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Canadians' willingness to get a COVID-19 vaccine: Group differences and reasons for vaccine hesitancy

by **Kristyn Frank** and **Rubab Arim**

This article provides disaggregated data to better understand the impact of COVID-19 on specific groups. Visit the Gender, Diversity and Inclusion Statistics Hub for more analysis, including disaggregated data on labour, public safety, health and more.

The development of a COVID-19 vaccine has been identified as a key factor in ending the pandemic and returning to normal activities (Dourado 2020). Although a COVID-19 vaccine is not yet available, its success will ultimately depend on the proportion of the population who are willing to be vaccinated (Thunstrom et al. 2020).

Vaccine hesitancy, defined as either a refusal or reluctance to be vaccinated, could have implications for the implementation of a COVID-19 vaccination strategy (Thunstrom et al. 2020). Identified as a top threat to global health by the World Health Organization (WHO) in 2019 (WHO 2019), vaccine hesitancy can be attributed to a range of reasons and does not necessarily indicate a general distrust of vaccines (Thunstrom et al. 2020). For example, some people are more likely to delay getting a newly introduced vaccine due to concerns about its effectiveness or side effects (Dubé et al. 2013; Thunstrom et al. 2020). Therefore, the novelty of a COVID-19 vaccine could play a role in Canadians' willingness to get vaccinated, as well as their reasons for not choosing to get vaccinated.

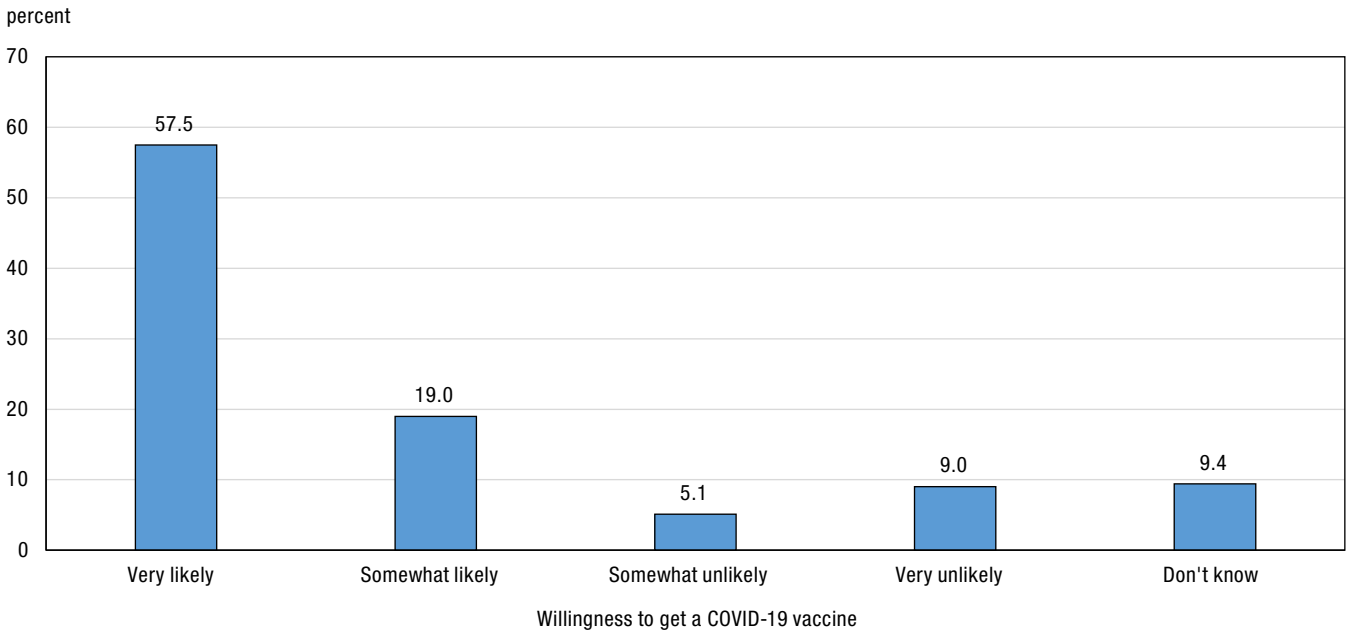
A recent study based on a Statistics Canada crowdsourcing online questionnaire conducted between May 26 and June 8, 2020 showed that just over two thirds of participants were very likely to get a COVID-19 vaccine when one becomes available (Frank and Arim 2020a). However, since the questionnaire did not use a probability-based sampling design, the results could not be generalized to the Canadian population, and thus group differences were not examined. The present study addresses these limitations by using data from the Canadian Perspectives Survey Series (CPSS), which are representative of the Canadian population living in the ten provinces.[1] In addition to examining Canadians' willingness to get a COVID-19 vaccine, group differences and Canadians' reasons for not intending to get a COVID-19 vaccine are examined.

