

Insights from the Canadian Community Health Survey on Smokers' Quitting

December 2022

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Cigarette Smoking Characteristics – 2001 to 2021

Figure 1: Canadian population (aged 12+) by smoking status, 6 Definition (%): 2001 to 2021.
Canadian Community Health Survey, Variable SMKDVSTY

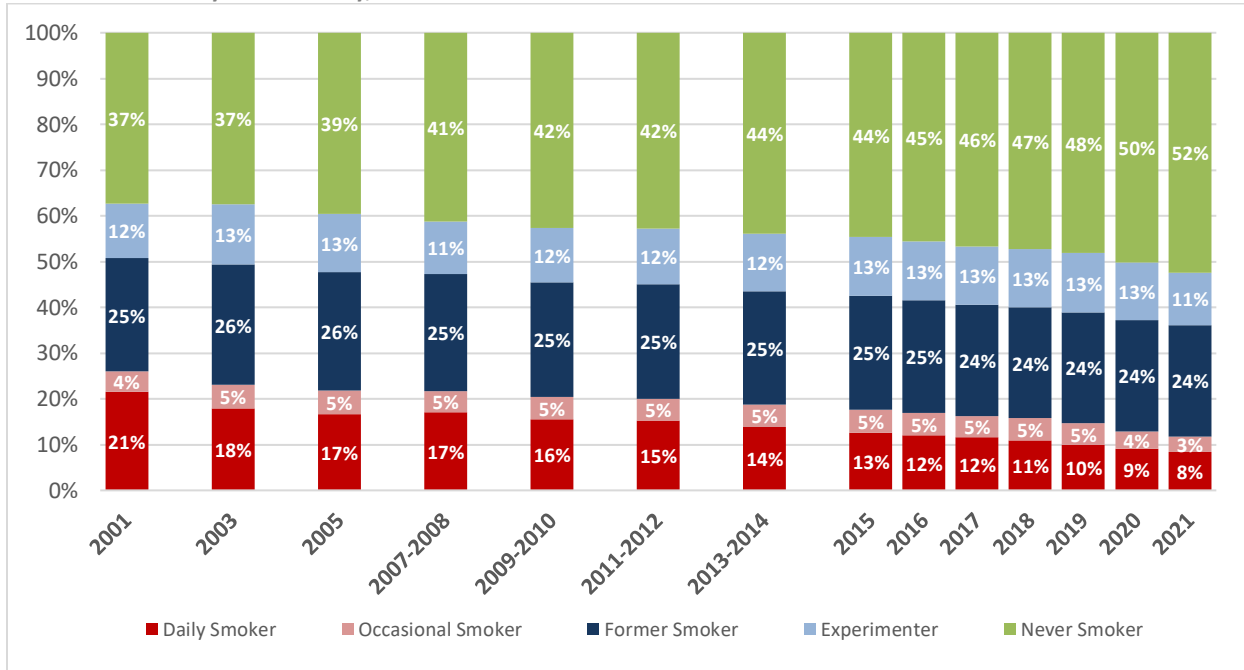


Figure 2: Canadian population (aged 12+) by smoking status, 5 Definition: (# of people): 2001 to 2021.

