



Youth and Young Adult Vaping in Canada

Background

As part of the Health System Research Fund, OTRU's Research on E-Cigarettes and Waterpipe (RECIG-WP) grant has established a Youth and Young Adult Panel Study in order to help understand what happens over time to young people, especially non-smokers, who start vaping.

In this newsletter, we highlight preliminary findings from baseline data collection.

Methods

Between mid-February and mid-March 2018, 1049 youth and young adults across Canada were recruited to an online study from multiple sources, including social media (Google, Instagram, Reddit) and a recontact list from a Smoke-Free Ontario initiative for young adults (Leave the Pack Behind). Quota sampling was used to ensure sufficient numbers of regular vapers were recruited, targeting 60% regular vapers (vaping at least weekly) and 40% non-regular vapers (vaping less than weekly, not at all, or never). After an initial detailed survey, participants are being contacted by email approximately every 3 months. Specifically, participants are being given a single question poll at 3-, 9- and 15-months follow-up and brief surveys at 6 and 12 months. A final detailed survey will be conducted at 18 months.

Key Findings

- Canadian youth and young adults are regularly exposed to vaping through marketing and social exposures
- More than 4 in 5 regular vapers frequently vape nicotine, and more than half perceive themselves to be addicted to vaping
- Regular vapers are more likely to use other substances in the past 30 days than non-regular or never vapers.
- Longitudinal data will soon begin to provide a picture of how regular and non-regular young vapers progress over time.

Results

Participant Demographics

Participants were predominately single (93%), male (67%) students (62%) of Caucasian decent (77%), with a mean age of 18 years. Most of this young population had ‘some elementary or high school’ education (43%) or ‘completed high school’ (46%). One-third of respondents reported sensation-seeking behaviours (strongly or somewhat agree with the statements): ‘I like to do frightening things’ (38%); ‘I like new and exciting experiences, even if I have to break the rules’ (39%); ‘I prefer friends who are exciting and unpredictable’ (35%).

As designed, almost 60% were regular vapers (vaped daily or weekly in the past 4 weeks); 26% were non-regular vapers and 17% were never vapers.

Most participants (68%) rated their overall health as ‘excellent’ or ‘very good’, and 44% reported having ‘excellent’ or ‘very good’ mental health. Almost 40% of respondents reported high levels of stress on most days. General health, mental health and stress did not significantly differ by vaping status ($p>0.05$).

