

Canadian Tobacco and Nicotine Survey, 2021

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According to recent results from the 2021 Canadian Tobacco and Nicotine Survey (CTNS), vaping continues to be more prevalent among younger adults than older age groups. Results indicate that in 2021, 13% of youth (aged 15 to 19) and 17% of young adults (aged 20 to 24) reported having vaped at least once during the 30-day period before the survey, compared with 4% of adults aged 25 or older. Vaping to reduce stress has increased during the COVID-19 pandemic for those aged 15 to 19 and was reported as the main reason for vaping within this age group (33%).

Vaping is the act of inhaling and exhaling vapour produced by a device such as an electronic cigarette (e-cigarette), vape mod, vaporizer or vape pen. While some people use these devices to reduce or to quit smoking, vaping can also have negative effects on health, particularly among youth or non-smokers. According to Health Canada, the majority of vaping products contain nicotine and, like tobacco, can lead to nicotine addiction. Vaping may also increase the risk of exposure to other harmful chemicals.

A third cycle of the CTNS was conducted from mid-December 2021 to early February 2022. The CTNS was conducted by Statistics Canada in collaboration with Health Canada to obtain information about vaping and smoking habits.

Vaping remains stable among youth aged 15 to 19

A higher percentage of youth and young adults reported having ever tried vaping at some point in their life compared with adults aged 25 and older. In 2021, nearly half (48%) of young adults aged 20 to 24 and nearly 3 in 10 (29%) youth aged 15 to 19 reported having ever tried vaping at some point in their life, compared with 13% of adults aged 25 and older.

Among young adults aged 20 to 24, the rate of those who vaped in the past 30 days remained stable between 2019 and 2020, but increased from 13% in 2020 to 17% in 2021. On the other hand, this rate has remained stable over the last three years (since this survey started) among youth aged 15 to 19 (13% in 2021) and adults aged 25 and older (4% in 2021).

Overall, 5% of Canadians reported having vaped in the past 30 days. New Brunswick had the highest rate of vaping (9%), followed by Prince Edward Island (8%) and Quebec (6%).

A higher proportion of Canadians reported vaping on a daily basis in 2021 compared with before the pandemic (2019). Among those who reported vaping in the past 30 days, 55% responded that they vaped on a daily basis, compared with 44% in 2019.

More youth aged 15 to 19 report vaping to reduce stress than in 2019

Since there are health risks associated with vaping, particularly for youth, it is important to understand the reasons why Canadians are vaping.

In 2021, among people who vaped in the past 30 days, 18% reported that their main reason for vaping was to reduce stress. Compared with 2019 results (21%), stress reduction was more commonly reported as the main reason for vaping by youth aged 15 to 19 in 2021 (33%). This may be an indication that youth aged 15 to 19 are vaping in part to cope with stress caused by the pandemic and other difficult situations, such as ongoing disruptions to education and workplaces.