Canadian Community Health Survey, Variable SMKDVSTY

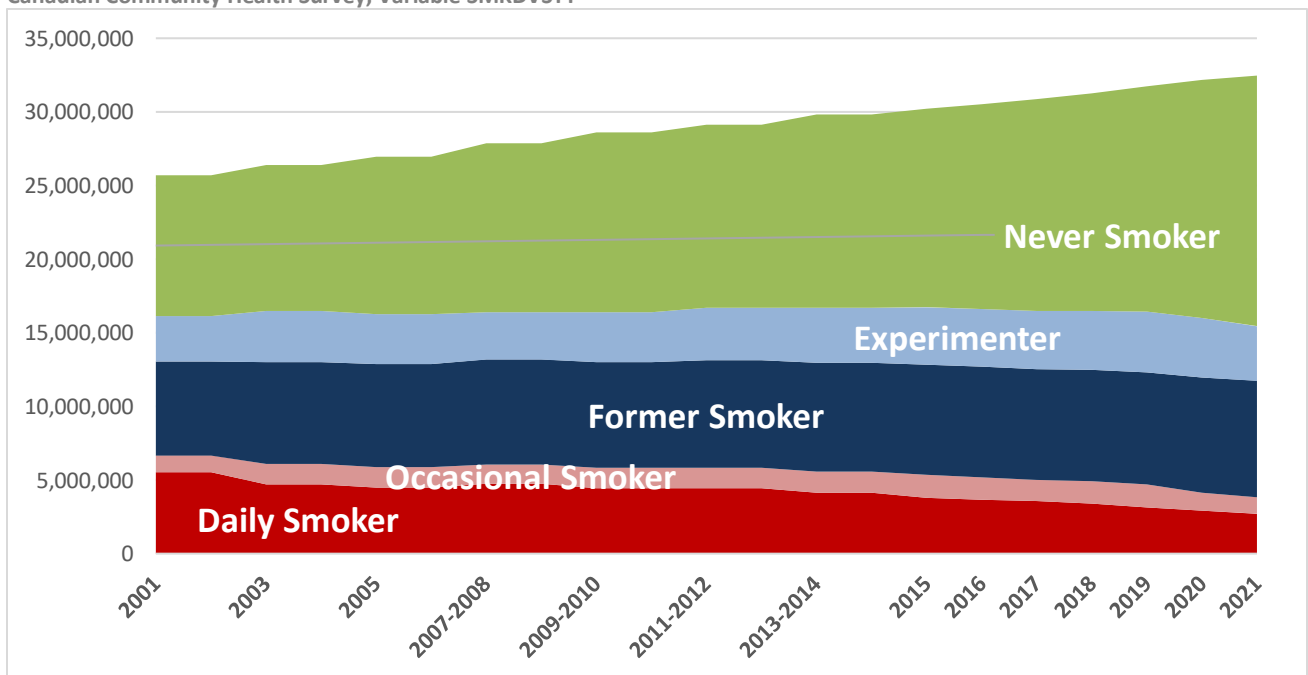


Table 1A: Canadian population (aged 12+) by smoking status, 6 definition 2015-2021. (000s of people)

Canadian Community Health Survey, Master File Data Dictionary (rounded counts), Variable SMKDVSTY

	2015	2016	2017	2018	2019	2020	2021
Total current smokers	5,344	5,161	5,006	4,927	4,685	4,160	3,831
-Current daily smoker	3,809.5	3,668	3,577	3,392.5	3,160	2,916.5	2,716.5
-Current occasional smoker	1,534.5	1,492.5	1,429	1,534	1,524.5	1,243.5	1,114
Total former smoker	7,501.5	7,526.0	7,540.5	7,572.0	7,642.5	7,789.5	7,900.5
-Former daily smoker (non smoker now)	6,624.5	6,647	6,692.5	6,650.5	6,694.5	6,803	7,001.5
-Former occasional smoker (non-smoker now)	877	879	848	921.5	948	986.5	899
Experimental smoker	3,879	3,916.5	3,927	3,984.5	4,123.5	4,045.5	3,725
Smoked at least 1 cigarette but less than 100 and is a non-smoker now							
Total ever smoker	18,740	18,619	18,491	18,501	18,470	18,015	17,477
Never smoker	13,499	13,929.5	14,407	14,780.5	15,291.5	16,158	17,008.5
Never smoked a whole cigarette							
Unknown (answer not given)	127	132.5	105	129.5	125	79.5	71
Total population	30,350.5	30,665.5	30,985.5	31,393.5	31,867	32,232.5	32,535.5

Table 1B: Canadian population (aged 12+) by smoking status, 6 definition 2001-2014. (000s of people)

