Canadian Tobacco and Nicotine Survey, 2022

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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. Most vaping products contain nicotine, which can cause addiction. Results released today from the Canadian Tobacco and Nicotine Survey (CTNS) suggest that vaping continues to be prevalent among young people in Canada.

Statistics Canada conducted the fourth cycle of the CTNS from November 2022 to January 2023 in collaboration with Health Canada to obtain information about vaping and smoking habits.

Youth and young adults are more likely to have tried vaping, while older adults are more likely to have tried smoking

In 2022, 30% of youth aged 15 to 19 years and nearly half (48%) of young adults aged 20 to 24 years reported having tried vaping in their lifetime. In comparison, 10% of youth and 27% of young adults had ever tried smoking cigarettes. Adults aged 25 years and older were much less likely to have tried vaping (15%) and much more likely to have tried cigarette smoking (52%). These estimates are consistent with those observed in 2021.

Among young adults, smoking and vaping prevalence are moving in opposite directions

In 2022, 20% of young adults aged 20 to 24 years reported having vaped at least once in the past 30 days, up from 15% in 2019, 13% in 2020 and 17% in 2021. The opposite trend occurred for cigarette smoking; 8% of young adults reported currently smoking cigarettes in 2022, down from 10% in 2021. For youth aged 15 to 19 years and adults aged 25 years and older, the percentage of people who reported vaping in the past 30 days and the percentage of those who reported smoking cigarettes in the past 30 days have remained stable across the four cycles of the CTNS.

Some youth and young adults are more likely to vape and smoke than others

Among young adults aged 20 to 24 years, vaping in the past 30 days was more common for men (23%) than women (17%) in 2022. Men were also more likely than women to report cigarette smoking in the past 30 days, both among those aged 15 to 19 years (5% of men compared with 3% of women) and among those aged 20 to 24 years (10% of men compared with 6% of women). However, among youth aged 15 to 19 years, men (14%) and women (13%) were almost equally likely to have vaped in the past 30 days.

Youth aged 15 to 19 years who were lesbian, gay, bisexual or another sexual orientation that is not heterosexual (LGB+) reported vaping (19%) and cigarette smoking (8%) in the past 30 days at a higher rate than their heterosexual peers (13% for vaping and 4% for cigarette smoking). Among young adults aged 20 to 24 years, there was little difference in the prevalence of vaping or cigarette smoking in the past 30 days based on sexual orientation. Specifically, 22% of LGB+ young adults reported vaping compared with 20% of their heterosexual counterparts, and 11% of LGB+ young adults reported cigarette smoking compared with 7% of their heterosexual counterparts.





Table 1 Vaping patterns of Canadians aged 15 years and older, by age group or demographic characteristics, 2022

