Vaping behaviour for Nova Scotia respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Age of onset</b>	14.64 (1.27)	17.36 (2.01)	15.05 (1.19)	18.09 (1.99)	16.08 (2.13)
<b>Number of serious quit attempts (&gt; 24 hours)</b>	5.37 (14.17)	3.22 (3.71)	6.80 (22.55)	2.36 (1.62)	4.82 (14.69)
<b>Days vaped per week</b>	5.51 (2.30)	6.05 (1.88)	4.67 (2.42)	4.93 (2.40)	5.33 (2.30)
<b>Vaping episodes per day</b>	28.71 (32.03)	29.79 (32.03)	16.99 (22.14)	15.82 (22.92)	23.36 (28.60)
<b>Number of puffs per episode</b>	7.49 (7.01)	7.63 (6.78)	7.30 (5.89)	5.24 (3.33)	7.11 (6.17)
<b>Since the onset of COVID-19*</b>					
Days vaped per week	---	---	---	---	---
Vaping episodes per day	---	---	---	---	---
Number of puffs per episode	---	---	---	---	---
<b>Number of people who have used your e-cigarette</b>	52.34 (282.34)	19.17 (28.46)	14.59 (15.06)	9.04 (7.69)	24.31 (141.37)
<b>Average spending per week on vaping products</b>	13.74 (11.80)	19.06 (12.95)	15.12 (10.50)	13.77 (11.06)	14.79 (12.35)
<b>Pods used per week (pod-based devices)*</b>	---	---	---	---	---

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. \*Denotes a question not asked in or not measured in the same manner as the Nova Scotia survey and thus Nova Scotia data is excluded from these responses.

Table 7. Vaping behaviour for Nova Scotia respondents (continued).

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Strongest influence to start vaping<sup>1</sup></b>					
Friends	95	72	121	51	339
Wanting to quit smoking	18	54	20	22	114
Social media exposure	9	5	16	9	39
<b>Negative side-effects<sup>2</sup></b>					
Yes	48 (41.4)	54 (35.5)	60 (35.9)	29 (34.1)	191 (41.3)
No	68 (58.6)	80 (52.6)	78 (46.7)	46 (54.1)	272 (58.7)
<b>Pressure from others to vape</b>					
Yes	42 (31.3)	42 (27.6)	58 (34.7)	30 (35.3)	172 (32.0)
No	92 (68.7)	110 (72.4)	109 (65.3)	55 (64.7)	366 (68.0)
<b>Offered to share your e-cigarette<sup>2</sup></b>					
Yes	113 (94.2)	134 (91.8)	141 (97.2)	72 (92.3)	460 (94.1)
No	7 (5.8)	12 (8.2)	4 (2.8)	6 (7.7)	29 (5.9)
<b>Have used someone else's e-cigarette</b>					
Yes	133 (99.3)	149 (98.0)	166 (99.4)	83 (97.6)	531 (98.7)
No	1 (0.7)	3 (2.0)	1 (0.6)	2 (2.4)	7 (1.3)
<b>Parental knowledge of vaping behaviour<sup>2,3</sup></b>					
Yes	70 (64.8)	---	65 (43.9)	---	135 (52.7)
No	38 (35.2)	---	83 (56.1)	---	121 (47.3)
<b>Social media advertisement exposure</b>					
Yes	110 (82.1)	93 (61.2)	152 (91.0)	69 (81.2)	424 (78.8)
No	24 (17.9)	59 (38.8)	15 (9.0)	16 (18.8)	114 (21.2)
<b>Top advertisement exposure platforms<sup>1</sup></b>					
Instagram	35	36	50	22	143
Snapchat	28	22	43	10	103
YouTube	22	15	33	10	80
No exposure	68	94	89	50	301

Note. Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported. <sup>2</sup>Participants who answered "I don't know" to this question were not included in this estimate. <sup>3</sup>Question not asked to young adults.

Table 8. *Vaping behaviour for Ontario respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Age of onset</b>	14.49 (1.47)	16.65 (1.77)	14.63 (1.16)	17.33 (1.89)	15.78 (2.02)
<b>Number of serious quit attempts (&gt; 24 hours)</b>	4.83 (7.80)	4.20 (4.03)	4.29 (6.60)	2.90 (1.91)	4.11 (5.71)
<b>Days vaped per week</b>	6.06 (1.78)	6.37 (1.45)	5.60 (1.95)	6.02 (1.75)	6.02 (1.75)
<b>Vaping episodes per day</b>	24.95 (28.91)	30.78 (31.72)	25.15 (27.89)	26.39 (30.50)	26.83 (29.79)
<b>Number of puffs per episode</b>	5.62 (4.35)	6.23 (5.13)	5.50 (4.14)	5.36 (4.38)	5.68 (4.51)
<b>Since the onset of COVID-19</b>					
Days vaped per week	4.55 (2.72)	4.93 (2.41)	4.26 (2.65)	4.91 (2.46)	4.68 (2.55)
Vaping episodes per day	12.55 (18.37)	16.65 (23.03)	14.19 (24.30)	15.54 (21.81)	14.80 (21.91)
Number of puffs per episode	4.39 (3.49)	5.83 (5.58)	5.43 (5.71)	5.33 (5.07)	5.26 (5.04)
<b>Number of people who have used your e-cigarette</b>	26.74 (29.94)	28.85 (45.55)	17.21 (20.86)	17.89 (27.66)	22.66 (32.59)
<b>Average spending per week on vaping products</b>	16.74 (18.06)	17.41 (16.21)	11.09 (11.92)	14.62 (11.33)	15.22 (14.89)
<b>Pods used per week (pod-based devices)</b>	2.38 (1.94)	3.38 (3.20)	2.12 (2.95)	2.25 (1.52)	2.52 (2.51)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24.

Table 8. Vaping behaviour for Ontario respondents (continued).

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Ever tried to quit vaping</b>					
Yes	66 (65.3)	61 (61.0)	56 (58.3)	52 (52.0)	235 (59.2)
No	35 (34.7)	39 (39.0)	40 (41.7)	48 (48.0)	162 (40.1)
<b>Strongest influence to start vaping<sup>1</sup></b>					
Friends	72	61	80	67	280
Quitting smoking	12	22	3	17	54
Social media exposure	3	3	5	5	16
<b>Negative side-effects<sup>2</sup></b>					
Yes	47 (56.0)	47 (53.4)	50 (63.3)	45 (53.6)	189 (56.4)
No	37 (44.0)	41 (46.6)	29 (36.7)	39 (46.4)	146 (43.6)
<b>Pressure from others to vape</b>					
Yes	34 (33.7)	28 (28.0)	35 (36.5)	23 (23.0)	120 (30.2)
No	67 (66.3)	72 (72.0)	61 (63.5)	77 (77.0)	277 (69.8)
<b>Offered to share your e-cigarette<sup>2</sup></b>					
Yes	90 (90.0)	91 (91.9)	90 (96.8)	92 (92.9)	363 (92.8)
No	10 (10.0)	8 (8.1)	3 (3.2)	7 (7.1)	28 (7.2)
<b>Have used someone else's e-cigarette</b>					
Yes	101 (100.0)	97 (97.0)	96 (100.0)	99 (99.0)	393 (99.0)
No	0 (0.0)	3 (3.0)	0 (0.0)	1 (1.0)	4 (1.0)
<b>Parental knowledge of vaping behaviour<sup>2,3</sup></b>					
Yes	48 (57.1)	---	28 (34.6)	---	76 (46.1)
No	36 (42.9)	---	53 (65.4)	---	89 (53.9)
<b>Social media advertisement exposure</b>					
Yes	80 (79.2)	59 (59.0)	87 (90.6)	70 (70.0)	296 (74.6)
No	21 (20.8)	41 (41.0)	9 (9.4)	30 (30.0)	101 (25.4)
<b>Top advertisement exposure platforms<sup>1</sup></b>					
Instagram	26	28	34	29	117
Snapchat	22	20	33	16	91
Posters	19	18	16	29	82
No exposure	51	55	39	47	192

Note. Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported. <sup>2</sup>Participants who answered "I don't know" to this question were not included in this estimate. <sup>3</sup>Question not asked to young adults.

Table 9. Vaping behaviour for Prairies respondents.

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Age of onset</b>	14.58 (1.28)	16.40 (1.93)	14.34 (1.15)	16.82 (1.82)	15.36 (1.86)
<b>Number of serious quit attempts (&gt; 24 hours)</b>	3.22 (2.24)	4.15 (4.52)	6.41 (22.53)	3.35 (2.80)	4.26 (11.55)
<b>Days vaped per week</b>	6.30 (1.64)	6.54 (1.20)	6.18 (1.70)	6.30 (1.59)	6.32 (1.56)
<b>Vaping episodes per day</b>	36.30 (33.81)	43.10 (35.35)	34.47 (35.27)	33.99 (33.23)	36.83 (34.50)
<b>Number of puffs per episode</b>	5.80 (4.86)	5.34 (3.46)	7.29 (6.38)	5.73 (4.77)	6.11 (5.11)
<b>Since the onset of COVID-19</b>					
Days vaped per week	5.51 (2.40)	5.85 (1.84)	4.57 (2.61)	5.12 (2.35)	5.22 (2.38)
Vaping episodes per day	29.47 (35.42)	24.27 (29.16)	21.20 (32.96)	21.25 (29.27)	24.26 (32.10)
Number of puffs per episode	5.87 (6.51)	4.67 (4.21)	6.93 (7.37)	5.78 (5.22)	5.91 (6.13)
<b>Number of people who have used your e-cigarette</b>	23.69 (31.15)	29.24 (41.69)	22.28 (23.04)	16.39 (21.56)	23.00 (30.24)
<b>Average spending per week on vaping products</b>	13.91 (13.29)	17.74 (15.06)	11.34 (11.61)	11.95 (10.75)	13.72 (13.00)
<b>Pods used per week (pod-based devices)</b>	2.96 (2.21)	2.95 (1.97)	2.32 (1.84)	2.80 (2.82)	2.76 (2.21)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24.



Table 9. Vaping behaviour for Prairies respondents (continued).

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Ever tried to quit vaping</b>					
Yes	72 (68.6)	52 (65.0)	54 (52.4)	40 (56.3)	218 (39.3)
No	33 (31.4)	28 (35.0)	49 (47.6)	31 (43.7)	141 (60.7)
<b>Strongest influence to start vaping<sup>1</sup></b>					
Friends	84	52	85	48	269
Quitting smoking	9	16	4	13	42
Social media exposure	3	2	6	4	15
<b>Negative side-effects<sup>2</sup></b>					
Yes	36 (40.0)	41 (59.4)	50 (55.6)	30 (48.4)	157 (50.5)
No	54 (60.0)	28 (40.6)	40 (44.4)	32 (51.6)	154 (49.5)
<b>Pressure from others to vape</b>					
Yes	46 (43.8)	36 (45.0)	34 (33.0)	21 (29.6)	137 (38.2)
No	59 (56.2)	44 (55.0)	69 (67.0)	50 (70.4)	222 (61.8)
<b>Offered to share your e-cigarette<sup>2</sup></b>					
Yes	89 (87.3)	71 (89.9)	96 (96.0)	66 (93.0)	322 (91.5)
No	13 (12.7)	8 (10.1)	4 (4.0)	5 (7.0)	30 (8.5)
<b>Have used someone else's e-cigarette</b>					
Yes	102 (97.1)	80 (100.0)	103 (100.0)	70 (98.6)	355 (98.9)
No	3 (2.9)	0 (0.0)	0 (0.0)	1 (1.4)	4 (1.1)
<b>Parental knowledge of vaping behaviour<sup>2,3</sup></b>					
Yes	60 (69.0)	---	54 (59.3)	---	114 (64.0)
No	27 (31.0)	---	37 (40.7)	---	64 (36.0)
<b>Social media advertisement exposure</b>					
Yes	70 (66.7)	48 (60.0)	85 (82.5)	47 (66.2)	250 (69.6)
No	35 (33.3)	32 (40.0)	18 (17.5)	24 (33.8)	109 (30.3)
<b>Top advertisement exposure platforms<sup>1</sup></b>					
Instagram	37	20	37	10	104
Snapchat	27	12	35	5	79
YouTube	24	8	29	3	64
No exposure	48	42	46	47	183

Note. Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported. <sup>2</sup>Participants who answered "I don't know" to this question were not included in this estimate. <sup>3</sup>Question not asked to young adults.