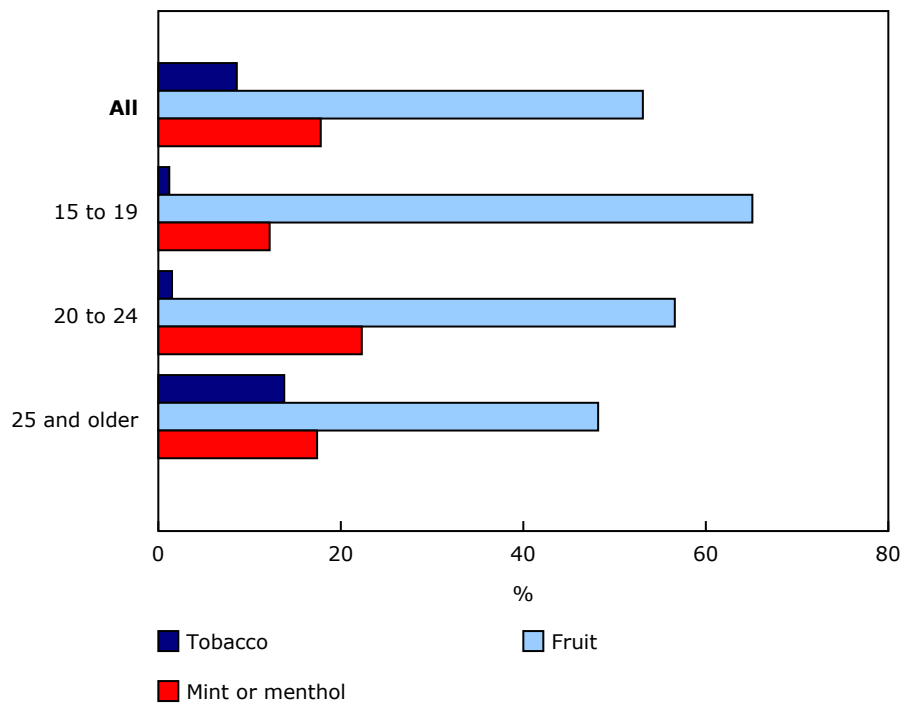
In addition to reducing stress, youth aged 15 to 19 reported vaping because they enjoyed it (28%) and because they wanted to try it (24%). Among young adults aged 20 to 24, the most commonly reported reasons for vaping were because they enjoyed it (27%); to reduce stress (25%); or to reduce, quit or avoid returning to smoking (24%). In contrast, a higher proportion of Canadians aged 25 and older reported vaping to reduce, quit or avoid returning to smoking (58%) as their main reason, while another 14% reported vaping because they enjoyed it.

Fruit and mint or menthol are the most vaped flavours

Flavours have been identified as one of the potential factors contributing to the high proportion of youth vaping in Canada.

Among people who vaped in the past 30 days, across all age groups, the most vaped flavours were fruit (53%) followed by mint or menthol (18%).

Chart 1
Most often used flavour among those who vaped in the 30 days before the survey, by age group, 2021, Canada, excluding the territories



Note(s): Flavours were categorized as follows: tobacco, fruit, candy or dessert, mint or menthol, and other flavours. Only the proportions for tobacco, fruit, and mint or menthol flavours are presented in this chart.

Source(s): Canadian Tobacco and Nicotine Survey, 2021 (5305).

Flavour preferences varied by age group but not by gender. More vapers from the youngest age group (aged 15 to 19) preferred fruit flavours (65%) compared with adults aged 20 to 24 (57%) and those aged 25 and older (48%).

By contrast, tobacco flavour was more popular among users aged 25 and older (14%) than it was among the younger age groups (1% among youth aged 15 to 19 and 2% among adults aged 20 to 24).

Most youth who vape have never smoked tobacco

One of the potential uses of vaping is to reduce or quit smoking tobacco. However, among those who reported having vaped in the past 30 days, a majority (61%) of youth aged 15 to 19 and more than one-quarter (27%) of young adults aged 20 to 24 had never tried a tobacco cigarette in their life. This finding suggests that the majority of youth are not using vaping devices to reduce or quit smoking.

Overall in 2021, 10% of Canadians reported smoking cigarettes on a regular basis. For all age groups, cigarette smoking remained stable compared with the previous year.

In 2021, approximately three times more Canadians aged 20 and older (11%) reported being a current smoker than those aged 15 to 19 (4%).

Finally, smoking continued to be more prevalent among men than women in 2021, with 12% of men reporting that they were current smokers compared with 9% of women.

Note to readers

Data in this release are from the 2021 Canadian Tobacco and Nicotine Survey (CTNS), which collects information about the prevalence of cigarette smoking, vaping and cannabis use. The survey was conducted from December 2021 to February 2022, and information was collected from 9,908 respondents. Even though the collection period ended in February 2022, 2021 is used to designate this collection period to simplify the text. The target population was non-institutionalized people aged 15 and older living in Canada's 10 provinces who do not live in collective dwellings or on reserves. Questionnaire content was developed in collaboration with Health Canada. Previous cycles were conducted from October to December 2019 and from December 2020 to January 2021, and data from these cycles are provided to examine time trends.

In the context of this analysis, vaping includes vaping e-liquid—with and without nicotine (i.e., just flavouring)—and using an e-cigarette, vape mod, vaporizer or vape pen. The analysis excludes vaping cannabis.