	Ever vaped ¹			Pas	t 30 days vapin	g ²	Daily vaping ³		
	Estimate	Lower limit of confidence interval (95%) ⁶	Upper limit of confidence interval (95%) ⁶	Estimate	Lower limit of confidence interval (95%) ⁶	Upper limit of confidence interval (95%) ⁶	Estimate	Lower limit of confidence interval (95%) ⁶	Upper limit of confidence interval (95%) ⁶
					%				
15 to 19 years									
Total	30.0	28.0	31.9	13.6	12.2	15.0	6.5	5.5	7.5
Women+ 8	30.0	27.3	32.7	13.2	11.2	15.1	6.8	5.3	8.3
Men+ ^{4,9}	30.0	27.3	32.7	14.0	11.9	16.0	6.3	4.9	7.7
LGB+ ⁷	38.6 ⁵	33.1	44.1	19.4 ⁵	14.9	23.9	10.4 ⁵	7.0	13.8
Heterosexual ⁴	29.4	27.2	31.5	12.9	11.4	14.5	6.0	5.0	7.1
20 to 24 years									
Total	47.5	45.3	49.7	19.7	17.9	21.5	10.1	8.7	11.5
Women+ 8	44.4 ⁵	41.3	47.4	16.5 ⁵	14.2	18.9	7.3 ⁵	5.7	9.0
Men+ ^{4,9}	50.5	47.3	53.6	22.7	20.0	25.4	12.6	10.5	14.8
LGB+ ⁷	57.8 ⁵	51.7	63.8	22.1	17.2	27.0	10.9	7.1	14.7
Heterosexual ⁴	46.6	44.2	49.0	19.7	17.8	21.7	10.0	8.5	11.5
25 years and older									
Total	14.7	13.6	15.8	3.9	3.4	4.5	2.0	1.6	2.4
Women+ 8	12.6 ⁵	11.2	14.0	3.4	2.7	4.2	1.4 ⁵	1.0	1.8
Men+ ^{4,9}	16.9	15.2	18.6	4.5	3.5	5.4	2.7	2.0	3.4
LGB+ ⁷	26.9 ⁵	20.1	33.7	6.8	3.4	10.2	3.5	1.3	5.7
Heterosexual ⁴	14.3	13.2	15.4	3.9	3.3	4.5	2.0	1.5	2.4
15 years and older									
Total	18.2	17.2	19.1	5.8	5.2	6.3	2.9	2.6	3.3
Women+ 8	16.0 ⁵	14.7	17.2	5.0 ⁵	4.3	5.7	2.2 ⁵	1.8	2.5
Men+ ^{4,9}	20.4	19.0	21.9	6.5	5.7	7.4	3.7	3.1	4.4
LGB+ ⁷	34.1 ⁵	29.3	38.9	11.5 ⁵	8.9	14.1	5.9 ⁵	4.2	7.6
Heterosexual 4	17.4	16.4	18.4	5.5	5.0	6.1	2.8	2.4	3.2

^{1.} Those who answered having tried vaping in their lifetime

Source(s): Canadian Tobacco and Nicotine Survey 2022 (5305).

^{2.} Those who answered having vaped in the past 30 days

^{3.} Those who answered having vaped daily in the past 30 days

^{4.} Reference category

^{5.} Significantly different than reference category, p less than 0.05

^{6.} Confidence intervals are used to express the precision of the estimates

The LGB+ category includes persons whose reported sexual orientation is lesbian, gay, bisexual, or another sexual orientation that is not heterosexual.

^{8.} This category includes women (and/or girls), as well as some non-binary persons. Given that the non-binary population is small, data aggregation to a two-category gender variable is sometimes necessary to protect the confidentiality of responses. In these cases, individuals in the category "non-binary persons" are distributed into the other two gender categories and are denoted by the "+" symbol.

^{9.} This category includes men (and/or boys), as well as some non-binary persons. Given that the non-binary population is small, data aggregation to a two-category gender variable is sometimes necessary to protect the confidentiality of responses. In these cases, individuals in the category "non-binary persons" are distributed into the other two gender categories and are denoted by the "+" symbol.

Table 2 Cigarette smoking patterns of Canadians aged 15 years and older, by age group or demographic characteristics, 2022