Table 10. *Vaping behaviour for Prince Edward Island respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Age of onset</b>	14.23 (1.55)	16.87 (2.37)	14.16 (1.81)	17.67 (2.48)	15.75 (2.66)
<b>Number of serious quit attempts (&gt; 24 hours)</b>	4.96 (9.23)	3.93 (3.75)	2.83 (2.51)	4.09 (7.43)	3.77 (5.95)
<b>Days vaped per week</b>	6.60 (1.21)	6.28 (1.53)	5.61 (2.23)	5.94 (1.77)	6.00 (1.85)
<b>Vaping episodes per day</b>	36.06 (32.75)	42.89 (37.26)	30.13 (31.53)	29.86 (29.51)	33.26 (32.39)
<b>Number of puffs per episode</b>	7.43 (6.79)	5.89 (5.10)	5.78 (5.19)	5.28 (3.77)	5.93 (5.13)
<b>Since the onset of COVID-19</b>					
Days vaped per week	6.35 (1.62)	5.50 (2.21)	5.33 (2.45)	5.57 (2.13)	5.58 (2.21)
Vaping episodes per day	34.82 (32.67)	37.93 (39.13)	23.85 (27.78)	30.57 (28.17)	29.40 (30.23)
Number of puffs per episode	6.18 (5.37)	4.00 (2.18)	5.85 (4.52)	5.49 (4.60)	5.55 (4.46)
<b>Number of people who have used your e-cigarette</b>	25.39 (31.86)	11.19 (9.98)	20.68 (23.97)	11.38 (11.38)	17.18 (21.71)
<b>Average spending per week on vaping products</b>	20.97 (17.12)	21.09 (14.43)	22.64 (18.61)	20.95 (15.85)	21.50 (16.59)
<b>Pods used per week (pod-based devices)</b>	4.01 (4.08)	3.40 (2.93)	2.92 (2.97)	2.82 (2.09)	3.15 (2.99)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24.

Table 10. *Vaping behaviour for Prince Edward Island respondents (continued).*

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Ever tried to quit vaping</b>					
Yes	28 (59.6)	29 (61.7)	54 (58.1)	44 (51.2)	155 (56.8)
No	19 (40.4)	18 (38.3)	39 (41.9)	42 (48.8)	118 (43.2)
<b>Strongest influence to start vaping<sup>1</sup></b>					
Friends	25	22	73	51	171
Quitting smoking	11	20	6	27	64
Social media exposure	0	1	6	1	8
<b>Negative side-effects<sup>2</sup></b>					
Yes	18 (47.4)	13 (32.5)	33 (37.5)	33 (44.6)	97 (42.2)
No	20 (52.6)	27 (67.5)	45 (62.5)	41 (55.4)	133 (57.8)
<b>Pressure from others to vape</b>					
Yes	19 (40.4)	9 (19.1)	34 (36.6)	26 (30.2)	88 (32.2)
No	28 (59.6)	38 (80.9)	59 (63.4)	60 (69.8)	185 (67.8)
<b>Offered to share your e-cigarette<sup>2</sup></b>					
Yes	44 (93.6)	37 (78.7)	81 (87.1)	73 (84.9)	235 (89.4)
No	3 (6.4)	9 (19.1)	4 (4.3)	12 (14.0)	28 (10.6)
<b>Have used someone else's e-cigarette</b>					
Yes	47 (100.0)	44 (93.6)	91 (97.8)	81 (94.2)	263 (96.3)
No	0 (0.0)	3 (6.4)	2 (2.2)	5 (5.8)	10 (3.7)
<b>Parental knowledge of vaping behaviour<sup>2,3</sup></b>					
Yes	33 (76.7)	---	39 (54.2)	---	72 (62.6)
No	10 (23.3)	---	33 (45.8)	---	43 (37.4)
<b>Social media advertisement exposure</b>					
Yes	34 (72.3)	16 (34.0)	69 (74.2)	52 (60.5)	171 (62.6)
No	13 (27.7)	31 (66.0)	24 (25.8)	34 (39.5)	102 (37.4)
<b>Top advertisement exposure platforms<sup>1</sup></b>					
Snapchat	11	8	21	15	55
Instagram	12	4	14	16	46
Facebook	6	4	14	20	44
No exposure	28	35	63	59	185

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported. <sup>2</sup>Participants who answered "I don't know" to this question were not included in this estimate. <sup>3</sup>Question not asked to young adults.

Tableau 11. *Habitudes de vapotage des répondants du Québec*

Variables	Garçons (jeunes) <i>M</i> (É.T.)	Hommes (jeunes adultes) <i>M</i> (É.T.)	Filles (jeunes) <i>M</i> (É.T.)	Femmes (jeunes adultes) <i>M</i> (É.T.)	Total, <i>M</i> (É.T.)
<b>Âge au moment de l'initiation</b>	14,46 (1,56)	17,13 (1,75)	14,59 (1,31)	17,57 (2,41)	15,69 (2,20)
<b>Nombre de tentatives sérieuses d'abandon (&gt; 24 heures)</b>	3,49 (2,16)	3,35 (5,16)	3,02 (2,37)	2,00 (1,26)	3,09 (3,05)
<b>Jours de vapotage par semaine</b>	6,08 (1,87)	6,46 (1,39)	6,11 (1,63)	6,28 (1,72)	6,21 (1,66)
<b>Séances de vapotage par jour</b>	28,06 (28,27)	32,44 (31,53)	30,78 (33,36)	35,52 (35,69)	31,32 (32,06)
<b>Nombre de bouffées par séance</b>	6,46 (5,26)	6,10 (5,01)	6,20 (5,05)	6,61 (4,84)	6,32 (5,04)
<b>Depuis le début de la COVID-19</b>					
Jours de vapotage par semaine	5,70 (2,23)	6,15 (1,80)	5,62 (2,15)	6,19 (1,91)	5,85 (2,05)
Séances de vapotage par jour	28,37 (37,10)	30,38 (34,44)	24,38 (25,47)	29,94 (32,99)	27,72 (31,90)
Nombre de bouffées par séance	6,63 (6,02)	5,92 (3,97)	5,70 (3,77)	8,13 (6,21)	6,37 (4,91)
<b>Nombre de personnes qui ont utilisé votre vapoteuse</b>	21,55 (21,60)	13,97 (20,12)	19,13 (26,19)	7,36 (5,78)	16,46 (21,65)
<b>Dépenses moyennes par semaine sur les produits de vapotage</b>	15,39 (14,27)	22,70 (19,35)	16,44 (16,77)	22,82 (19,33)	18,88 (17,58)
<b>Cartouches de vapotage consommées par semaine (dispositifs de type « pods »)</b>	2,18 (1,41)	3,28 (1,79)	1,92 (1,42)	2,58 (2,11)	2,37 (1,68)

*Remarque* : Le terme « jeunes » désigne les répondants âgés de 16 à 18 ans; les « jeunes adultes » regroupent ceux de 19 à 24 ans.

Tableau 11. *Habitudes de vapotage des répondants du Québec (suite)*

Variables	Garçons (jeunes) N (%)	Hommes (jeunes adultes) N (%)	Filles (jeunes) N (%)	Femmes (jeunes adultes) N (%)	Total N (%)
<b>A déjà tenté d'arrêter de vapoter</b>					
Oui	45 (57,7)	34 (48,6)	60 (61,9)	21 (38,9)	160 (53,5)
Non	33 (42,3)	36 (51,4)	37 (38,1)	33 (61,1)	139 (46,5)
<b>Incitation principale à vapoter<sup>1</sup></b>					
Amis	71	31	79	24	205
Tentative d'arrêter de fumer	3	19	6	22	50
Médias sociaux	1	2	4	2	9
<b>Effets secondaires néfastes<sup>2</sup></b>					
Oui	40 (56,3)	35 (51,5)	53 (67,9)	23 (50,0)	151 (57,4)
Non	31 (43,7)	33 (48,5)	25 (32,1)	23 (50,0)	112 (42,6)
<b>Pression des autres pour vapoter</b>					
Oui	12 (15,4)	14 (20,0)	12 (12,4)	4 (7,4)	42 (14,0)
Non	66 (84,6)	56 (80,0)	85 (87,6)	50 (92,6)	257 (86,0)
<b>A partagé sa vapoteuse</b>					
Oui	69 (88,5)	64 (91,4)	88 (90,7)	47 (87,0)	268 (91,5)
Non	7 (9,0)	6 (8,6)	6 (6,2)	6 (11,1)	25 (8,5)
<b>A utilisé la vapoteuse d'un autre</b>					
Oui	78 (100,0)	66 (94,3)	95 (97,9)	51 (94,4)	290 (97,0)
Non	0 (0,0)	4 (5,7)	2 (2,1)	3 (5,6)	9 (3,0)
<b>Parents au fait des habitudes de vapotage<sup>2,3</sup></b>					
Oui	44 (64,7)	---	61 (69,3)	---	105 (67,3)
Non	24 (35,3)	---	27 (30,7)	---	51 (32,7)
<b>Exposition aux publicités dans les médias sociaux</b>					
Oui	46 (59,0)	32 (45,7)	73 (75,3)	17 (31,5)	168 (56,2)
Non	32 (41,0)	38 (54,3)	24 (24,7)	37 (68,5)	131 (43,8)
<b>Principales plateformes d'exposition aux publicités sur le vapotage<sup>1</sup></b>					
Instagram	18	15	23	2	58
Snapchat	13	11	24	3	51
Facebook	10	14	20	3	47
Aucune exposition	51	47	52	46	196

*Remarque* : Le terme « jeunes » désigne les répondants âgés de 16 à 18 ans; les « jeunes adultes » regroupent ceux de 19 à 24 ans. <sup>1</sup>Les participants avaient plusieurs choix de réponses; pour cette raison, seules les fréquences des réponses les plus populaires sont rapportées. <sup>2</sup> Cette estimation ne tient pas compte des participants ayant répondu « Je ne sais pas » à cette question. <sup>3</sup> Cette question n'a pas été posée aux jeunes adultes.

Table 12. Product information for the total sample.

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Type of e-cigarette</b>					
Cig-a-like	8 (1.1)	14 (2.1)	6 (0.6)	12 (1.7)	40 (1.3)
Vape pen	114 (16.1)	110 (15.7)	168 (18.7)	122 (17.3)	514 (17.1)
Mod	97 (13.7)	156 (22.3)	124 (13.8)	126 (17.9)	503 (16.7)
Pod	488 (69.1)	419 (59.9)	601 (66.9)	444 (63.1)	1952 (64.9)
<b>Currently prefer flavoured vape juices<sup>1</sup></b>					
Yes	595 (88.9)	587 (87.1)	795 (93.9)	618 (90.4)	2595 (90.3)
No	74 (11.1)	87 (12.9)	52 (6.1)	66 (9.6)	279 (9.7)
<b>Used flavoured vape juice at initiation<sup>1*</sup></b>					
Yes	517 (90.2)	492 (89.9)	696 (95.1)	567 (91.6)	2272 (91.9)
No	56 (9.8)	55 (10.1)	36 (4.9)	52 (8.4)	199 (8.1)
<b>Would you vape if you could not buy flavoured juices?<sup>1</sup></b>					
Yes	385 (64.7)	334 (56.9)	428 (53.8)	292 (47.2)	1439 (55.5)
No	210 (35.3)	253 (43.1)	367 (46.2)	326 (52.8)	1156 (44.5)
<b>Content added to vape juice</b>					
Yes	163 (23.1)	124 (17.7)	187 (20.8)	70 (9.9)	544 (18.1)
No	544 (76.9)	575 (82.3)	712 (79.2)	634 (90.1)	2465 (81.9)
<b>Nicotine concentration<sup>1</sup></b>					
10-20 mg/mL	37 (6.0)	88 (15.8)	64 (8.4)	94 (17.7)	283 (11.5)
35 mg/mL	124 (20.2)	144 (25.9)	171 (22.6)	156 (29.3)	595 (24.2)
50-60 mg/mL	453 (73.8)	325 (58.3)	522 (69.0)	282 (53.0)	1582 (64.3)
<b>Vaping product content at onset*</b>					
Vape juice with nicotine	374 (65.3)	385 (70.3)	490 (66.9)	457 (73.8)	1706 (69.0)
Vape juice without nicotine	192 (33.5)	136 (24.9)	232 (31.7)	114 (18.5)	674 (27.4)
Dry cannabis	4 (0.7)	13 (2.4)	3 (0.4)	23 (3.7)	43 (1.7)
Liquid cannabis	3 (0.5)	13 (2.4)	7 (1.0)	25 (4.0)	48 (1.9)
<b>Vaping product content at present<sup>1</sup></b>					
Vape juice with nicotine	663 (94.3)	639 (91.8)	827 (92.4)	608 (86.5)	2737 (91.3)
Vape juice without nicotine	19 (2.7)	19 (2.7)	39 (4.4)	35 (5.0)	112 (3.7)
Dry cannabis	6 (0.9)	9 (1.3)	3 (0.3)	15 (2.1)	33 (1.2)
Liquid cannabis	15 (2.1)	29 (4.2)	26 (2.9)	45 (6.4)	115 (3.8)
<b>Know nicotine content<sup>1</sup></b>					
Yes	650 (98.0)	630 (98.6)	801 (96.9)	578 (95.1)	2659 (97.2)
No	13 (2.0)	9 (1.4)	26 (3.1)	30 (4.9)	78 (2.8)
<b>Device purchase location<sup>2</sup></b>					
From a friend	244	61	405	91	801