Canadian Community Health Survey, Public Use Microfile, Variable SMKDVSTY

	2001	2003	2005	2007-2008	2009-2010	2011-2012	2013-2014
Total current smokers	6,677.4	6,081.4	5,874.6	6,063	5,846.9	5,847.5	5,568
-Current daily smoker	5,529	4,722.6	4,478.6	4,766.6	4,456.9	4,451.3	4,147.7
-Current occasional smoker	1,148.4	1,358.8	1,396	1,296.9	1,390	1,396.2	1,420.3
Total former smoker	6,360.7	6,932	6,984	7,129.7	7,144.8	7,271	7,414.6
-Former daily smoker (non smoker now) and Former occasional smoker (non-smoker now)							
Experimental smoker	3,092.3	3,472.1	3,426.3	3,206.2	3,415.7	3,571.7	3,723.9
Smoked at least 1 cigarette but less than 100 and is a non-smoker now							
Total ever smoker	16,130	16,486	16,285	16,399	16,407	16,690	16,707
Never smoker	9,583	9,906.3	10,681.3	11,482.8	12,181.5	12,449	13,099.1
Never smoked a whole cigarette							
Total population	25,787.3	26,555.4	27,126.2	28,017.4	28,725.1	29,335.2	30,002.8

Table 2A: Canadian population (aged 12+) by smoking status, 2015-2021. (Percentage of population)

Canadian Community Health Survey, Master File Data Dictionary (rounded counts), Variable SMKDVSTY

	2015	2016	2017	2018	2019	2020	2021
Total current smokers	18%	17%	16%	16%	15%	13%	12%
-Current daily smoker	13%	12%	12%	11%	10%	9%	8%
-Current occasional smoker	5%	5%	5%	5%	5%	4%	3%
Total former smoker	25%	25%	24%	24%	24%	24%	24%
-Former daily smoker (non smoker now)	22%	22%	22%	21%	21%	21%	22%
-Former occasional smoker (non-smoker now)	3%	3%	3%	3%	3%	3%	3%
Experimental smoker	13%	13%	13%	13%	13%	13%	11%
Smoked at least 1 cigarette but less than 100 and is a non-smoker now							
Total ever smoker	55%	54%	53%	53%	52%	50%	48%
Never smoker	45%	46%	47%	47%	48%	50%	52%
Never smoked a whole cigarette							
Unknown (answer not given)	0.4%	0.4%	0.3%	0.4%	0.4%	0.2%	0.2%
Total population	100%	100%	100%	100%	100%	100%	100%

Table 2B: Canadian population (aged 12+) by smoking status, 5 definition 2001-2014. (Percentage of population)

Canadian Community Health Survey, Public Use Microfile, Variable SMKDVSTY

	2001	2003	2005	2007-2008	2009-2010	2011-2012	2013-2014
Total current smokers	26%	23%	22%	22%	20%	20%	19%
-Current daily smoker	21%	18%	17%	17%	16%	15%	14%
-Current occasional smoker	4%	5%	5%	5%	5%	5%	5%
Total former smoker	25%	26%	26%	25%	25%	25%	25%
-Former daily smoker (non smoker now)							
-Former occasional smoker (non-smoker now)							
Experimental smoker	12%	13%	13%	11%	12%	12%	12%
Smoked at least 1 cigarette but less than 100 and is a non-smoker now							
Total ever smoker	63%	62%	60%	59%	57%	57%	56%
Never smoker	37%	37%	39%	41%	42%	42%	44%
Never smoked a whole cigarette							
Total population	100%	100%	100%	100%	100%	100%	100%

Month in which past-year former smokers quit.