		Ever smoked ¹			Past 30 days smoking ²			Daily smoking ³		
	Estimate	Lower limit of confidence interval (95%) ⁶	Upper limit of confidence interval (95%) ⁶	Estimate	Lower limit of confidence interval (95%) ⁶	Upper limit of confidence interval (95%) ⁶	Estimate	Lower limit of confidence interval (95%) ⁶	Upper limi o confidence interva (95%)	
					%					
15 to 19 years										
Total	9.8	8.5	11.1	4.2	3.4	5.1	1.0	0.6	1.5	
Women+ 8	8.5 ⁵	6.9	10.1	3.3 ⁵	2.3	4.4	0.8	0.3	1.3	
Men+ ^{4,9}	11.1	9.2	13.0	5.1	3.8	6.3	1.3	0.6	2.0	
LGB+ ⁷	15.1 ⁵	11.2	18.9	8.4 ⁵	5.4	11.3	1.6	0.3	3.0	
Heterosexual ⁴	9.2	7.8	10.6	3.5	2.7	4.4	1.0	0.5	1.4	
20 to 24 years										
Total	26.6	24.6	28.6	7.7	6.5	8.9	2.6	1.8	3.3	
Women+ 8	20.5 ⁵	17.9	23.1	5.6 ⁵	4.1	7.0	1.5 ⁵	0.7	2.3	
Men+ ^{4,9}	32.2	29.2	35.2	9.6	7.7	11.5	3.5	2.3	4.7	
LGB+ ⁷	31.9	26.1	37.6	10.5	6.8	14.3	3.1	1.0	5.1	
Heterosexual ⁴	26.1	24.0	28.3	7.4	6.1	8.6	2.5	1.7	3.3	
25 years and older										
Total	51.7	50.2	53.2	11.7	10.8	12.7	9.3	8.4	10.1	
Women+ 8	47.7 ⁵	45.7	49.7	9.8 ⁵	8.6	10.9	8.3 ⁵	7.2	9.3	
Men+ ^{4,9}	55.8	53.6	58.0	13.8	12.3	15.3	10.3	9.0	11.6	
LGB+ ⁷	55.2	47.4	63.0	13.9	8.8	18.9	7.7	4.0	11.4	
Heterosexual ⁴	52.1	50.5	53.6	11.6	10.6	12.6	9.4	8.5	10.2	
15 years and older										
Total	47.1	45.8	48.3	10.9	10.1	11.7	8.2	7.5	8.9	
Women+ 8	43.3 ⁵	41.5	45.0	9.1 ⁵	8.1	10.1	7.3 ⁵	6.4	8.2	
Men+ ^{4,9}	50.9	49.0	52.8	12.9	11.6	14.1	9.1	8.0	10.3	
LGB+ ⁷	44.5	39.0	50.0	12.4	8.9	15.8	5.9	3.4	8.4	
Heterosexual 4	47.7	46.4	49.1	10.8	10.0	11.7	8.4	7.6	9.2	

^{1.} Those who answered having tried smoking cigarettes in their lifetime

Source(s): Canadian Tobacco and Nicotine Survey 2022 (5305).

^{2.} Those who answered having smoked cigarettes in the past 30 days

^{3.} Those who answered having smoked cigarettes daily in the past 30 days

^{4.} Reference category

^{5.} Significantly different than reference category, p less than $0.05\,$

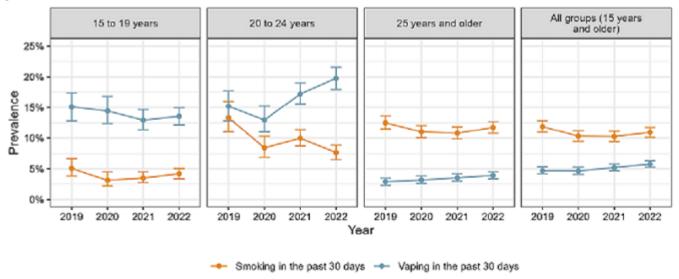
^{6.} Confidence intervals are used to express the precision of the estimates

^{7.} The LGB+ category includes persons whose reported sexual orientation is lesbian, gay, bisexual, or another sexual orientation that is not heterosexual.

^{8.} This category includes women (and/or girls), as well as some non-binary persons. Given that the non-binary population is small, data aggregation to a two-category gender variable is sometimes necessary to protect the confidentiality of responses. In these cases, individuals in the category "non-binary persons" are distributed into the other two gender categories and are denoted by the "+" symbol.

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Infographic 1 – Cigarette smoking and vaping in the 30 days before the survey, by age group, 2019 to 2022



Note: Error bars indicate the 95% confidence intervals of the prevalence estimates.

Source: Canadian Tobacco and Nicotine Survey, 2019 to 2022.

Note to readers

Data in this release are from the 2022 Canadian Tobacco and Nicotine Survey (CTNS), which collects information about the prevalence of cigarette smoking, tobacco use, vaping and cannabis use. The survey was conducted from late November 2022 to late January 2023, and information was collected from 12,133 respondents. The target population was non-institutionalized people aged 15 years 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, from December 2020 to January 2021 and from December 2021 to February 2022, 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 then asked about the frequency of use. Daily vaping refers to those reported vaping daily within the past 30 days. Similar questions were used to define smoking within the past 30 days and daily smoking. In this context, smoking specifically refers to smoking cigarettes. Use of other tobacco products are not included.

Survey sampling weights were applied so that the analyses would be representative of the targeted population.

Health Canada has also released a detailed report from the latest cycle of the CTNS.

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).