Specialty vape shop	54	119	90	193	456
Purchased from someone	146	36	175	30	387
<b>Juice purchase location<sup>2</sup></b>					
From a friend	257	43	418	59	777
Specialty vape shop	61	119	106	203	489
Retail location	56	93	63	131	343

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*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. \*Denotes a question not asked in or not measured in the same manner as the Nova Scotia survey and thus Nova Scotia data is excluded from these responses. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 13. Product information for British Columbia respondents.

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Type of e-cigarette</b>					
Cig-a-like	0 (0.0)	0 (0.0)	1 (1.3)	0 (0.0)	1 (0.3)
Vape pen	22 (30.2)	19 (23.8)	22 (29.3)	22 (29.7)	85 (27.4)
Mod	13 (15.1)	11 (13.8)	12 (16.0)	12 (16.2)	48 (15.5)
Pod	46 (54.7)	50 (62.5)	40 (53.3)	40 (54.1)	176 (56.8)
<b>Currently prefer flavoured vape juices<sup>1</sup></b>					
Yes	66 (85.7)	67 (84.8)	61 (87.1)	66 (92.3)	260 (87.5)
No	11 (14.3)	12 (15.2)	9 (12.9)	5 (7.7)	37 (12.5)
<b>Used flavoured vape juice at initiation</b>					
Yes	66 (81.5)	70 (87.5)	70 (93.3)	68 (91.9)	274 (88.4)
No	15 (18.5)	10 (12.5)	5 (6.7)	6 (8.1)	36 (11.6)
<b>Most used flavour at initiation</b>					
Berry	21 (30.4)	19 (27.1)	22 (29.3)	29 (41.4)	91 (32.0)
Confectionary	7 (10.1)	8 (11.4)	5 (6.7)	6 (8.6)	26 (9.2)
Mango	14 (20.3)	16 (22.9)	14 (18.7)	15 (21.4)	59 (20.8)
Menthol	8 (11.6)	11 (15.7)	8 (10.7)	6 (8.6)	33 (11.6)
Tobacco	1 (1.4)	1 (1.4)	0 (0.0)	1 (1.4)	3 (1.1)
Other	18 (26.1)	15 (21.4)	26 (34.7)	13 (18.6)	72 (25.4)
<b>Most used flavour at present</b>					
Berry	21 (31.3)	11 (18.0)	18 (27.3)	19 (27.5)	69 (26.2)
Confectionary	1 (1.5)	6 (9.8)	1 (1.5)	7 (10.1)	15 (5.7)
Mango	17 (25.4)	9 (14.8)	16 (24.2)	12 (17.4)	54 (20.5)
Menthol	10 (14.9)	17 (27.9)	11 (16.7)	16 (23.2)	54 (20.5)
Tobacco	3 (4.5)	0 (0.0)	0 (0.0)	0 (0.0)	3 (1.1)
Other	15 (22.4)	18 (29.5)	20 (30.3)	15 (21.7)	68 (25.9)
<b>Would you vape if you could not buy flavoured juices?<sup>1</sup></b>					
Yes	48 (72.7)	44 (65.7)	39 (63.9)	33 (50.0)	164 (63.1)
No	18 (27.3)	23 (34.3)	22 (36.1)	33 (50.0)	96 (36.9)
<b>Content added to vape juice</b>					
Yes	15 (18.5)	15 (18.8)	15 (20.0)	4 (5.4)	49 (15.8)
No	66 (81.5)	65 (81.2)	60 (80.0)	70 (94.6)	261 (84.2)
<b>Nicotine concentration<sup>1</sup></b>					
10-20 mg/mL	4 (5.8)	10 (14.5)	4 (5.8)	15 (25.0)	33 (12.4)
35 mg/mL	16 (23.2)	24 (34.8)	20 (29.0)	19 (31.7)	79 (29.6)
50-60 mg/mL	49 (71.0)	35 (50.7)	45 (65.2)	26 (43.3)	155 (58.0)
<b>Vaping product content at onset</b>					
Vape juice with nicotine	51 (63.0)	60 (75.0)	42 (56.0)	56 (75.7)	209 (67.4)



Vape juice without nicotine	29 (35.8)	16 (20.0)	33 (44.0)	15 (20.2)	93 (30.0)
Dry cannabis	1 (1.2)	2 (2.5)	0 (0.0)	0 (0.0)	3 (1.0)
Liquid cannabis	0 (0.0)	2 (2.5)	0 (0.0)	3 (4.1)	5 (1.6)
<b>Vaping product content at present</b>					
Vape juice with nicotine	74 (92.5)	75 (93.8)	70 (93.3)	67 (90.5)	286 (92.6)
Vape juice without nicotine	1 (1.2)	1 (1.2)	2 (2.7)	3 (4.1)	7 (2.3)
Dry cannabis	1 (1.2)	1 (1.2)	0 (0.0)	1 (1.3)	3 (1.0)
Liquid cannabis	4 (5.1)	3 (3.8)	3 (4.0)	3 (4.1)	13 (4.1)
<b>Know nicotine content<sup>1</sup></b>					
Yes	74 (100.0)	75 (100.0)	70 (100.0)	65 (97.0)	284 (99.3)
No	0 (0.0)	0 (0.0)	0 (0.0)	2 (3.0)	2 (0.7)
<b>Device purchase location<sup>2</sup></b>					
Specialty vape shop	27	49	13	54	143
From a friend	32	13	38	16	99
Retail location	17	29	7	22	75
<b>Juice purchase location<sup>2</sup></b>					
Specialty vape shop	25	49	13	56	143
From a friend	35	5	44	9	93
Retail location	21	33	5	20	79

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 14. *Product information for Manitoba respondents.*

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Type of e-cigarette</b>					
Cig-a-like	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Vape pen	17 (25.8)	20 (35.7)	18 (23.7)	12 (27.2)	67 (27.7)
Mod	14 (21.2)	10 (17.9)	16 (21.1)	16 (36.4)	56 (23.1)
Pod	35 (53.0)	26 (46.4)	42 (55.2)	16 (36.4)	119 (49.2)
<b>Currently prefer flavoured vape juices<sup>1</sup></b>					
Yes	60 (92.3)	47 (87.0)	67 (97.1)	40 (93.0)	214 (92.6)
No	5 (7.7)	7 (13.0)	2 (2.9)	3 (7.0)	17 (7.4)
<b>Used flavoured vape juice at initiation</b>					
Yes	63 (95.5)	47 (83.9)	74 (97.4)	41 (93.2)	225 (93.0)
No	3 (4.5)	9 (16.1)	2 (2.6)	3 (6.8)	17 (7.0)
<b>Most used flavour at initiation</b>					
Berry	14 (20.6)	6 (13.0)	28 (37.8)	13 (28.3)	61 (26.1)
Confectionary	11 (16.2)	9 (19.6)	11 (14.9)	5 (10.9)	36 (15.4)
Mango	3 (4.4)	9 (19.6)	5 (6.8)	7 (15.2)	24 (10.3)
Menthol	9 (13.2)	5 (10.9)	7 (9.5)	3 (6.5)	24 (10.3)
Tobacco	5 (7.4)	3 (6.5)	0 (0.0)	0 (0.0)	8 (3.4)
Other	26 (38.2)	14 (30.4)	23 (31.1)	18 (39.1)	81 (34.6)
<b>Most used flavour at present</b>					
Berry	18 (27.3)	15 (31.3)	16 (21.1)	15 (34.9)	64 (27.5)
Confectionary	3 (4.5)	4 (8.3)	9 (11.8)	5 (11.6)	21 (9.0)
Mango	11 (16.7)	8 (16.7)	11 (14.5)	4 (9.3)	34 (14.6)
Menthol	13 (19.7)	7 (14.6)	13 (17.1)	4 (9.3)	37 (15.9)
Tobacco	0 (0.0)	0 (0.0)	1 (1.3)	0 (0.0)	1 (0.4)
Other	21 (31.8)	14 (29.2)	26 (34.2)	15 (34.9)	76 (32.6)
<b>Would you vape if you could not buy flavoured juices?<sup>1</sup></b>					
Yes	35 (58.3)	30 (63.8)	45 (67.2)	17 (42.5)	127 (59.3)
No	25 (41.7)	17 (36.2)	22 (32.8)	23 (57.5)	87 (40.7)
<b>Content added to vape juice</b>					
Yes	16 (24.2)	9 (16.1)	23 (30.3)	6 (13.6)	54 (22.3)
No	50 (75.8)	47 (83.9)	53 (69.7)	38 (82.4)	188 (77.7)
<b>Nicotine concentration<sup>1</sup></b>					
10-20 mg/mL	3 (5.4)	11 (24.4)	5 (7.6)	9 (26.5)	28 (13.9)
35 mg/mL	18 (32.1)	14 (31.1)	14 (21.2)	5 (14.7)	51 (25.4)
50-60 mg/mL	35 (62.5)	20 (44.5)	47 (71.2)	20 (58.8)	122 (60.7)
<b>Vaping product content at onset</b>					
Vape juice with nicotine	36 (54.5)	38 (67.9)	48 (63.2)	33 (75.0)	155 (64.0)

Vape juice without nicotine	29 (43.9)	15 (26.8)	28 (36.8)	9 (20.4)	81 (33.5)
Dry cannabis	1 (1.6)	2 (3.6)	0 (0.0)	1 (2.3)	4 (1.7)
Liquid cannabis	0 (0.0)	1 (1.7)	0 (0.0)	1 (2.3)	2 (0.8)
<b>Vaping product content at present</b>					
Vape juice with nicotine	62 (93.9)	52 (92.9)	72 (94.8)	39 (88.6)	225 (93.0)
Vape juice without nicotine	3 (4.5)	2 (3.5)	2 (2.6)	1 (2.3)	8 (3.3)
Dry cannabis	1 (1.6)	1 (1.8)	1 (1.3)	0 (0.0)	3 (1.2)
Liquid cannabis	0 (0.0)	1 (1.8)	1 (1.3)	4 (9.1)	6 (2.5)
<b>Know nicotine content<sup>1</sup></b>					
Yes	61 (98.4)	51 (98.1)	70 (97.2)	38 (97.4)	220 (97.8)
No	1 (1.6)	1 (1.9)	2 (2.8)	1 (2.6)	5 (2.2)
<b>Device purchase location<sup>2</sup></b>					
Specialty vape shop	17	44	20	31	112
From a friend	32	7	33	3	75
From someone else	15	4	18	3	40
<b>Juice purchase location<sup>2</sup></b>					
Specialty vape shop	26	44	24	32	126
From a friend	28	2	36	3	69
Retail location	6	12	5	7	30

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*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 15. *Product information for New Brunswick respondents.*