Respondents who reported having used a vaping product at least once during the 30-day period preceding the survey, also referred to as "vaped in the past 30 days," were asked about the type of product used, frequency of use and reasons for vaping. Survey sampling weights were applied so that the analyses would be representative of the targeted population.

Respondents were asked to identify their main reason for vaping in the 30 days before the survey. Users were classified across the following categories: those who just wanted to try; those who reported enjoying it; those who vaped to reduce stress; those who vaped to reduce, quit or avoid returning to smoking; and those who mentioned other reasons.

In addition, those who reported vaping in the 30 days before the survey were asked to identify the flavour they vaped most often. Flavours were categorized as follows: tobacco, fruit, candy or dessert, mint or menthol, and other flavours.

Table 1
Percentage of Canadians aged 15 and older who vaped in their lifetime or in the 30 days before the survey, by age group or gender, 2021, Canada, excluding the territories

	estimate %	lower limit of confidence ² interval (95%)	upper limit of confidence ² interval (95%)
Vaped in their lifetime			
Total	16.9	16.0	17.9
Gender			
Male ¹	19.8	18.4	21.3
Female	14.1*	12.9	15.3
Age group			
15 to 19 years	29.3*	27.1	31.6
20 to 24 years ¹	47.6	45.3	49.8
25 years and older	13.3*	12.2	14.4
Vaped in the past 30 days			
Total	5.2	4.7	5.8
Gender			
Male ¹	5.8	5.0	6.7
Female	4.6*	3.9	5.3
Age group			
15 to 19 years	12.9*	11.4	14.7
20 to 24 years ¹	17.2	15.6	19.0
25 years and older	3.6*	3.0	4.2

* significantly different from reference category (p < 0.05)

1. Reference category.

2. These confidence intervals are used to express the precision of the estimates.

Source(s): Canadian Tobacco and Nicotine Survey, 2021 (5305).

Table 2
Percentage of Canadians aged 15 and older by smoking status, by age group or gender, 2021,
Canada, excluding the territories

	estimate %	lower limit of confidence ² interval (95%)	upper limit of confidence ² interval (95%)
Current Smoking³			
Total	10.3	9.5	11.1
Gender			
Male ¹	11.8	10.6	13.2
Female	8.7*	7.7	9.9
Age group			
15 to 19 years	3.5*	2.7	4.5
20 to 24 years ¹	10.0	8.7	11.4
25 years and older	10.8	9.9	11.8
Former Smoking⁴			
Total	22.4	21.3	23.5
Gender			
Male ¹	23.1	21.5	24.8
Female	21.7	20.2	23.2
Age group			
15 to 19 years	1.0*	0.6	1.5
20 to 24 years ¹	6.2	5.2	7.5
25 years and older	25.5*	24.2	26.8
Never Smoking⁵			
Total	67.3	66.1	68.6
Gender			
Male ¹	65.0	63.1	66.9
Female	69.6*	67.9	71.2
Age group			
15 to 19 years	95.5*	94.4	96.4
20 to 24 years ¹	83.8	82.1	85.3
25 years and older	63.7*	62.3	65.1

* significantly different from reference category ($p < 0.05$)

1. Reference category.

2. These confidence intervals are used to express the precision of the estimates.

3. Includes people who smoke daily and people who smoke occasionally. Refers to those who responded "daily", "less than daily, but at least once a week" or "less than once a week, but at least once in the past month" to the question "During the past 30 days, how often did you smoke cigarettes?".

4. Refers to those who responded "not at all" to the question "During the past 30 days, how often did you smoke cigarettes?" and "yes" to the question "Have you smoked at least 100 cigarettes (about 4 packs) in your life?".

5. Refers to those who responded "not at all" to the question "During the past 30 days, how often did you smoke cigarettes?" and "no" to the question "Have you smoked at least 100 cigarettes (about 4 packs) in your life?" or "no" to the question "Have you ever smoked a whole cigarette?".

Source(s): Canadian Tobacco and Nicotine Survey, 2021 ([5305](#)).

Definitions, data sources and methods: survey number [5305](#).

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; infostats@statcan.gc.ca) or Media Relations (statcan.mediahotline-ligneinfomedias.statcan@statcan.gc.ca).