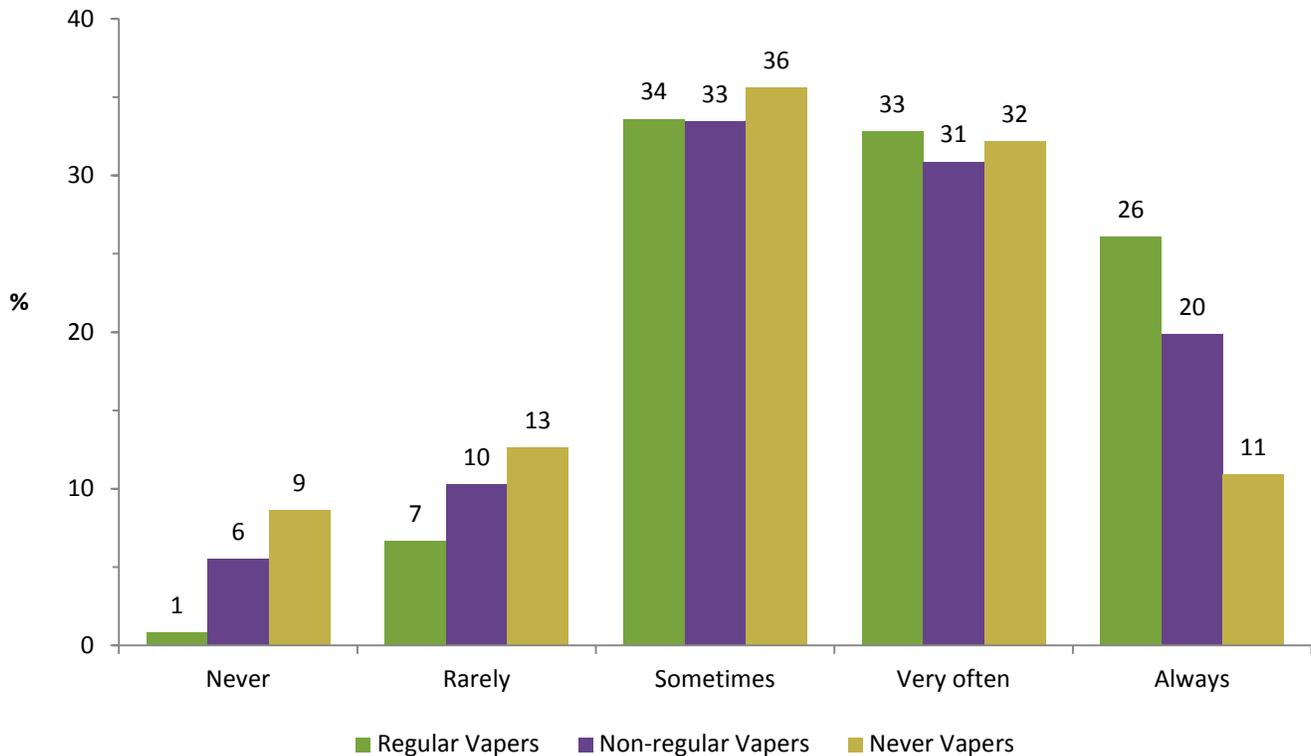
Exposure to Vaping

At baseline (March 2018) youth and young adults were regularly exposed to vaping. While 30% of youth and young adults did not recall exposure to marketing in the past 30 days, many others reported exposure in various environments including:

- Internet (48%)
- Vape shops (46%)
- Convenience stores, grocery stores, or gas stations where cigarettes are typically sold (28%)
- Email or text messages (13%)
- Magazines, billboards, public transit ads (13%)
- Tobacconists or head shops (9%)
- Television (9%)
- Bars, clubs, music festivals (7%)

Social exposure to vaping is high in this population. In the past 7 days, almost 8 in 10 never vapers (79%) reported seeing someone vaping ‘sometimes’, ‘very often’ or ‘always’. Regular vapers and ever vapers were more likely to report social exposure in the past 7 days than never vapers ($p < 0.001$, Figure 1).