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Type of e-cigarette</b>					
Cig-a-like	0 (0.0)	2 (2.5)	0 (0.0)	2 (1.9)	4 (1.3)
Vape pen	4 (11.8)	16 (20.0)	12 (14.1)	18 (17.1)	50 (16.4)
Mod	3 (8.8)	21 (26.3)	13 (15.3)	15 (14.3)	52 (17.1)
Pod	27 (79.4)	41 (51.2)	60 (70.6)	70 (66.7)	198 (65.2)
<b>Currently prefer flavoured e-juices<sup>1</sup></b>					
Yes	31 (100.0)	62 (82.7)	78 (96.3)	92 (92.0)	263 (91.6)
No	0 (0.0)	13 (17.3)	3 (3.7)	8 (8.0)	24 (8.4)
<b>Used flavoured e-juice at initiation</b>					
Yes	33 (97.1)	68 (85.0)	81 (95.3)	91 (86.7)	273 (89.8)
No	1 (2.9)	12 (15.0)	4 (4.7)	14 (13.3)	31 (10.2)
<b>Most used flavour at initiation<sup>1</sup></b>					
Berry	11 (33.3)	29 (42.6)	37 (45.7)	49 (54.4)	126 (46.3)
Confectionary	3 (9.1)	7 (10.3)	6 (7.4)	8 (8.9)	24 (8.8)
Mango	2 (6.1)	8 (11.8)	11 (13.6)	12 (13.3)	33 (12.1)
Menthol	9 (27.3)	15 (22.1)	23 (28.4)	12 (13.3)	59 (21.7)
Tobacco	2 (6.1)	0 (0.0)	0 (0.0)	2 (2.2)	4 (1.5)
Other	6 (18.1)	9 (13.2)	4 (4.9)	7 (7.9)	26 (9.6)
<b>Most used flavour at present<sup>1</sup></b>					
Berry	15 (48.4)	28 (45.1)	34 (43.7)	46 (50.0)	123 (46.8)
Confectionary	1 (3.2)	4 (6.5)	3 (3.8)	4 (4.3)	12 (4.6)
Mango	4 (12.9)	7 (11.3)	9 (11.5)	8 (8.7)	28 (10.6)
Menthol	8 (25.8)	19 (30.6)	23 (29.5)	25 (27.2)	75 (28.5)
Tobacco	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Other	3 (9.7)	4 (6.5)	9 (11.5)	9 (9.8)	25 (9.5)
<b>Would you vape if you could not buy flavoured juices?<sup>1</sup></b>					
Yes	22 (71.0)	28 (45.2)	43 (55.1)	43 (46.7)	136 (51.7)
No	9 (29.0)	34 (54.8)	35 (44.9)	49 (53.3)	127 (48.3)
<b>Content added to vape juice</b>					
Yes	9 (26.5)	15 (18.8)	14 (16.5)	7 (6.7)	45 (17.4)
No	25 (73.5)	65 (81.2)	71 (83.5)	98 (93.3)	259 (82.6)
<b>Nicotine concentration<sup>1</sup></b>					
10-20 mg/mL	3 (9.7)	12 (20.3)	5 (6.9)	19 (26.4)	39 (16.7)
35 mg/mL	3 (9.7)	12 (20.3)	18 (25.0)	19 (26.4)	52 (22.2)
50-60 mg/mL	25 (80.6)	35 (59.4)	49 (68.1)	34 (47.2)	143 (61.1)
<b>Vaping product content at onset</b>					
Vape juice with nicotine	27 (79.4)	56 (70.0)	58 (68.2)	74 (70.5)	215 (70.7)

Vape juice without nicotine	7 (20.6)	18 (22.5)	27 (31.8)	13 (12.4)	65 (21.4)
Dry cannabis	0 (0.0)	1 (1.3)	0 (0.0)	5 (4.7)	6 (2.0)
Liquid cannabis	0 (0.0)	5 (6.2)	0 (0.0)	13 (12.4)	18 (5.9)
<b>Vaping product content at present<sup>1</sup></b>					
Vape juice with nicotine	32 (94.2)	68 (86.0)	80 (95.2)	87 (82.9)	267 (88.4)
Vape juice without nicotine	1 (2.9)	3 (3.8)	1 (1.2)	1 (1.0)	6 (2.0)
Dry cannabis	0 (0.0)	1 (1.3)	0 (0.0)	1 (1.0)	2 (0.7)
Liquid cannabis	1 (2.9)	7 (8.9)	3 (3.6)	16 (15.1)	27 (8.9)
<b>Know nicotine content<sup>1</sup></b>					
Yes	32 (100.0)	67 (98.5)	78 (97.5)	83 (95.4)	260 (97.4)
No	0 (0.0)	1 (1.5)	2 (2.5)	4 (4.6)	7 (2.6)
<b>Device purchase location<sup>2</sup></b>					
Specialty vape shop	8	42	21	56	127
Retail location	7	33	17	43	100
From a friend	11	2	44	9	66
<b>Juice purchase location<sup>2</sup></b>					
Specialty vape shop	9	40	23	57	129
Retail location	8	37	19	52	116
From a friend	12	5	42	5	64

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 16. *Product information for Newfoundland and Labrador respondents.*

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Type of e-cigarette</b>					
Cig-a-like	2 (3.3)	1 (2.9)	1 (0.9)	5 (5.9)	9 (3.2)
Vape pen	11 (18.0)	6 (17.6)	24 (22.4)	13 (15.3)	54 (18.8)
Mod	11 (18.0)	7 (20.6)	10 (9.3)	14 (16.5)	42 (14.6)
Pod	37 (60.7)	20 (58.9)	72 (67.4)	53 (62.3)	182 (63.4)
<b>Currently prefer flavoured e-juices<sup>1</sup></b>					
Yes	51 (87.9)	26 (81.3)	93 (89.4)	76 (90.5)	246 (88.5)
No	7 (12.1)	6 (18.7)	11 (10.6)	8 (9.5)	32 (11.5)
<b>Used flavoured e-juice at initiation</b>					
Yes	54 (88.5)	31 (91.2)	103 (96.3)	80 (94.1)	268 (93.4)
No	7 (11.5)	3 (8.8)	4 (3.7)	5 (5.9)	19 (6.6)
<b>Most used flavour at initiation<sup>1</sup></b>					
Berry	20 (37.0)	10 (32.3)	50 (48.6)	34 (42.5)	114 (42.5)
Confectionary	8 (14.8)	3 (9.7)	16 (15.5)	15 (18.8)	42 (15.7)
Mango	9 (16.7)	5 (16.1)	17 (16.5)	11 (13.8)	42 (15.7)
Menthol	11 (20.4)	12 (38.7)	17 (16.5)	14 (17.4)	54 (20.1)
Tobacco	1 (1.9)	0 (0.0)	0 (0.0)	2 (2.5)	3 (1.1)
Other	5 (9.2)	1 (3.2)	3 (2.9)	4 (5.0)	13 (4.9)
<b>Most used flavour at present<sup>1</sup></b>					
Berry	26 (52.0)	10 (38.5)	54 (58.1)	32 (42.1)	122 (49.8)
Confectionary	6 (12.0)	3 (11.5)	4 (4.3)	9 (11.8)	22 (9.0)
Mango	3 (6.0)	3 (11.5)	11 (11.8)	5 (6.6)	22 (9.0)
Menthol	11 (22.0)	9 (34.6)	20 (21.5)	28 (36.8)	68 (27.8)
Tobacco	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Other	4 (8.0)	1 (3.9)	4 (4.3)	2 (2.7)	11 (4.4)
<b>Would you vape if you could not buy flavoured juices?<sup>1</sup></b>					
Yes	29 (56.9)	16 (61.5)	36 (38.7)	31 (40.8)	112 (45.5)
No	22 (43.1)	10 (38.5)	57 (61.3)	45 (59.2)	134 (54.5)
<b>Content added to vape juice</b>					
Yes	16 (26.2)	4 (11.8)	23 (21.5)	12 (14.1)	55 (19.2)
No	45 (73.8)	30 (88.2)	84 (78.5)	73 (85.9)	232 (80.8)
<b>Nicotine concentration<sup>1</sup></b>					
10-20 mg/mL	3 (6.0)	3 (11.1)	9 (10.1)	15 (25.9)	30 (13.4)
35 mg/mL	15 (30.0)	8 (29.6)	31 (34.8)	18 (31.0)	72 (32.1)
50-60 mg/mL	32 (64.0)	16 (59.3)	49 (55.1)	25 (43.1)	122 (54.5)
<b>Vaping product content at onset</b>					
Vape juice with nicotine	36 (59.0)	19 (55.9)	66 (61.7)	57 (67.1)	178 (62.0)

Vape juice without nicotine	24 (39.4)	13 (38.3)	39 (36.5)	20 (23.5)	96 (33.4)
Dry cannabis	1 (1.6)	1 (2.9)	1 (0.9)	7 (8.2)	10 (3.5)
Liquid cannabis	0 (0.0)	1 (2.9)	1 (0.9)	1 (1.2)	3 (1.1)
<b>Vaping product content at present<sup>1</sup></b>					
Vape juice with nicotine	56 (94.9)	29 (85.3)	100 (93.5)	65 (77.4)	250 (88.0)
Vape juice without nicotine	1 (1.7)	3 (8.8)	4 (3.7)	9 (10.7)	17 (6.0)
Dry cannabis	1 (1.7)	0 (0.0)	0 (0.0)	6 (7.1)	7 (2.5)
Liquid cannabis	1 (1.7)	2 (5.9)	3 (2.8)	4 (4.8)	10 (3.5)
<b>Know nicotine content<sup>1</sup></b>					
Yes	55 (98.2)	28 (96.6)	93 (93.0)	63 (96.9)	239 (95.6)
No	1 (1.8)	1 (3.4)	7 (7.0)	2 (3.1)	11 (4.4)
<b>Device purchase location<sup>2</sup></b>					
From a friend	29	1	52	12	94
Specialty vape shop	8	10	17	47	82
Retail location	8	16	17	33	74
<b>Juice purchase location<sup>2</sup></b>					
Specialty vape shop	12	12	22	48	94
From a friend	25	2	51	7	85
Retail location	11	15	12	36	74

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*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 17. Product information for Nova Scotia respondents.

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Type of e-cigarette</b>					
Cig-a-like	0 (0.0)	4 (2.6)	0 (0.0)	1 (1.2)	5 (0.9)
Vape pen	7 (5.2)	12 (7.9)	32 (19.1)	14 (16.5)	65 (12.1)
Mod	26 (19.4)	39 (25.7)	37 (22.2)	21 (24.7)	123 (22.9)
Pod	101 (75.4)	97 (63.8)	98 (58.7)	49 (57.6)	345 (64.1)
<b>Currently prefer flavoured vape juices<sup>1</sup></b>					
Yes	121 (93.8)	134 (90.5)	161 (98.8)	76 (90.5)	492 (93.9)
No	8 (6.2)	14 (9.5)	2 (1.2)	8 (9.5)	32 (6.1)
<b>Used flavoured vape juice at initiation*</b>					
Yes	---	---	---	---	---
No	---	---	---	---	---
<b>Most used flavour at initiation*</b>					
Berry	---	---	---	---	---
Confectionary	---	---	---	---	---
Mango	---	---	---	---	---
Menthol	---	---	---	---	---
Tobacco	---	---	---	---	---
Other	---	---	---	---	---
<b>Most used flavour at present*</b>					
Berry	---	---	---	---	---
Confectionary	---	---	---	---	---
Mango	---	---	---	---	---
Menthol	---	---	---	---	---
Tobacco	---	---	---	---	---
Other	---	---	---	---	---
<b>Would you vape if you could not buy flavoured juices?<sup>1</sup></b>					
Yes	79 (65.3)	61 (45.5)	77 (47.8)	34 (44.7)	251 (51.0)
No	42 (34.7)	73 (54.5)	84 (52.2)	42 (55.3)	241 (49.0)
<b>Content added to vape juice</b>					
Yes	37 (27.6)	34 (22.4)	39 (23.4)	12 (14.1)	122 (22.7)
No	97 (72.4)	118 (77.6)	128 (76.6)	73 (85.9)	416 (77.3)
<b>Nicotine concentration<sup>1</sup></b>					
10-20 mg/mL	6 (5.3)	13 (10.6)	12 (9.4)	3 (5.1)	34 (8.0)
35 mg/mL	18 (15.8)	32 (26.0)	24 (18.8)	18 (30.5)	92 (21.7)
50-60 mg/mL	90 (78.9)	78 (63.4)	92 (71.8)	38 (64.4)	298 (70.3)
<b>Vaping product content at onset*</b>					
Vape juice with nicotine	---	---	---	---	---



Vape juice without nicotine	---	---	---	---	---
Dry cannabis	---	---	---	---	---
Liquid cannabis	---	---	---	---	---
<b>Vaping product content at present</b>					
Vape juice with nicotine	127 (95.5)	139 (91.4)	142 (85.0)	70 (82.4)	478 (89.3)
Vape juice without nicotine	4 (3.0)	2 (1.3)	20 (12.0)	7 (8.2)	33 (6.2)
Dry cannabis	0 (0.0)	4 (2.6)	1 (0.6)	2 (2.4)	7 (1.3)
Liquid cannabis	2 (1.5)	6 (3.9)	3 (1.8)	6 (7.0)	17 (3.2)
<b>Know nicotine content<sup>1</sup></b>					
Yes	121 (95.3)	138 (99.3)	137 (96.5)	62 (88.6)	458 (95.8)
No	6 (4.7)	1 (0.7)	5 (3.5)	8 (11.4)	20 (4.2)
<b>Device purchase location*</b>					
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<b>Juice purchase location*</b>					
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*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. \*Denotes a question not asked in or not measured in the same manner as the Nova Scotia survey and thus Nova Scotia data is excluded from these responses. <sup>1</sup>Question not answered by all participants.