Figure 3: Month in which smokers quit (% of past-year quitters), CCHS 2015-2021

Canadian Community Health Survey, Variable SMK_065 and SMK_085

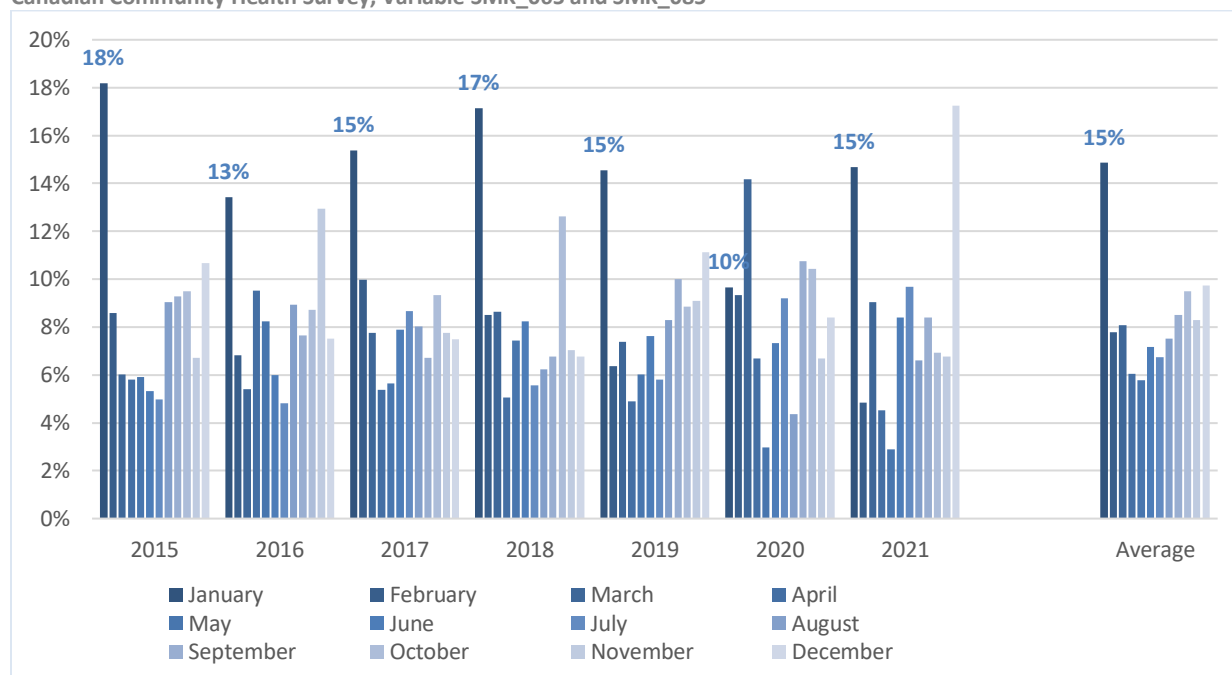


Table 3: Number of individuals who quit smoking in the past year, by month in which they quit

Canadian Community Health Survey, Variable SMK_065 and SMK_085

	2015	2016	2017	2018	2019	2020	2021	Average
January	78,500	57,000	58,500	64,500	64,000	31,000	45,500	57,000
February	37,000	29,000	38,000	32,000	28,000	30,000	15,000	29,857
March	26,000	23,000	29,500	32,500	32,500	45,500	28,000	31,000
April	25,000	40,500	20,500	19,000	21,500	21,500	14,000	23,143
May	25,500	35,000	21,500	28,000	26,500	9,500	9,000	22,143
June	23,000	25,500	30,000	31,000	33,500	23,500	26,000	27,500
July	21,500	20,500	33,000	21,000	25,500	29,500	30,000	25,857
August	39,000	38,000	30,500	23,500	36,500	14,000	20,500	28,857
September	40,000	32,500	25,500	25,500	44,000	34,500	26,000	32,571
October	41,000	37,000	35,500	47,500	39,000	33,500	21,500	36,429
November	29,000	55,000	29,500	26,500	40,000	21,500	21,000	31,786
December	46,000	32,000	28,500	25,500	49,000	27,000	53,500	37,357
Number who quit	431,500	425,000	380,500	376,500	440,000	321,000	310,000	383,500

Length of time since quitting.

Figure 4: Number of Canadians aged 12+ who quit smoking, by the length of time since they quit

Canadian Community Health Survey, Variable SMK_060 and SMK_080 (Does not include 'Experimenters').