Figure 1: Social Exposure to Vaping in the Past 7 Days by Vaping Status



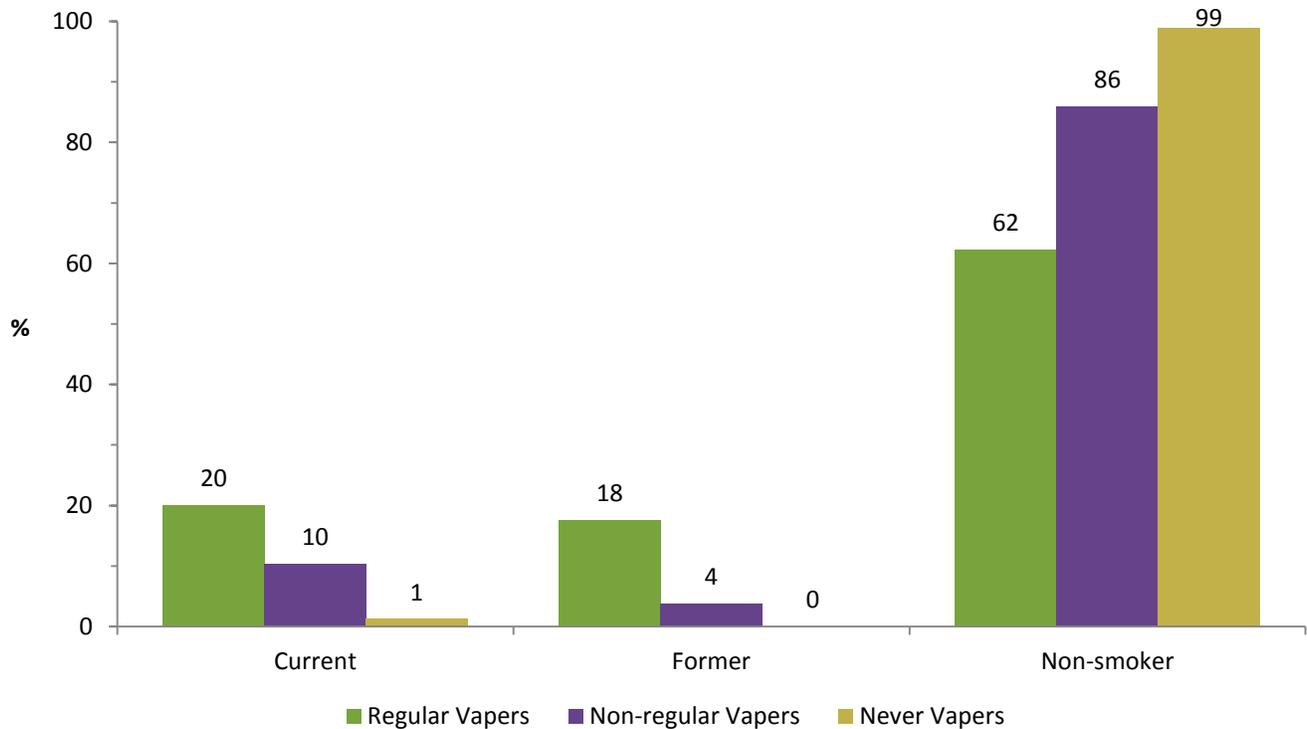
Note: Full data table for this graph provided in the Appendix (Table 1).

Cigarette Smoking

Only 20% of regular vapers were current smokers and 18% were former smokers. Regular vapers were more likely to be current and former smokers than non-regular and never vapers ($p < 0.001$; Figure 2). Daily smoking was similar for regular vapers (5%) and non-regular vapers (6%). While a large proportion of the regular and non-regular vapers were non-smokers, this includes experimenters (i.e., have not smoked 100 or more lifetime cigarettes): 30% of regular vapers and 24% of non-regular vapers were experimenting with cigarette smoking. Almost all never vapers were non-smokers (99%) with 94% being never smokers.

Youth and young adult e-cigarette users were frequently vaping nicotine: 82% of regular vapers and 60% of non-regular vapers were using nicotine ‘sometimes’, ‘very often’ or ‘always’. Regular vapers were more likely to use nicotine than non-regular vapers ($p < 0.001$).

Figure 2: Cigarette Smoking Status by Vape Status



Note: Full data table for this graph provided in the Appendix (Table 2).