Table 18. *Product information for Ontario respondents.*

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Type of e-cigarette</b>					
Cig-a-like	1 (1.0)	3 (3.0)	2 (2.1)	2 (2.0)	8 (2.0)
Vape pen	18 (17.8)	7 (7.0)	15 (15.6)	8 (8.0)	48 (12.1)
Mod	10 (9.9)	21 (21.0)	8 (8.3)	13 (13.0)	52 (13.1)
Pod	72 (71.3)	69 (69.0)	71 (74.0)	77 (77.0)	289 (72.8)
<b>Currently prefer flavoured vape juices<sup>1</sup></b>					
Yes	85 (87.6)	77 (82.8)	85 (95.5)	84 (86.6)	331 (88.0)
No	12 (12.4)	16 (17.2)	4 (4.5)	13 (13.4)	45 (12.0)
<b>Used flavoured vape juice at initiation</b>					
Yes	95 (94.1)	93 (93.0)	91 (94.8)	90 (90.0)	369 (92.9)
No	6 (5.9)	7 (7.0)	5 (5.2)	10 (10.0)	28 (7.1)
<b>Most used flavour at initiation</b>					
Berry	26 (25.5)	28 (33.3)	36 (38.7)	32 (31.7)	122 (32.1)
Confectionary	15 (14.7)	16 (19.0)	14 (15.1)	14 (13.9)	59 (15.5)
Mango	18 (17.6)	8 (9.5)	14 (15.1)	15 (14.9)	55 (14.5)
Menthol	11 (10.8)	8 (9.5)	7 (7.5)	18 (17.8)	44 (11.6)
Tobacco	1 (1.0)	1 (1.2)	0 (0.0)	2 (2.0)	4 (1.1)
Other	31 (30.4)	23 (27.4)	22 (23.7)	20 (19.8)	96 (25.3)
<b>Most used flavour at present</b>					
Berry	30 (30.9)	14 (18.9)	30 (32.6)	22 (25.3)	96 (27.4)
Confectionary	7 (7.2)	3 (4.1)	4 (4.3)	8 (9.2)	22 (6.3)
Mango	12 (12.4)	17 (23.0)	19 (20.7)	10 (11.5)	58 (16.6)
Menthol	13 (13.4)	19 (25.7)	11 (12.0)	29 (33.3)	72 (20.6)
Tobacco	1 (1.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.3)
Other	34 (35.1)	21 (28.4)	28 (30.4)	18 (20.7)	101 (28.9)
<b>Would you vape if you could not buy flavoured juices?<sup>1</sup></b>					
Yes	57 (67.1)	45 (58.4)	45 (52.9)	46 (54.8)	193 (58.3)
No	28 (32.9)	32 (41.6)	40 (47.1)	38 (45.2)	138 (41.7)
<b>Content added to vape juice</b>					
Yes	28 (27.7)	14 (14.0)	21 (21.9)	16 (16.0)	79 (19.9)
No	73 (72.3)	86 (86.0)	75 (78.1)	84 (84.0)	318 (80.1)
<b>Nicotine concentration<sup>1</sup></b>					
10-20 mg/mL	4 (4.6)	9 (11.3)	8 (11.0)	7 (9.0)	28 (8.8)
35 mg/mL	14 (16.1)	17 (21.3)	14 (19.2)	24 (30.8)	69 (21.7)
50-60 mg/mL	69 (79.3)	54 (67.4)	51 (69.8)	47 (60.2)	221 (69.5)
<b>Vaping product content at onset</b>					
Vape juice with nicotine	67 (66.3)	70 (70.0)	67 (69.8)	64 (64.0)	268 (67.5)

Vape juice without nicotine	32 (31.7)	25 (25.0)	27 (28.2)	29 (29.0)	113 (28.5)
Dry cannabis	1 (1.0)	4 (4.0)	1 (1.0)	2 (2.0)	8 (2.0)
Liquid cannabis	1 (1.0)	1 (1.0)	1 (1.0)	5 (5.0)	8 (2.0)
<b>Vaping product content at present</b>					
Vape juice with nicotine	93 (92.0)	94 (94.0)	86 (89.6)	84 (84.0)	357 (90.4)
Vape juice without nicotine	3 (3.0)	2 (2.0)	3 (3.1)	6 (6.0)	14 (3.5)
Dry cannabis	2 (2.0)	0 (0.0)	0 (0.0)	1 (1.0)	3 (0.8)
Liquid cannabis	3 (3.0)	3 (3.0)	6 (6.3)	9 (9.0)	21 (5.3)
<b>Know nicotine content<sup>1</sup></b>					
Yes	90 (96.8)	93 (98.9)	84 (97.7)	80 (95.2)	347 (97.2)
No	3 (3.2)	1 (1.1)	2 (2.3)	4 (4.8)	10 (2.8)
<b>Device purchase location<sup>2</sup></b>					
Retail location	26	46	17	46	135
Specialty vape shop	25	46	13	43	127
From a friend	32	7	48	21	108
<b>Juice purchase location<sup>2</sup></b>					
Retail location	33	49	17	50	149
Specialty vape shop	23	54	13	45	135
From a friend	37	6	50	10	103

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 19. Product information for Prairies respondents.

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Type of e-cigarette</b>					
Cig-a-like	1 (1.0)	1 (1.2)	0 (0.0)	1 (1.4)	3 (0.8)
Vape pen	16 (15.2)	19 (23.8)	31 (30.1)	18 (25.4)	84 (23.4)
Mod	13 (12.4)	16 (20.0)	14 (13.6)	9 (12.7)	52 (14.5)
Pod	75 (71.4)	44 (55.0)	58 (56.3)	43 (60.5)	220 (61.3)
<b>Currently prefer flavoured vape juices<sup>1</sup></b>					
Yes	83 (83.8)	72 (92.3)	87 (90.6)	61 (91.0)	303 (89.1)
No	16 (16.2)	6 (7.7)	9 (9.4)	6 (9.0)	37 (10.9)
<b>Used flavoured vape juice at initiation</b>					
Yes	93 (88.6)	75 (93.8)	97 (94.2)	69 (97.2)	334 (93.0)
No	12 (11.4)	5 (6.2)	6 (5.8)	2 (2.8)	25 (7.0)
<b>Most used flavour at initiation</b>					
Berry	36 (38.3)	19 (21.1)	34 (30.9)	21 (29.6)	110 (30.1)
Confectionary	15 (16.0)	16 (17.8)	19 (17.3)	7 (9.9)	57 (15.6)
Mango	9 (9.6)	6 (6.7)	19 (17.3)	10 (14.1)	44 (12.1)
Menthol	8 (8.5)	13 (14.4)	3 (2.7)	8 (11.3)	32 (8.8)
Tobacco	4 (4.3)	3 (3.3)	3 (2.7)	0 (0.0)	10 (2.7)
Other	22 (23.4)	33 (36.7)	32 (29.1)	25 (35.2)	112 (30.7)
<b>Most used flavour at present</b>					
Berry	18 (22.2)	18 (22.2)	28 (27.5)	14 (20.3)	78 (23.4)
Confectionary	4 (4.9)	2 (2.5)	5 (4.9)	3 (4.3)	14 (4.2)
Mango	13 (16.0)	24 (29.6)	15 (14.7)	9 (13.0)	61 (18.3)
Menthol	17 (21.0)	13 (16.0)	20 (19.6)	14 (20.3)	64 (19.2)
Tobacco	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0)
Other	29 (35.8)	24 (29.6)	34 (33.3)	29 (42.0)	116 (34.8)
<b>Would you vape if you could not buy flavoured juices?<sup>1</sup></b>					
Yes	60 (72.3)	41 (56.9)	51 (58.6)	25 (41.0)	177 (58.4)
No	23 (27.7)	31 (43.1)	36 (41.4)	36 (59.0)	126 (41.6)
<b>Content added to vape juice</b>					
Yes	25 (23.8)	19 (23.8)	32 (31.1)	2 (2.8)	78 (21.7)
No	80 (76.2)	61 (76.2)	71 (68.9)	69 (97.2)	281 (78.3)
<b>Nicotine concentration<sup>1</sup></b>					
10-20 mg/mL	3 (3.3)	10 (15.9)	7 (7.2)	6 (9.7)	26 (8.3)
35 mg/mL	21 (22.8)	16 (25.4)	18 (18.8)	18 (29.0)	73 (23.3)
50-60 mg/mL	68 (73.9)	37 (58.7)	71 (74.0)	38 (61.3)	214 (68.4)
<b>Vaping product content at onset</b>					
Vape juice with nicotine	69 (65.7)	54 (67.5)	65 (63.1)	58 (81.7)	246 (68.5)

Vape juice without nicotine	36 (34.3)	23 (28.8)	37 (35.9)	12 (16.9)	108 (30.1)
Dry cannabis	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.4)	1 (0.3)
Liquid cannabis	0 (0.0)	3 (3.7)	1 (1.0)	0 (0.0)	4 (1.1)
<b>Vaping product content at present</b>					
Vape juice with nicotine	101 (96.2)	74 (92.5)	97 (94.2)	69 (97.2)	341 (95.0)
Vape juice without nicotine	2 (1.9)	2 (2.5)	3 (2.9)	0 (0.0)	7 (1.9)
Dry cannabis	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0)
Liquid cannabis	2 (1.9)	4 (5.0)	3 (2.9)	2 (2.8)	11 (3.1)
<b>Know nicotine content<sup>1</sup></b>					
Yes	100 (99.0)	73 (98.6)	97 (100.0)	66 (95.7)	336 (98.5)
No	1 (1.0)	1 (1.4)	0 (0.0)	3 (4.3)	5 (1.5)
<b>Device purchase location<sup>2</sup></b>					
Specialty vape shop	41	48	23	43	155
From a friend	38	5	51	7	101
Retail location	20	37	10	29	96
<b>Juice purchase location<sup>2</sup></b>					
Specialty vape shop	50	49	29	46	174
Retail location	21	39	11	31	102
From a friend	34	5	52	3	94

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 20. *Product information for Prince Edward Island respondents.*