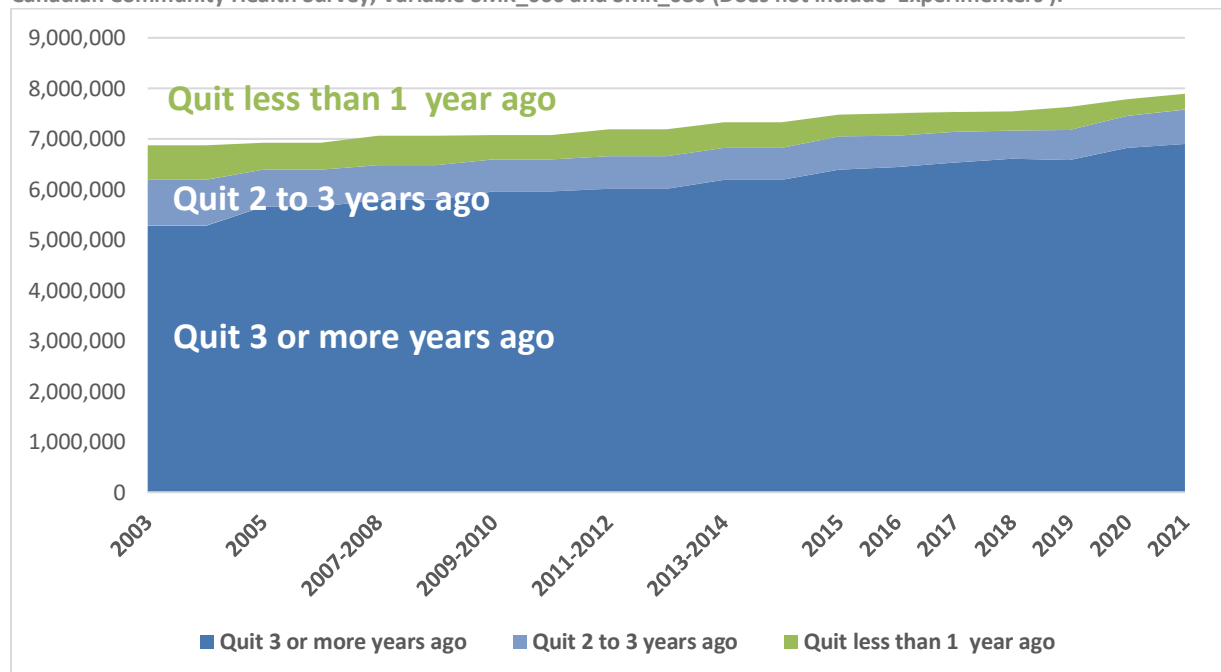


Table 4A: Number of Canadians aged 12+ who quit smoking, by the length of time since they quit (2015-2021)

Canadian Community Health Survey, Master File Data Dictionary (rounded counts), Variable SMK_060 and SMK_080 (Does not include 'Experimenters').

	2015	2016	2017	2018	2019	2020	2021
Quit less than 1 year ago	439,000	438,500	389,000	382,000	451,500	328,500	314,500
Quit 2 to 3 years ago	660,000	624,000	605,500	559,000	599,500	626,000	679,500
Quit 3 or more years ago	6,384,500	6,442,500	6,531,500	6,601,500	6,576,000	6,824,000	6,898,000
Not stated/unknown	18,000	21,000	14,500	29,500	15,500	11,000	8,500
Total Former Smokers	7,501,500	7,526,000	7,540,500	7,572,000	7,642,500	7,789,500	7,900,500

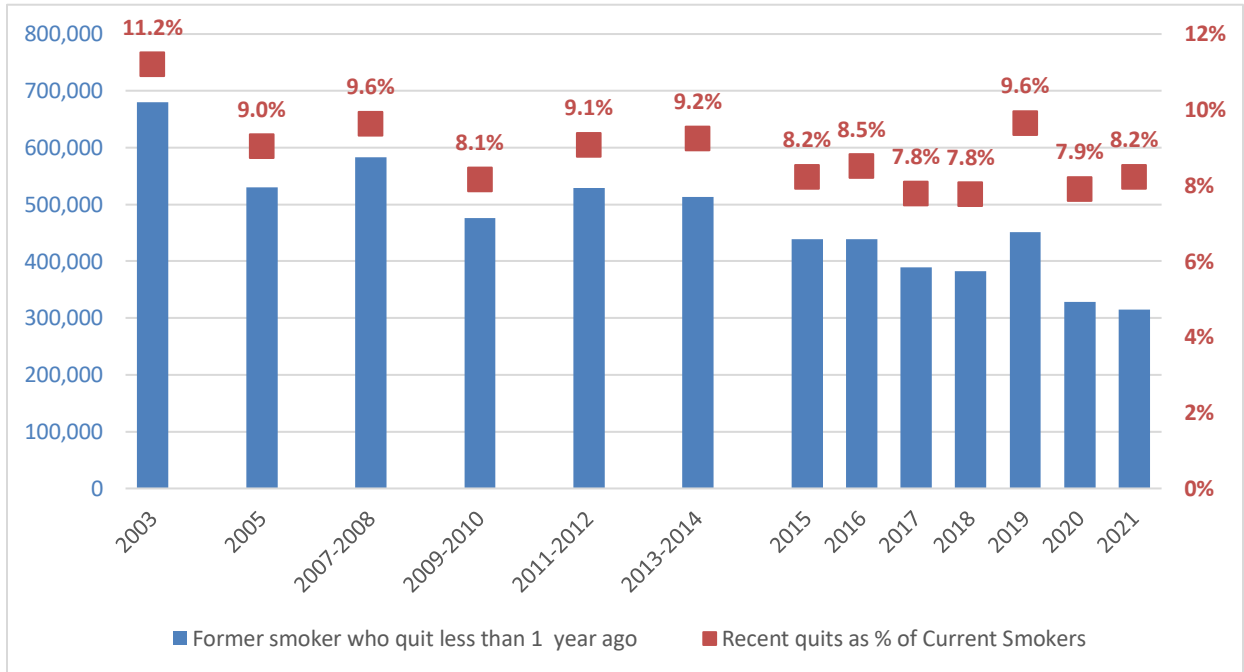
Table 4B: Number of Canadians aged 12+ who quit smoking, by the length of time since they quit (2003-2014)

