



Fact Sheet: The 2019 Youth and Young Adult Vaping Survey Findings

Background

Vaping among youth and young adults is an epidemic. Between 2017 and 2018, vaping among Canadians aged 16 to 19 increased by 74% (Hammond et al., 2019). This trajectory signifies a red alert state. The 2016-17 Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS) revealed that 20.9% of Nova Scotian youth in grades 10-12 used e-cigarettes in the last 30 days, which is substantially higher than the national average of 10% (CSTADS, 2017).

Aim and Objectives

The aim of the *2019 Youth and Young Adult Vaping Survey* was to better understand the drivers and mechanisms that affect vaping behaviour among individuals who vape and are between the ages of 16 and 24.

The end goal of the survey is to disseminate the findings in a manner that informs policy and helps create educational resources for youth and young adults, teachers, and health professionals.

Methods

The vaping survey was initially pilot tested with 20 participants, revised, and then tested again with 8 volunteers to confirm that the questions were clear and that the length of the survey did not lead to participant fatigue. Further, the answers of the pilot surveys were examined to determine whether they contained meaningful and coherent responses.

A single comprehensive cross-sectional survey was used for the final version of the survey to recruit participants in the fall of 2019. Participants had to be between the ages of 16 and 24, vape at least once a week, and currently reside in Nova Scotia.

Participants were recruited online using Facebook and Instagram advertising 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 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 which included demographic questions, questions about their vaping behaviour and preferences, questions about smoking, personality questionnaires, and a substance use motives questionnaire.

On average, the survey took approximately 15 minutes to complete. The participants were offered a \$10 electronic gift card to Starbucks for completing the survey.

Summary of demographics and general vaping behaviour in the survey

Demographics

- 670 of youth and young adult who vape participated in the survey.
- 367 participants identified as male and 303 identified as female. Although 10 additional participants identified as another gender, they were not included in the results due to the small group number, which precludes robust analysis for this group.
- 369 participants were youth (16-18 years old) and 301 were young adults (19-24 years old)
- 396 participants were from Halifax County, 46 from Cape Breton, 31 from Annapolis, 30 from Pictou, 26 from Colchester, and 27 from Antigonish. The rest of the participants were from various other counties.
- 77.2% of participants stated that they were currently employed.

General vaping behaviour

- The average age of vaping onset was 16 years old.
- On average males vaped more (877 puffs per week) versus females (521 puffs per week) and young adults vaped more (746 puffs per week) than youth (681 puffs per week).
- 27.8% of participants said they have never tried tobacco, 57.6% said they tried it but do not currently use it, and 14.6% said they currently use tobacco.
- Among the 424 participants who reported a history of tobacco use (either past or current use), 19.8% of participants reported using tobacco after vaping.
- 35.7% of participants reported attempting to quit vaping at least once.

Summary of key survey findings, supporting evidence from other studies, and recommendations for policy action

The following are 5 recommendations followed by findings from the survey. Where applicable, reference is made to supporting evidence from other research and is clearly cited to differentiate them from the findings of this survey.

1. Banning flavoured vaping juices is needed to reduce e-cigarette use among youth as flavours appeal more to youth than adults. Reducing maximum nicotine concentration levels is also fundamental for reducing the potential for youth to become addicted to nicotine.

Survey evidence: Preference for flavoured products and high nicotine concentration levels

- 95.8% of youth who vape (ages 16-18) stated that they prefer flavoured vape juice over unflavoured vape juice.
- About 59% of youth females who vape (ages 16-18) specifically reported flavours as the most liked aspect about vaping.
- If flavoured vape juices were to be eliminated, 48.3% of youth and young adults who vape (ages 16-24) think they would stop vaping.
- 90% of youth who vape (ages 16-18) use nicotine-based vape juice. Among youth who vape nicotine-based juice, the majority (66.5%) use concentrations of nicotine 50 mg/mL or higher.
- 54.7% of youth males who vape (ages 16-18) specifically reported that getting a nicotine rush is the most liked aspect of vaping.