Variables	Male youth, N (%)	Male young adults, N (%)	Female youth, N (%)	Female young adults, N (%)	Total, N (%)
<b>Type of e-cigarette</b>					
Cig-a-like	1 (2.1)	2 (4.3)	2 (2.2)	1 (1.2)	6 (2.2)
Vape pen	4 (8.6)	4 (8.6)	2 (2.2)	7 (8.1)	17 (6.2)
Mod	2 (4.3)	9 (19.0)	1 (1.1)	13 (15.1)	25 (9.2)
Pod	40 (85.0)	32 (68.1)	88 (94.5)	65 (75.6)	225 (82.4)
<b>Currently prefer flavoured e-juices<sup>1</sup></b>					
Yes	37 (88.1)	40 (87.0)	76 (92.7)	73 (85.9)	226 (88.6)
No	5 (11.9)	6 (13.0)	6 (7.3)	12 (14.1)	29 (11.4)
<b>Used flavoured e-juice at initiation</b>					
Yes	38 (80.9)	43 (91.5)	85 (91.4)	80 (93.0)	246 (90.1)
No	9 (19.1)	4 (8.5)	8 (8.6)	6 (7.0)	27 (9.9)
<b>Most used flavour at initiation<sup>1</sup></b>					
Berry	12 (31.6)	17 (39.5)	41 (48.2)	44 (55.0)	114 (46.2)
Confectionary	4 (10.5)	6 (14.0)	10 (11.8)	5 (6.2)	25 (10.2)
Mango	7 (18.4)	4 (9.3)	12 (14.1)	7 (8.8)	30 (12.2)
Menthol	8 (21.1)	11 (25.6)	17 (20.0)	19 (23.8)	55 (22.4)
Tobacco	5 (13.2)	3 (7.0)	2 (2.4)	1 (1.2)	11 (4.5)
Other	2 (5.2)	2 (4.6)	3 (3.5)	4 (5.0)	11 (4.5)
<b>Most used flavour at present<sup>1</sup></b>					
Berry	13 (35.2)	15 (37.5)	39 (51.3)	36 (49.3)	103 (45.6)
Confectionary	2 (5.4)	5 (12.5)	7 (9.2)	3 (4.1)	17 (7.5)
Mango	6 (16.2)	3 (7.5)	7 (9.2)	6 (8.2)	22 (9.7)
Menthol	14 (37.8)	16 (40.0)	19 (25.0)	22 (30.1)	71 (31.4)
Tobacco	1 (2.7)	0 (0.0)	1 (1.3)	0 (0.0)	2 (0.9)
Other	1 (2.7)	1 (2.5)	3 (4.0)	6 (8.3)	11 (4.9)
<b>Would you vape if you could not buy flavoured juices?<sup>1</sup></b>					
Yes	29 (78.4)	32 (80.0)	45 (59.2)	34 (46.6)	140 (61.9)
No	8 (21.6)	8 (20.0)	31 (40.8)	39 (53.4)	86 (38.1)
<b>Content added to vape juice</b>					
Yes	8 (17.0)	2 (4.3)	12 (12.9)	9 (10.5)	31 (11.4)
No	39 (83.0)	45 (95.7)	81 (87.1)	77 (89.5)	242 (88.6)
<b>Nicotine concentration<sup>1</sup></b>					
10-20 mg/mL	2 (4.4)	5 (13.5)	3 (3.8)	3 (4.5)	13 (5.7)
35 mg/mL	4 (8.9)	5 (13.5)	13 (16.5)	22 (32.8)	44 (19.3)
50-60 mg/mL	39 (86.7)	27 (73.0)	63 (79.7)	42 (62.7)	171 (75.0)
<b>Vaping product content at onset</b>					
Vape juice with nicotine	40 (85.1)	41 (87.2)	69 (74.2)	71 (82.6)	221 (81.0)

Vape juice without nicotine	5 (10.6)	4 (8.5)	20 (21.5)	8 (9.3)	37 (13.6)
Dry cannabis	0 (0.0)	2 (4.3)	1 (1.1)	5 (5.8)	8 (2.9)
Liquid cannabis	2 (4.3)	0 (0.0)	3 (3.2)	2 (2.3)	7 (2.5)
<b>Vaping product content at present<sup>1</sup></b>					
Vape juice with nicotine	45 (95.7)	46 (97.9)	86 (93.5)	76 (88.4)	253 (93.0)
Vape juice without nicotine	0 (0.0)	0 (0.0)	2 (2.2)	5 (5.8)	7 (2.6)
Dry cannabis	0 (0.0)	1 (2.1)	1 (1.1)	4 (4.7)	6 (2.2)
Liquid cannabis	2 (4.3)	0 (0.0)	3 (3.2)	1 (1.1)	6 (2.2)
<b>Know nicotine content<sup>1</sup></b>					
Yes	45 (100.0)	43 (93.5)	82 (95.3)	72 (94.7)	242 (95.7)
No	0 (0.0)	3 (6.5)	4 (4.7)	4 (5.3)	11 (4.3)
<b>Device purchase location<sup>2</sup></b>					
Specialty vape shop	8	25	12	52	97
From a friend	19	7	50	10	86
Retail location	9	15	0	28	52
<b>Juice purchase location<sup>2</sup></b>					
Specialty vape shop	7	26	11	57	101
From a friend	21	6	49	11	87
Retail location	5	14	1	29	49

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Tableau 21. *Information sur les produits consommés par les répondants du Québec*

Variables	Garçons (jeunes) N (%)	Hommes (jeunes adultes) N (%)	Filles (jeunes) N (%)	Femmes (jeunes adultes) N (%)	Total N (%)
<b>Type de vapoteuse</b>					
Dispositif similaire à une cigarette	3 (3,8)	1 (1,4)	0 (0,0)	0 (0,0)	4 (1,3)
Stylo de vapotage	15 (19,2)	7 (10,0)	12 (12,4)	10 (18,5)	44 (14,7)
Dispositif de type « mod »	5 (6,5)	22 (31,4)	13 (13,4)	13 (24,1)	53 (17,7)
Dispositif de type « pod »	55 (70,5)	40 (57,2)	72 (74,2)	31 (57,4)	198 (66,3)
<b>Préfère actuellement consommer des liquides à vapoter aromatisés<sup>1</sup></b>					
Oui	61 (85,9)	62 (89,9)	87 (93,5)	50 (94,3)	260 (90,9)
Non	10 (14,1)	7 (10,1)	6 (6,5)	3 (5,7)	26 (9,1)
<b>A consommé un liquide à vapoter aromatisé<sup>1</sup> lors de l'initiation</b>					
Oui	75 (96,2)	65 (92,9)	95 (97,9)	48 (88,9)	283 (94,6)
Non	3 (3,8)	5 (7,1)	2 (2,1)	6 (11,1)	16 (5,4)
<b>Arôme le plus populaire lors de l'initiation<sup>1</sup></b>					
Baies	37 (49,3)	24 (36,9)	44 (46,7)	24 (50,0)	129 (45,7)
Bonbons	1 (1,3)	2 (3,1)	5 (5,3)	2 (4,1)	10 (3,5)
Mangue	8 (10,7)	7 (10,8)	17 (18,1)	4 (8,3)	36 (12,8)
Menthol	12 (16,0)	17 (26,2)	15 (16,0)	9 (18,8)	53 (18,8)
Tabac	3 (4,0)	1 (1,5)	1 (1,1)	0 (0,0)	5 (1,8)
Autre	14 (18,7)	14 (21,5)	12 (12,8)	9 (18,8)	49 (17,4)
<b>Arôme préféré actuellement<sup>1</sup></b>					
Baies	33 (54,2)	24 (38,7)	40 (46,0)	27 (54,0)	124 (47,7)
Bonbons	2 (3,2)	3 (4,8)	7 (8,0)	4 (8,0)	16 (6,2)
Mangue	8 (13,1)	6 (9,7)	9 (10,3)	3 (6,0)	26 (10,0)
Menthol	10 (16,4)	17 (27,4)	17 (19,5)	14 (28,0)	58 (22,3)
Tabac	0 (0,0)	1 (1,6)	0 (0,0)	0 (0,0)	1 (0,3)
Autre	8 (13,1)	11 (17,8)	14 (16,2)	2 (4,0)	35 (13,5)
<b>Vapoteriez-vous si vous n'aviez pas accès à des liquides à vapoter aromatisés?<sup>1</sup></b>					
Oui	26 (42,6)	37 (59,7)	47 (54,0)	29 (58,0)	139 (53,5)
Non	35 (57,4)	25 (40,3)	40 (46,0)	21 (42,0)	121 (46,5)
<b>Contenu ajouté au liquide à vapoter</b>					
Oui	9 (11,5)	12 (17,1)	8 (8,2)	2 (3,7)	31 (10,4)
Non	69 (80,5)	58 (82,9)	89 (91,8)	52 (96,3)	268 (89,6)
<b>Taux de nicotine<sup>1</sup></b>					
10-20 mg/ml	9 (12,9)	15 (27,8)	11 (12,9)	17 (40,5)	52 (20,7)
35 mg/ml	15 (21,4)	16 (29,6)	19 (22,4)	13 (31,0)	63 (25,1)
50-60 mg/ml	46 (65,7)	23 (42,6)	55 (64,7)	12 (28,5)	136 (54,2)



**Contenu du produit de vapotage à l'initiation**

Liquide à vapoter avec nicotine	48 (61,5)	47 (67,2)	75 (77,4)	44 (81,5)	214 (71,6)
Liquide à vapoter sans nicotine	30 (38,5)	22 (31,4)	21 (21,6)	8 (14,8)	81 (27,1)
Cannabis séché	0 (0,0)	1 (1,4)	0 (0,0)	2 (3,7)	3 (1,0)
Cannabis liquide	0 (0,0)	0 (0,0)	1 (1,0)	0 (0,0)	1 (0,3)

**Contenu actuel du produit de vapotage**

Liquide à vapoter avec nicotine	73 (93,6)	62 (88,6)	94 (96,9)	51 (94,4)	280 (93,6)
Liquide à vapoter sans nicotine	4 (5,1)	4 (5,7)	2 (2,1)	3 (5,6)	13 (4,4)
Cannabis séché	1 (1,3)	1 (1,4)	0 (0,0)	0 (0,0)	2 (0,7)
Cannabis liquide	0 (0,0)	3 (4,3)	1 (1,0)	0 (0,0)	4 (1,3)

**Connais le taux de nicotine<sup>1</sup>**

Oui	72 (98,6)	62 (100,0)	90 (95,7)	49 (96,1)	273 (97,5)
Non	1 (1,4)	0 (0,0)	4 (4,3)	2 (3,9)	7 (2,5)

**Lieu d'achat du dispositif de vapotage<sup>2</sup>**

Boutique spécialisée de vapotage	30	42	40	38	150
Magasin de détail	30	25	30	13	98
Ami	14	5	26	3	48

**Lieu d'achat du liquide à vapoter<sup>2</sup>**

Boutique spécialisée de vapotage	33	41	50	41	165
Magasin de détail	32	27	31	14	104
Ami	17	1	24	2	44

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*Remarque* : Le terme « jeunes » désigne les répondants âgés de 16 à 18 ans; les « jeunes adultes » regroupent ceux de 19 à 24 ans. <sup>1</sup> Les participants n'ont pas tous répondu à cette question. <sup>2</sup> Les participants avaient plusieurs choix de réponses; pour cette raison, seules les fréquences des réponses les plus populaires sont rapportées.

Table 22. Other substance use behaviours for the total sample.

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Cigarettes smoked per week</b>	14.21 (23.32)	24.11 (31.89)	9.79 (13.92)	21.77 (28.52)	16.97 (25.36)
<b>Days of cannabis use in the last 30 days<sup>1*</sup></b>	16.27 (12.03)	19.94 (10.97)	14.10 (11.68)	17.32 (11.90)	16.80 (11.84)
<b>Days of alcohol use in the last 30 days<sup>2*</sup></b>	6.72 (7.19)	8.59 (7.66)	5.44 (5.59)	7.18 (6.82)	6.91 (6.88)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. \*Denotes a question not asked in or not measured in the same manner as the Nova Scotia survey and thus Nova Scotia data is excluded from these responses. <sup>1</sup>Participants that indicated cannabis use in the last 30 days (N = 1586). Participants who responded 0 to this question are not included in this estimate. <sup>2</sup>Participants that indicated alcohol use in the last 30 days (N = 1843). Participants who responded 0 to this question are not included in this estimate.

Table 22. Other substance use behaviours for the total sample (continued).