Canadian Community Health Survey, Public Use Micro File, Variable SMKGSTP (Does not include 'Experimenters').

	2003	2005	2007-2008	2009-2010	2011-2012	2013-2014
Quit less than 1 year ago	679,900	530,300	583,200	475,900	529,400	513,400
Quit 2 to 3 years ago	909,600	744,600	687,800	640,300	651,800	629,900
Quit 3 or more years ago	5,278,700	5,649,700	5,793,100	5,954,400	6,009,100	6,187,500
Not stated/unknown	63,800	59,500	65,500	74,200	80,700	83,800
Total Former Smokers	6,932,000	6,984,000	7,129,000	7,144,900	7,270,900	7,414,600

Figure 5: Number of past-year quitters and percentage of past-year quitters to remaining current smokers, CCHS 2003-2021.

Canadian Community Health Survey, Public Use Micro File and Master File Data Directory, Variables SMKGSTP, SMK_060, SMK-080 and SMKDVSTY (Does not include 'Experimenters').



Counterfactual scenario: if population grew but smoking behaviour did not change.

Using data provided by the 2015 and 2021 annual component of the Canadian Community Health Survey, between 2015 and 2021 the population of Canadians who were 12 years of age or older grew by 2.2 million, or 7%. During the same period:

- the number of **current smokers** fell by 1.5 million (1.1 million fewer daily smokers and 420,500 fewer occasional smokers). The prevalence of current smoking fell from 18% to 12% (a decrease in daily smoking from 13% to 8% and occasional smoking from 5% to 3%)
- The number of **former smokers** increased by 399,000 (377,000 more former daily smokers and 22,000 more former occasional smokers). The prevalence of former smokers in the population fell from 25% to 24%.
- The number of former “**experimenters**” (non-smoking Canadians who had smoked between 1 and 100 cigarettes) fell by 154,000. The prevalence of “experimenters” fell from 13% to 11%.
- The number of **ever-smokers** (including daily and occasional smokers, former smokers and experimenters) fell by 1.3 million. The prevalence of ever smoking fell from 55% to 48%.
- The number of **never-smokers** (lifetime abstainers, or people who had never smoked 1 whole cigarette) increased by 3.5 million. The prevalence of never smoking increased from 45% to 52%.

If smoking behaviour had been stable during that period of population growth (the counterfactual scenario presented in table below), there would be almost 400,000 more smokers instead of a decline of 1.5 million and an increase in never smokers of only 1 million instead of 3.5 million.