Supporting evidence from other studies: Choice of flavours at vaping initiation

- A study by Harrell et al. (2017) provides additional supportive evidence: 98.6% of youth (ages 12-17) who vape started vaping products that contain flavours other than tobacco and only 44.1% of older adults (ages 30+) who vape started vaping products that contain these flavours. Further, 47.5% of older adults who vape started vaping using tobacco flavours and only 1.4% of youth who vape started vaping using tobacco flavours (Harrell et al., 2017).

2. Taxation is needed as a policy lever to reduce the affordability of vaping products for youth and to reduce the potential for vaping-related harms. Increasing the cost of vaping will reduce use most notably among youth because they are more sensitive to pricing in comparison to adults.

Survey evidence: The affordability of vaping products for underage youth and concerns over side effects

- On average, youth who vape (ages 16-18) use the equivalent of 3 pods (disposable cartridges containing vape juice) per week and spend \$24.30 per week on vaping.
- 63% of youth who vape (ages 16-18) purchase their vaping products using money earned from their jobs.
- 14% of youth who vape (ages 16-18) reported negative side effects (73% of these were respiratory-related; e.g., shortness of breath).

Supporting evidence from other studies: Youth are more sensitive to tobacco price increases

- Tax increases lead to higher reductions in youth tobacco use prevalence in comparison to adults (Ding, 2003).

3. Stronger enforcement is required to prevent sales to minors. This will help to reduce the percentage of youth that access vaping devices and vape juice through retail outlets.

Survey evidence: Access to vaping products by underage youth

- 33% of youth who vape (ages 16-18) report retail locations in Nova Scotia as the most frequent outlet for accessing their vaping products.

Supporting evidence from other studies: Access to tobacco products by underage youth

- A survey on youth access to tobacco from stores, gas stations, convenience stores, and supermarkets found that youth access for tobacco products from such retail locations is lower (17% of youth) [CRG Consulting, 2010 as cited by OTRU, 2013], in comparison to the access rate to vaping products reported in our survey.

4. It is important to consider a policy for increasing the minimum legal age for purchasing e-cigarettes and combustible cigarettes to 21.

Survey evidence: Sourcing vaping products from peers

- 73% of youth who vape (ages 16-18) report that friends are the strongest influence for vaping initiation. Approximately 99% of them have been offered to use someone else's vaping device.
- 31% of youth who vape (ages 16-18) state that they accessed a vaping device through a friend who either gave it to them or bought it for them. 35% report accessing vape juice through their friends.
- Increasing the minimum legal age will likely decrease the influence that friends with access to vaping products have on their underage friends. Youth are less likely to know someone who is 21 versus their 19-year-old peers and will therefore have less access to vaping products if the minimum age is raised.

Supporting evidence from other studies: Sourcing tobacco products from peers

- A study by Gendall et al. (2014) found that social supply from friends and close others is a primary source of tobacco for adolescents.

5. The public needs to be aware of the potential for vaping to transition into smoking and recognize that the potential benefits of vaping for smoking cessation may be overstated.

Survey evidence: Dual e-cigarette and combustible cigarette use

- Out of the 424 respondents that use e-cigarettes and have a history of tobacco use (current or past), 19.8% of youth and young adults (ages 16-24) reported ever using tobacco after vaping.
- 14.6% of youth and young adults who vape (ages 16-24) currently use tobacco.

Supporting evidence from other studies: Vaping as a cessation aid and e-cigarette use transitioning to combustible cigarette use

- The most promising evidence for the effectiveness of vaping as a smoking cessation aid is 18% for one-year abstinence (Hajek et al., 2019). About 80% of smokers who quit smoking via vaping in this study continued to use e-cigarettes (Hajek et al., 2019). This suggests that e-cigarettes sustain nicotine addiction. Although around 10% of smokers who quit smoking using nicotine replacement therapy were able to remain abstinent after 1 year, only 9% of those them continued using nicotine replacement therapy (Hajek et al., 2019).
- It is estimated that 21.8% of underage youth started using tobacco because of e-cigarettes (Berry et al., 2019).

References

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