Variables	Male youth, <i>N (%)</i>	Male young adults, <i>N (%)</i>	Female youth, <i>N (%)</i>	Female young adults, <i>N (%)</i>	Total, <i>N (%)</i>
<b>Tobacco use history</b>					
Never user	158 (22.3)	82 (11.7)	319 (35.5)	165 (23.4)	724 (24.1)
Former user	453 (64.1)	524 (75.0)	489 (54.4)	462 (65.6)	1928 (64.1)
Current user	96 (13.6)	93 (13.3)	91 (10.1)	77 (11.0)	357 (11.8)
<b>Tobacco use onset relative to vaping onset<sup>1</sup></b>					
Before	212 (38.6)	376 (60.9)	277 (47.8)	371 (68.8)	1236 (54.1)
During	128 (23.3)	103 (16.7)	123 (21.2)	76 (14.1)	430 (18.8)
After	209 (38.1)	138 (22.4)	180 (31.0)	92 (17.1)	619 (27.1)
<b>Knowledge of anyone who started vaping before smoking cigarettes</b>					
Yes	281 (39.7)	225 (32.2)	378 (42.0)	212 (30.1)	1096 (36.4)
No	426 (60.3)	474 (67.8)	521 (58.0)	492 (69.9)	1913 (63.6)
<b>Type of drinker<sup>*2</sup></b>					

Occasional drinker (1 drink/< 2wks.)	239	159	384	254	1036
Light drinker (1-5 drinks/wk.)	97	143	149	163	552
Moderate drinker (6-10 drinks/wk.)	84	114	63	86	347

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. \*Denotes a question not asked in or not measured in the same manner as the Nova Scotia survey and thus Nova Scotia data is excluded from these responses. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 23. *Other substance use behaviours for British Columbia respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Cigarettes smoked per week</b>	10.0 (6.95)	8.00 (7.45)	2.94 (2.01)	7.50 (8.74)	6.94 (6.54)
<b>Days of cannabis use in the last 30 days<sup>1</sup></b>	18.91 (11.08)	21.25 (10.21)	16.02 (12.15)	17.27 (12.06)	18.50 (11.44)
<b>Days of alcohol use in the last 30 days<sup>2</sup></b>	7.76 (7.99)	9.99 (8.01)	6.56 (5.89)	9.94 (8.05)	8.75 (7.70)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants that indicated cannabis use in the last 30 days (N = 220). Participants who responded 0 to this question are not included in this estimate. <sup>2</sup>Participants that indicated alcohol use in the last 30 days (N = 251). Participants who responded 0 to this question are not included in this estimate.

Table 23. *Other substance use behaviours for British Columbia respondents (continued).*

Variables	Male youth, <i>N (%)</i>	Male young adults, <i>N (%)</i>	Female youth, <i>N (%)</i>	Female young adults, <i>N (%)</i>	Total, <i>N (%)</i>
<b>Tobacco use history</b>					
Never user	17 (21.0)	15 (18.8)	23 (30.7)	18 (24.3)	73 (23.5)
Former user	53 (64.0)	58 (72.5)	42 (56.0)	49 (66.2)	202 (65.2)
Current user	11 (15.0)	7 (8.7)	10 (13.3)	7 (9.5)	35 (11.3)
<b>Tobacco use onset relative to vaping onset<sup>1</sup></b>					
Before	28 (43.8)	35 (53.8)	13 (25.0)	33 (58.9)	109 (46.0)
During	14 (21.9)	12 (18.5)	15 (28.8)	7 (12.5)	48 (20.3)
After	22 (34.3)	18 (27.7)	24 (46.2)	16 (28.6)	80 (33.7)
<b>Knowledge of anyone who started vaping before smoking cigarettes</b>					
Yes	28 (34.6)	31 (38.8)	33 (44.0)	25 (33.8)	117 (37.7)
No	53 (65.4)	49 (61.2)	42 (56.0)	49 (66.2)	193 (62.3)

**Type of drinker<sup>2</sup>**

Occasional drinker (1 drink/< 2wks.)	30	21	30	19	100
Light drinker (1-5 drinks/wk.)	15	29	23	23	90
Moderate drinker (6-10 drinks/wk.)	8	12	7	18	45

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 24. *Other substance use behaviours for Manitoba respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Cigarettes smoked per week</b>	3.67 (1.75)	32.33 (62.99)	8.75 (10.42)	15.33 (21.46)	14.43 (33.31)
<b>Days of cannabis use in the last 30 days<sup>1</sup></b>	14.48 (12.74)	20.73 (10.53)	14.69 (12.43)	18.12 (11.88)	16.62 (12.17)
<b>Days of alcohol use in the last 30 days<sup>2</sup></b>	7.12 (8.53)	7.12 (7.40)	7.16 (6.94)	7.32 (6.95)	7.17 (7.45)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants that indicated cannabis use in the last 30 days (N = 159). Participants who responded 0 to this question are not included in this estimate. <sup>2</sup>Participants that indicated alcohol use in the last 30 days (N = 188). Participants who responded 0 to this question are not included in this estimate.

Table 24. *Other substance use behaviours for Manitoba respondents (continued).*

Variables	Male youth, <i>N (%)</i>	Male young adults, <i>N (%)</i>	Female youth, <i>N (%)</i>	Female young adults, <i>N (%)</i>	Total, <i>N (%)</i>
<b>Tobacco use history</b>					
Never user	10 (15.2)	4 (7.1)	25 (32.9)	8 (18.2)	47 (19.4)
Former user	49 (74.2)	45 (80.4)	42 (55.3)	33 (75.0)	169 (69.8)
Current user	7 (10.6)	7 (12.5)	9 (11.8)	3 (6.8)	26 (10.8)
<b>Tobacco use onset relative to vaping onset<sup>1</sup></b>					
Before	15 (26.8)	34 (65.4)	20 (39.2)	20 (55.6)	89 (45.6)
During	17 (30.4)	9 (17.3)	11 (21.6)	9 (25.0)	46 (23.6)
After	24 (42.8)	9 (17.3)	20 (39.2)	7 (19.4)	60 (30.8)
<b>Knowledge of anyone who started vaping before smoking cigarettes</b>					
Yes	30 (45.5)	17 (30.4)	28 (36.8)	11 (25.0)	86 (35.5)
No	36 (54.5)	39 (69.6)	48 (63.2)	33 (75.0)	156 (64.5)

**Type of drinker<sup>2</sup>**

Occasional (1 drink/< 2 wks.)	31	20	39	17	107
Light (1-5 drinks/wk.)	8	15	13	13	49
Moderate (6-10 drinks/wk.)	12	8	12	3	35

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 25. *Other substance use behaviours for New Brunswick respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Cigarettes smoked per week</b>	17.00 (16.47)	32.83 (46.04)	1.75 (0.96)	28.14 (32.89)	25.38 (35.45)
<b>Days of cannabis use in the last 30 days<sup>1</sup></b>	19.00 (12.35)	20.88 (10.25)	16.60 (10.96)	19.54 (11.86)	19.13 (11.32)
<b>Days of alcohol use in the last 30 days<sup>2</sup></b>	5.59 (5.94)	7.65 (7.38)	3.85 (4.13)	6.11 (6.50)	5.97 (6.36)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants that indicated cannabis use in the last 30 days (N = 197). Participants who responded 0 to this question are not included in this estimate. <sup>2</sup>Participants that indicated alcohol use in the last 30 days (N = 206). Participants who responded 0 to this question are not included in this estimate.

Table 25. *Other substance use behaviours for New Brunswick respondents (continued).*

Variables	Male youth, <i>N (%)</i>	Male young adults, <i>N (%)</i>	Female youth, <i>N (%)</i>	Female young adults, <i>N (%)</i>	Total, <i>N (%)</i>
<b>Tobacco use history</b>					
Never user	10 (29.4)	11 (13.8)	27 (31.8)	22 (21.0)	70 (23.1)
Former user	20 (58.8)	56 (70.0)	54 (63.5)	68 (64.8)	198 (65.1)
Current user	4 (11.8)	13 (16.2)	4 (4.7)	15 (14.2)	36 (11.8)
<b>Tobacco use onset relative to vaping onset<sup>1</sup></b>					
Before	8 (33.4)	43 (62.3)	30 (51.7)	66 (79.5)	147 (62.8)
During	5 (20.8)	12 (17.4)	15 (25.9)	9 (10.8)	41 (17.5)
After	11 (45.8)	14 (20.3)	13 (22.4)	8 (9.7)	46 (19.7)
<b>Knowledge of anyone who started vaping before smoking cigarettes</b>					
Yes	17 (50.0)	25 (31.3)	35 (41.2)	30 (28.6)	107 (35.2)
No	17 (50.0)	55 (78.7)	50 (58.8)	75 (71.4)	197 (64.8)

**Type of drinker<sup>2</sup>**

Occasional drinker (1 drink/< 2wks.)	18	26	46	58	148
Light drinker (1-5 drinks/wk.)	2	21	12	12	47
No longer drink	4	5	17	19	45

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 26. *Other substance use behaviours for Newfoundland and Labrador respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Cigarettes smoked per week</b>	11.50 (12.92)	52.00 (47.25)	6.25 (4.35)	34.55 (31.95)	28.90 (33.20)
<b>Days of cannabis use in the last 30 days<sup>1</sup></b>	17.31 (11.55)	14.57 (12.31)	10.61 (11.53)	16.33 (11.32)	14.39 (11.81)
<b>Days of alcohol use in the last 30 days<sup>2</sup></b>	5.15 (3.74)	8.35 (8.05)	4.50 (4.09)	4.98 (4.93)	5.19 (4.96)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants that indicated cannabis use in the last 30 days (N = 173). Participants who responded 0 to this question are not included in this estimate. <sup>2</sup>Participants that indicated alcohol use in the last 30 days (N = 210). Participants who responded 0 to this question are not included in this estimate.

Table 26. *Other substance use behaviours for Newfoundland and Labrador respondents (continued).*

Variables	Male youth, <i>N (%)</i>	Male young adults, <i>N (%)</i>	Female youth, <i>N (%)</i>	Female young adults, <i>N (%)</i>	Total, <i>N (%)</i>
<b>Tobacco use history</b>					
Never user	17 (27.9)	7 (20.6)	43 (40.2)	24 (28.2)	91 (31.7)
Former user	38 (62.3)	22 (64.7)	60 (56.1)	49 (57.6)	169 (58.9)
Current user	6 (9.8)	5 (14.7)	4 (3.7)	12 (14.2)	27 (9.4)
<b>Tobacco use onset relative to vaping onset<sup>1</sup></b>					
Before	17 (38.6)	16 (59.3)	26 (40.6)	41 (67.2)	100 (51.0)
During	4 (9.1)	5 (18.5)	12 (18.8)	11 (18.0)	32 (16.3)
After	23 (52.3)	6 (22.2)	26 (40.6)	9 (14.8)	64 (32.7)
<b>Knowledge of anyone who started vaping before smoking cigarettes</b>					

Yes	32 (52.5)	15 (44.1)	52 (48.6)	33 (38.8)	132 (46.0)
No	29 (47.5)	19 (55.9)	55 (51.4)	52 (61.2)	155 (54.0)
<b>Type of drinker<sup>2</sup></b>					
Occasional drinker (1 drink/< 2wks.)	24	8	60	44	136
Light drinker (1-5 drinks/wk.)	12	5	24	18	59
No longer drink	11	5	9	10	35

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 27. *Other substance use behaviours for Nova Scotia respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Cigarettes smoked per week</b>	22.21 (39.06)	22.42 (17.59)	14.39 (16.99)	16.07 (23.48)	18.17 (23.65)
<b>Days of cannabis use in the last 30 days*</b>	---	---	---	---	---
<b>Days of alcohol use in the last 30 days*</b>	---	---	---	---	---

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. \*Denotes a question not asked in or not measured in the same manner in the Nova Scotia survey and thus Nova Scotia data is excluded from these responses.