This counterfactual scenario facilitates the calculation of the components which contribute to the change in smoking rates over the 6 year period. The number fewer Canadians who smoked represented 6% of the survey population (-1,909,745/32,535,500). There were actually fewer former smokers and former experimenters in 2021 than would have been present had smoking behaviour not changed – about 2% of the survey population. By contrast, the change in the number of never smokers was 2.5 million higher than would have been expected had there not been a change in smoking behaviour. **The net change in population behaviour was 6 in 100 fewer Canadians smoking because 8 in 100 more Canadians never smoked offset by 2 in 100 fewer Canadians who had either been regular smokers and quit, or who had experimented with smoking but not continued.**

Table 5: Actual changes in smoking behaviour and counterfactual projections reflecting population change, 2015 to 2021

	Actual					Counterfactual (CF)		
	2015		2021		Actual Survey Difference	<i>If the population had grown and aged without a change in smoking behaviour</i>		
	A		B			2021 – CF	CF Difference – 2015-2021CF	CF Difference 2021-2021CF
#	%	#	%	B-A	C	C-A	C-B	
Current smokers	5,344,000	18%	3,830,500	12%	-1,513,500	5,740,200	396,200	-1,909,700
Former Smokers	7,501,500	25%	7,900,500	24%	399,000	8,057,700	556,200	-157,200
Experimenters	3,879,000	13%	3,725,000	11%	-154,000	4,166,600	287,600	-441,600
Never Smokers	13,499,000	45%	17,008,500	52%	3,509,500	14,499,900	1,000,900	2,508,600
Total	30,350,500	100%	32,535,500	100%	2,185,000	32,535,500	0	0

Figure 6: Observed change in Canadian population (aged 12+) by smoking status, 2015 to 2021.

Canadian Community Health Survey, Variable SMKDVSTY

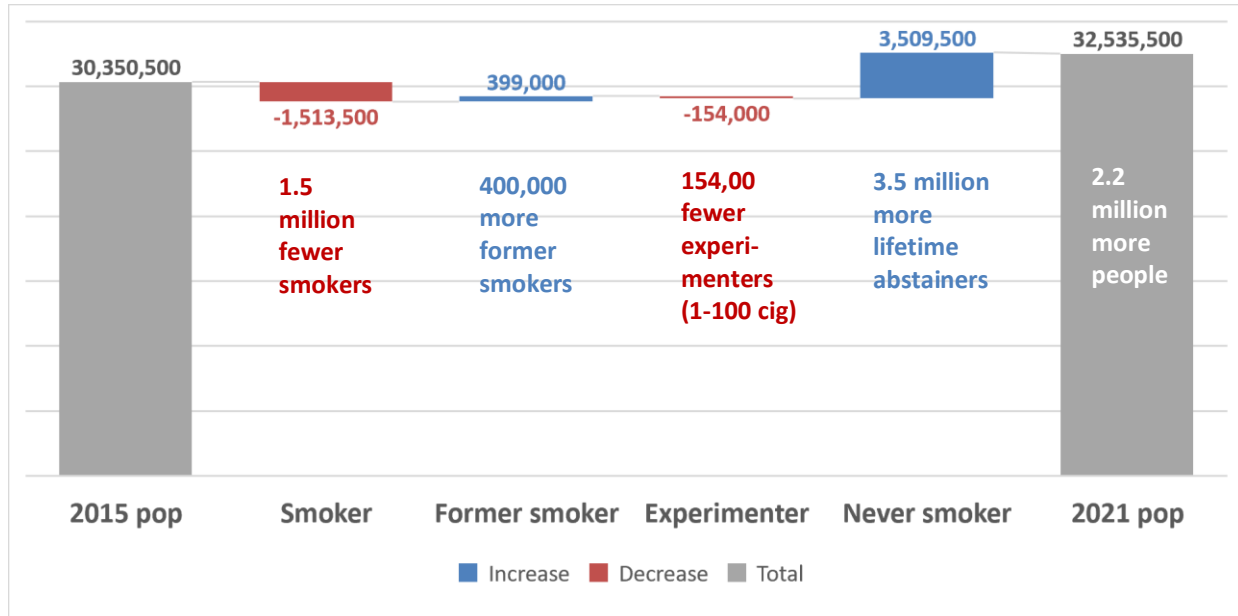
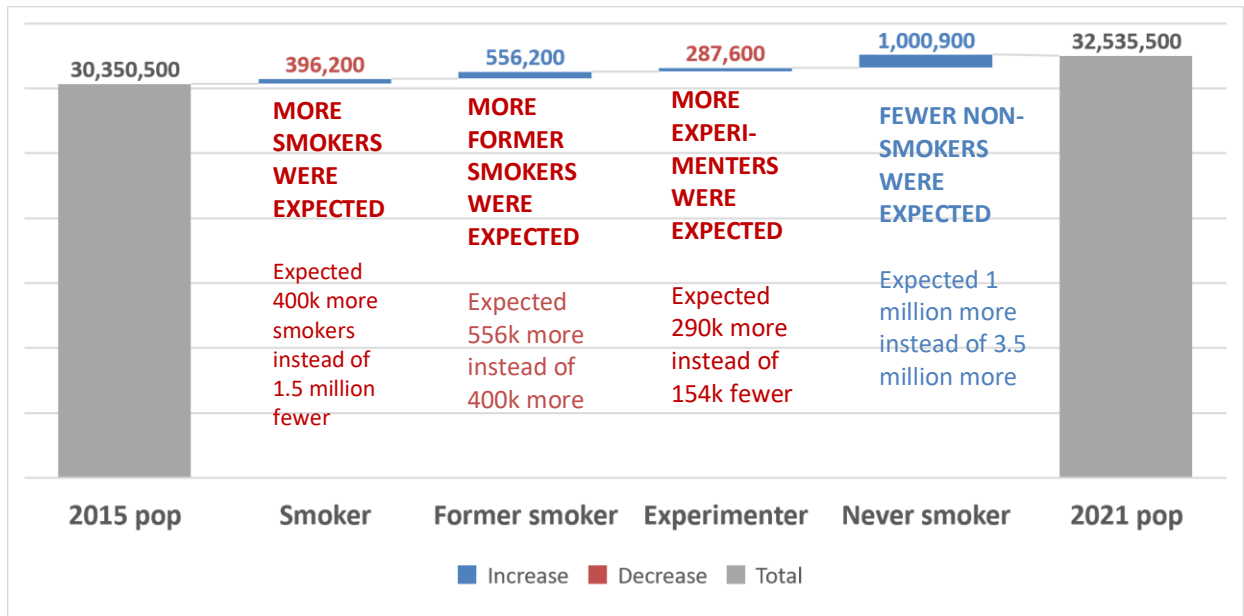