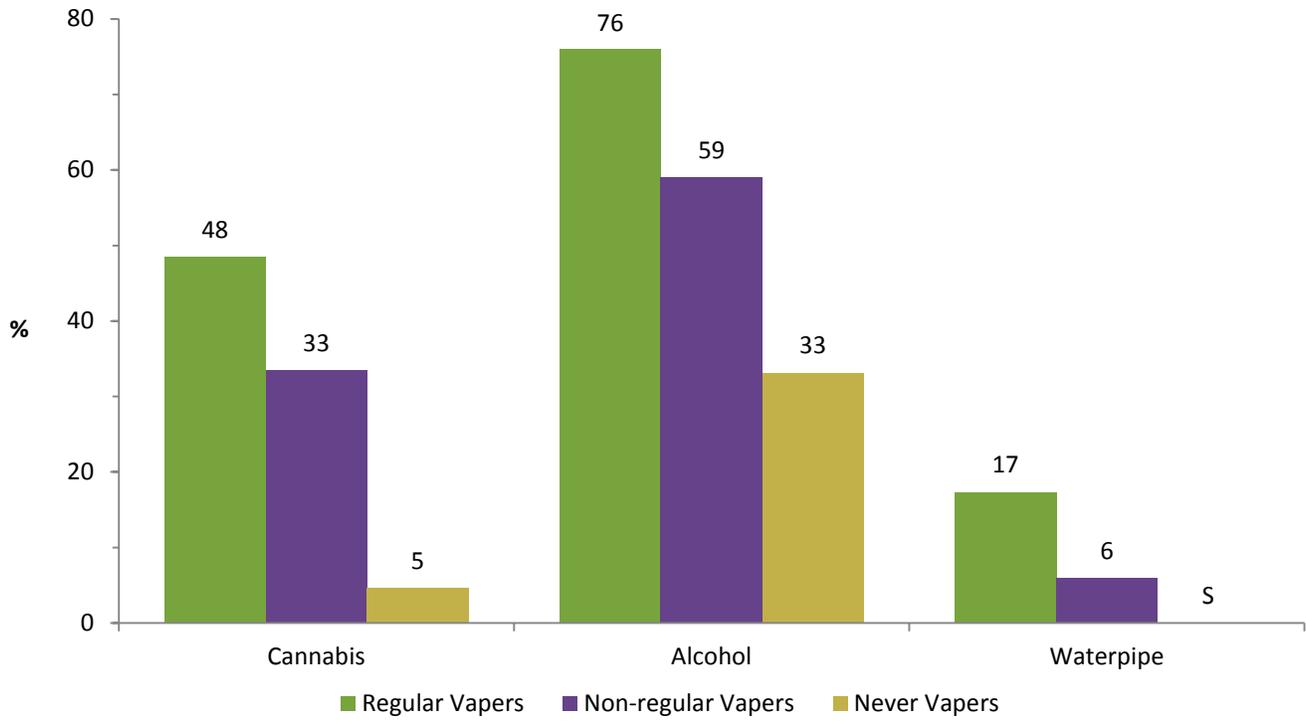
Perceived Addiction and Intention to Quit

More than half of regular vapers self-reported addiction to vaping: 12% reported being very addicted and 40% reported being somewhat addicted to vaping. Almost 6 in 10 regular vapers (58%) had no intention to quit vaping at any time in the future.

Other Substances

Never vapers were least likely to use other substances in the past 30 days while regular vapers were most likely to report past 30-day use (Figure 3). Cannabis was used by almost half of regular vapers and one-third of non-regular vapers; 5% of never vapers reported past 30-day use of cannabis ($p < 0.001$, Figure 3). Past 30-day use of alcohol was the most common substance used, while a waterpipe was used by a small number of participants (Figure 3).

Figure 3: Past 30-Day Cannabis, Alcohol and Waterpipe Use by Vaping Status



Note: S = suppressed. [Full data table for this graph provided in the Appendix \(Table 3\).](#)

Discussion

This baseline data provides some important descriptive information on vaping among youth and young adults in Canada. Social exposure to vaping is high, as is exposure to marketing and promotions. Furthermore, youth and young adults who do vape are regularly using nicotine and many are experimenting with cigarette smoking; these vapers are also more likely to use other substances. More than half of regular vapers already perceive they are addicted to vaping, and dual use with alcohol and cannabis is common. It is important for public health to continue to educate and to develop effective policies and programs to protect this vulnerable population.

Longitudinal data will soon begin to provide a picture of how regular and non-regular young vapers progress over time.

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Appendix

Table 1: Social Exposure to Vaping in the Past 7 Days by Vaping Status

	Regular Vapers	Non-regular Vapers	Never Vapers
Never	1	6	9
Rarely	7	10	13
Sometimes	34	33	36
Very often	33	31	32
Always	26	20	11

Note: Data table is for Figure 1.

Table 2: Cigarette Smoking Status by Vape Status

	Regular Vapers	Non-regular Vapers	Never Vapers
Current	20	10	1
Former	18	4	0
Non-smoker	62	86	99

Note: Data table is for Figure 2.

Table 3: Past 30-Day Cannabis, Alcohol and Waterpipe Use by Vaping Status

	Regular Vapers	Non-regular Vapers	Never Vapers
Cannabis	48	33	5
Alcohol	76	59	33
Waterpipe	17	6	5

Note: Data table is for Figure 3.