Table 27. *Other substance use behaviours for Nova Scotia respondents (continued).*

Variables	Male youth, <i>N (%)</i>	Male young adults, <i>N (%)</i>	Female youth, <i>N (%)</i>	Female young adults, <i>N (%)</i>	Total, <i>N (%)</i>
<b>Tobacco use history</b>					
Never user	37 (27.6)	13 (8.6)	75 (44.9)	23 (27.1)	148 (27.5)
Former user	80 (59.7)	115 (75.7)	64 (38.3)	47 (55.3)	306 (56.9)
Current user	17 (12.7)	24 (15.7)	28 (16.8)	15 (17.6)	84 (15.6)
<b>Tobacco use onset relative to vaping onset<sup>1</sup></b>					
Before	46 (47.4)	100 (71.9)	67 (72.8)	45 (72.6)	258 (66.1)
During	20 (20.6)	18 (12.9)	10 (10.9)	10 (16.1)	58 (14.9)
After	31 (32.0)	21 (15.2)	15 (16.3)	7 (11.3)	74 (19.0)
<b>Knowledge of anyone who started vaping before smoking cigarettes</b>					

Yes	45 (33.6)	33 (21.7)	66 (39.5)	20 (23.5)	164 (30.5)
No	89 (66.4)	119 (78.3)	101 (60.5)	65 (76.5)	374 (69.5)
<b>Type of drinker*</b>					
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Note. Youth refers to ages 16-18. Young adult refers to ages 19-24. \*Denotes a question not asked in or not measured in the same manner in the Nova Scotia survey and thus Nova Scotia data is excluded from these responses. <sup>1</sup>Question not answered by all participants.

Table 28. Other substance use behaviours for Ontario respondents.

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Cigarettes smoked per week</b>	12.71 (16.39)	13.00 (10.37)	10.50 (18.02)	7.00 (5.15)	11.31 (14.41)
<b>Days of cannabis use in the last 30 days<sup>1</sup></b>	15.10 (11.83)	21.32 (10.58)	14.07 (11.06)	17.40 (11.86)	17.03 (11.64)
<b>Days of alcohol use in the last 30 days<sup>2</sup></b>	7.30 (7.92)	9.86 (8.29)	5.32 (5.16)	8.20 (7.04)	7.78 (7.37)

Note. Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants that indicated cannabis use in the last 30 days (N = 270). Participants who responded 0 to this question are not included in this estimate. <sup>2</sup>Participants that indicated alcohol use in the last 30 days (N = 278). Participants who responded 0 to this question are not included in this estimate.

Table 28. Other substance use behaviours for Ontario respondents (continued).

Variables	Male youth, <i>N (%)</i>	Male young adults, <i>N (%)</i>	Female youth, <i>N (%)</i>	Female young adults, <i>N (%)</i>	Total, <i>N (%)</i>
<b>Tobacco use history</b>					
Never user	21 (20.8)	11 (11.0)	36 (37.5)	30 (30.0)	98 (24.7)
Former user	66 (65.3)	78 (78.0)	50 (52.1)	64 (64.0)	258 (65.0)
Current user	14 (13.9)	11 (11.0)	10 (10.4)	6 (6.0)	41 (10.3)
<b>Tobacco use onset relative to vaping onset<sup>1</sup></b>					
Before	25 (31.3)	48 (53.9)	28 (46.7)	44 (62.9)	145 (48.5)
During	21 (26.3)	16 (18.0)	12 (20.0)	11 (15.7)	60 (20.1)
After	34 (42.4)	25 (28.1)	20 (33.3)	15 (21.4)	94 (31.4)
<b>Knowledge of anyone who started vaping before smoking cigarettes</b>					



Yes	43 (42.6)	38 (38.0)	40 (41.7)	34 (34.0)	155 (39.0)
No	58 (57.4)	62 (62.0)	56 (58.3)	66 (66.0)	242 (61.0)
<b>Type of drinker<sup>2</sup></b>					
Occasional (1 drink/< 2wks.)	46	30	61	41	178
Light drinker (5-1 drinks/wk.)	18	23	14	29	84
Moderate drinker (6-10 drinks/wk.)	9	22	8	15	54

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 29. *Other substance use behaviours for Prairies respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Cigarettes smoked per week</b>	10.14 (14.51)	22.50 (20.44)	9.80 (12.32)	10.00 (16.81)	11.52 (14.83)
<b>Days of cannabis use in the last 30 days<sup>1</sup></b>	16.56 (12.49)	19.78 (11.52)	16.46 (11.25)	16.89 (12.28)	17.40 (11.85)
<b>Days of alcohol use in the last 30 days<sup>2</sup></b>	6.87 (6.88)	8.24 (7.35)	5.86 (6.16)	8.09 (6.86)	7.18 (6.84)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants that indicated cannabis use in the last 30 days (N = 207). Participants who responded 0 to this question are not included in this estimate. <sup>2</sup>Participants that indicated alcohol use in the last 30 days (N = 284). Participants who responded 0 to this question are not included in this estimate.

Table 29. *Other substance use behaviours for Prairies respondents (continued).*

Variables	Male youth, <i>N (%)</i>	Male young adults, <i>N (%)</i>	Female youth, <i>N (%)</i>	Female young adults, <i>N (%)</i>	Total, <i>N (%)</i>
<b>Tobacco use history</b>					
Never user	16 (15.2)	10 (12.5)	26 (25.3)	12 (16.9)	64 (17.8)
Former user	72 (68.6)	61 (76.3)	67 (65.0)	54 (76.1)	254 (70.8)
Current user	17 (16.2)	9 (11.2)	10 (9.7)	5 (7.0)	41 (11.4)
<b>Tobacco use onset relative to vaping onset<sup>1</sup></b>					
Before	34 (38.2)	34 (48.6)	31 (40.3)	37 (62.7)	136 (46.1)
During	24 (27.0)	15 (21.4)	22 (28.6)	10 (16.9)	71 (24.1)
After	31 (34.8)	21 (30.0)	24 (31.1)	12 (20.4)	88 (29.8)
<b>Knowledge of anyone who started vaping before smoking cigarettes</b>					

Yes	37 (35.2)	31 (38.8)	45 (43.7)	16 (22.5)	129 (35.9)
No	68 (64.8)	49 (61.2)	58 (56.3)	55 (77.5)	230 (64.1)
<b>Type of drinker<sup>2</sup></b>					
Occasional drinker (2 drinks/< 2wks.)	46	22	57	23	148
Light drinker (1-5 drinks/wk.)	18	22	22	24	86
Moderate drinker (6-10 drinks/wk.)	19	23	9	12	63

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

Table 30. *Other substance use behaviours for Prince Edward Island respondents.*

Variables	Male youth, <i>M (SD)</i>	Male young adults, <i>M (SD)</i>	Female youth, <i>M (SD)</i>	Female young adults, <i>M (SD)</i>	Total, <i>M (SD)</i>
<b>Cigarettes smoked per week</b>	18.25 (33.61)	15.78 (16.25)	11.13 (16.35)	26.38 (35.21)	17.82 (25.95)
<b>Days of cannabis use in the last 30 days<sup>1</sup></b>	14.81 (13.30)	18.88 (10.64)	15.16 (12.31)	16.53 (11.97)	16.26 (12.06)
<b>Days of alcohol use in the last 30 days<sup>2</sup></b>	6.42 (8.47)	9.31 (7.51)	5.56 (6.08)	6.46 (6.90)	6.67 (7.09)

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Participants that indicated cannabis use in the last 30 days (N = 179). Participants who responded 0 to this question are not included in this estimate. <sup>2</sup>Participants that indicated alcohol use in the last 30 days (N = 214). Participants who responded 0 to this question are not included in this estimate.

Table 30. *Other substance use behaviours for Prince Edward Island respondents (continued).*

Variables	Male youth, <i>N (%)</i>	Male young adults, <i>N (%)</i>	Female youth, <i>N (%)</i>	Female young adults, <i>N (%)</i>	Total, <i>N (%)</i>
<b>Tobacco use history</b>					
Never user	11 (23.4)	3 (6.4)	33 (35.5)	19 (22.1)	66 (24.2)
Former user	27 (57.4)	35 (74.5)	52 (55.9)	58 (67.4)	172 (63.0)
Current user	9 (19.2)	9 (19.1)	8 (8.6)	9 (10.5)	35 (12.8)
<b>Tobacco use onset relative to vaping onset<sup>1</sup></b>					
Before	24 (66.7)	30 (68.2)	28 (46.7)	47 (70.1)	129 (62.3)
During	5 (13.9)	6 (13.6)	12 (20.0)	5 (7.5)	28 (13.5)
After	7 (19.4)	8 (18.2)	20 (33.3)	15 (22.4)	50 (24.2)

**Knowledge of anyone who started vaping before smoking cigarettes**

Yes	23 (48.9)	14 (29.8)	42 (45.2)	33 (38.4)	112 (41.0)
No	24 (51.1)	33 (70.2)	51 (54.8)	53 (61.6)	161 (59.0)

**Type of drinker<sup>2</sup>**

Occasional drinker (1 drink/< 2wks.)	19	9	44	31	103
Light drinker (1-5 drinks/wk.)	5	8	22	30	65
Moderate drinker (6-10 drinks/wk.)	10	13	7	13	43

*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.

 Tableau 31. *Habitudes de consommation d'autres substances des répondants du Québec*

Variables	Garçons (jeunes) <i>M (É.T.)</i>	Hommes (jeunes adultes) <i>M (É.T.)</i>	Filles (jeunes) <i>M</i> (É.T.)	Femmes (jeunes adultes) <i>M (É.T.)</i>	Total <i>M (É.T.)</i>
<b>Cigarettes fumées par semaine</b>	17,89 (27,29)	15,40 (8,85)	4,71 (10,31)	27,40 (42,35)	15,69 (25,03)
<b>Jours de consommation de cannabis au cours des 30 derniers jours<sup>1</sup></b>	6,83 (10,72)	13,71 (13,12)	6,39 (9,69)	9,98 (12,41)	8,82 (11,64)
<b>Jours de consommation d'alcool au cours des 30 derniers jours<sup>2</sup></b>	4,12 (5,63)	5,29 (6,68)	3,71 (5,19)	3,98 (4,97)	4,24 (5,66)

*Remarque :* Le terme « jeunes » désigne les répondants âgés de 16 à 18 ans; les « jeunes adultes » regroupent ceux de 19 à 24 ans. <sup>1</sup> Participants ayant indiqué avoir consommé du cannabis au cours des 30 derniers jours (N = 291). Cette estimation ne tient pas compte des participants ayant répondu 0 à cette question. <sup>2</sup> Participants ayant indiqué avoir consommé de l'alcool au cours des 30 derniers jours (N = 294). Cette estimation ne tient pas compte des participants ayant répondu 0 à cette question.

 Table 31. *Other substance use behaviours for Quebec respondents.*

Variables	Male youth, <i>N (%)</i>	Male young adults, <i>N (%)</i>	Female youth, <i>N (%)</i>	Female young adults, <i>N (%)</i>	Total, <i>N (%)</i>
<b>Tobacco use history</b>					
Never user	19 (24.4)	8 (11.4)	31 (32.0)	9 (16.7)	67 (22.4)
Former user	48 (61.5)	54 (77.2)	58 (59.8)	40 (74.1)	200 (66.9)
Current user	11 (14.1)	8 (11.4)	8 (8.2)	5 (9.2)	32 (10.7)
<b>Tobacco use onset relative to vaping onset<sup>1</sup></b>					
Before	15 (25.4)	36 (58.1)	34 (51.5)	38 (84.4)	123 (53.0)

During	18 (30.5)	10 (16.1)	14 (21.2)	4 (8.9)	46 (19.8)
After	26 (44.1)	16 (25.8)	18 (27.3)	3 (6.7)	63 (27.2)
<b>Knowledge of anyone who started vaping before smoking cigarettes</b>					
Yes	26 (33.3)	21 (30.0)	37 (38.1)	10 (18.5)	94 (31.4)
No	52 (66.7)	49 (70.0)	60 (61.9)	44 (81.5)	205 (68.6)
<b>Type of drinker<sup>1,2</sup></b>					
Occasional drinker (1 drink/< 2wks.)	25	23	47	21	116
Light drinker (1-5 drinks/wk.)	19	20	19	14	72
No longer drink	17	11	17	11	56

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*Note.* Youth refers to ages 16-18. Young adult refers to ages 19-24. <sup>1</sup>Question not answered by all participants. <sup>2</sup>Participants could choose from several answers. For this reason, only the frequencies of the top answers are reported.