Figure 7: Counterfactual Scenario: Expected change in Canadian population (aged 12+) if smoking behaviour had remained constant, 2015 to 2021.



Background on the Canadian Community Health Survey data

The Canadian Community Health Survey has been conducted by Statistics Canada since 2001, and on an annual basis since 2009. As a result of changes to the survey design, caution is recommended when comparing results between periods with different survey designs. A major design change was made in 2015.

The survey covers 97% of Canadians over 11 years of age. Those not included in the survey are persons living in Indigenous settlements, two northern Quebec health regions, the military, foster children and institutionalized people.¹ The annual surveys include more than 60,000 individuals with response rates over 50% (e.g. 2015—2016 response rate was 59.5%).

The survey includes both questions that are asked across Canada and also questions that are asked only in certain provinces (at the request of those governments). At a national level, questions on tobacco use were restricted to cigarette smoking until 2021, although questions on ‘tobacco alternatives’, including the use of e-cigarettes, were asked in some provinces in earlier cycles (e.g. 2017-2018).

Survey results are used by Statistics Canada to provide annual data on key indicators (Health characteristics, annual estimates. Table 13-10-0096-01)². For smoking, the indicators made public are: (a) Current smoker, daily or occasional and (b) Current smoker, daily. This information is disaggregated by age, sex, and location.

Other indicators on smoking-related behaviour are not routinely provided, but can be obtained from Statistics Canada through:

- (a) the Public Use Microfile (PUMF) which is released for a two-year period. The most recent PUMF available is for 2017-2018.
- (b) the Data Dictionaries made available by Statistics Canada for each year or for two-year periods (these provide rounded estimates for each variable at a national level).
- (c) purchase of custom tabulations from Statistics Canada
- (d) use by authorized individuals of the master or share files through licensed portals (generally University-based individuals).

References

- 1 Statistics Canada. Canadian Community Health Survey – Annual Component
<https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&Id=1383236>
- 2 Statistics Canada. Health characteristics, annual estimates. Table 13-10-0096-01
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310009601>