Majority of Canadians are very likely to get a COVID-19 vaccine when it becomes available

Over half of Canadians indicated that they are very likely (57.5%) to get a COVID-19 vaccine when it becomes available and an additional 19.0% reported that they are somewhat likely to get vaccinated (Chart 1). About 1 in 7 Canadians are either somewhat unlikely (5.1%) or very unlikely (9.0%) to get a COVID-19 vaccine when it becomes available. Just under 1 in 10 Canadians (9.4%) didn't know if they would get vaccinated.

1. For more details on this survey, please refer to the Methodology section.

Chart 1
Canadians' willingness to get a COVID-19 vaccine when it becomes available



Source: Statistics Canada, Canadian Perspectives Survey Series 3 (June 2020).

Canadians who are older, have higher levels of education more likely to get a COVID-19 vaccine

Some group differences were observed between Canadians who indicated that they are very likely to get a COVID-19 vaccine and those who are not (Table 1).

The largest differences were observed across age groups and education levels. Older Canadians —those aged 65 or older—reported more often (70.3%) than their younger counterparts aged 15 to 64 (52% to 58%) that they are very likely to get a COVID-19 vaccine. More than 7 in 10 Canadians who had a university degree higher than a bachelor's degree indicated that they are very likely to get a COVID-19 vaccine when it becomes available (72.7%) compared to about 6 in 10 (60.3%) bachelor's degree holders (reference category). However, a smaller proportion of Canadians with a trades certificate or diploma (college or CEGEP), or a university certificate below a bachelor's degree (52.9%) are very likely to get a COVID-19 vaccine.

Smaller differences were observed across other sociodemographic characteristics. For example, a higher proportion of Canadians who did not have children under the age of 18 indicated that they are very likely to get COVID-19 vaccine (60.4%) than those with children under the age of 18 (51.6%), and Canadian-born individuals were more likely than immigrants to report that they are very likely to be vaccinated (59.4% and 52.0%, respectively). Moreover, about two-thirds of Canadians residing in the Atlantic Provinces indicated that they are very likely to be vaccinated (67.7%). The figure was 58.8% for residents of Ontario (reference category).

Interestingly, while another CPSS study found that Canadians who were employed but absent from work during the same reference week were more likely to plan to get tested for COVID-19 than those who were employed and

working (Frank and Arim 2020b), the present study displayed no statistically significant differences in Canadians' willingness to get a COVID-19 vaccine by employment status.

Table 1
Canadians' willingness to get a COVID-19 vaccine when it becomes available, by sociodemographic characteristics

	Willingness to get a COVID-19 vaccine					
	Very likely			Not very likely		
	percent	95% confidence limits		percent	95% confidence limits	
Sex						
Male (reference category)	55.9	51.9	59.9	44.1	40.1	48.1
Female	58.9	55.3	62.5	41.1	37.5	44.7
Age group						
15-24	58.1*	47.1	68.3	41.9*	31.7	52.9
25-44	51.6*	47.4	55.9	48.4*	44.1	52.6
45-64	54.8*	51.1	58.4	45.2*	41.6	48.9
65+ (reference category)	70.3	65.3	74.9	29.7	25.1	34.7
Highest level of education completed						
Grade 13 graduate or less or some post-secondary education	56.3	50.7	61.7	43.7	38.3	49.3
Trades, Community college, CEGEP, or university certificate below Bachelor's degree	52.9*	48.8	57.0	47.1*	43.0	51.2
Bachelor's degree (reference category)	60.3	55.3	65.1	39.7	34.9	44.7
Above Bachelor's degree	72.7*	66.6	77.9	27.3*	22.1	33.4
Employment status						
Employed and at work at least part of the reference week (reference category)	56.3	52.8	59.7	43.7	40.3	47.2
Employed but absent from work for reasons not related to COVID-19	58.0	43.4	71.3	42.0	28.7	56.6
Employed but absent from work due to COVID-19	52.7	40.4	64.6	47.3	35.4	59.6
Not employed	59.2	54.8	63.5	40.8	36.5	45.2
Marital status						
Married or living common-law (reference category)	58.0	55.0	60.9	42.0	39.1	45.0
Widowed, separated or divorced	56.3	49.1	63.3	43.7	36.7	50.9
Single, never married	56.8	50.4	63.0	43.2	37.0	49.6
Has a child under the age of 18 as of June 15th, 2020						
No (reference category)	60.4	57.3	63.5	39.6	36.5	42.7
Yes	51.6*	46.4	56.9	48.4*	43.1	53.6
Immigrant status						
Born in Canada (reference category)	59.4	56.3	62.4	40.6	37.6	43.7
Landed immigrant	52.0*	46.1	58.0	48.0*	42.0	53.9
Not a landed immigrant	47.6	31.3	64.5	52.4	35.5	68.7
Region of residence						
Atlantic provinces	67.7*	62.4	72.5	32.3*	27.5	37.6
Quebec	54.3	47.6	60.8	45.7	39.2	52.4
Ontario (reference category)	58.8	54.2	63.3	41.2	36.7	45.8
Prairies region	56.2	51.5	60.9	43.8	39.1	48.5
British Columbia	55.5	49.2	61.6	44.5	38.5	50.8

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

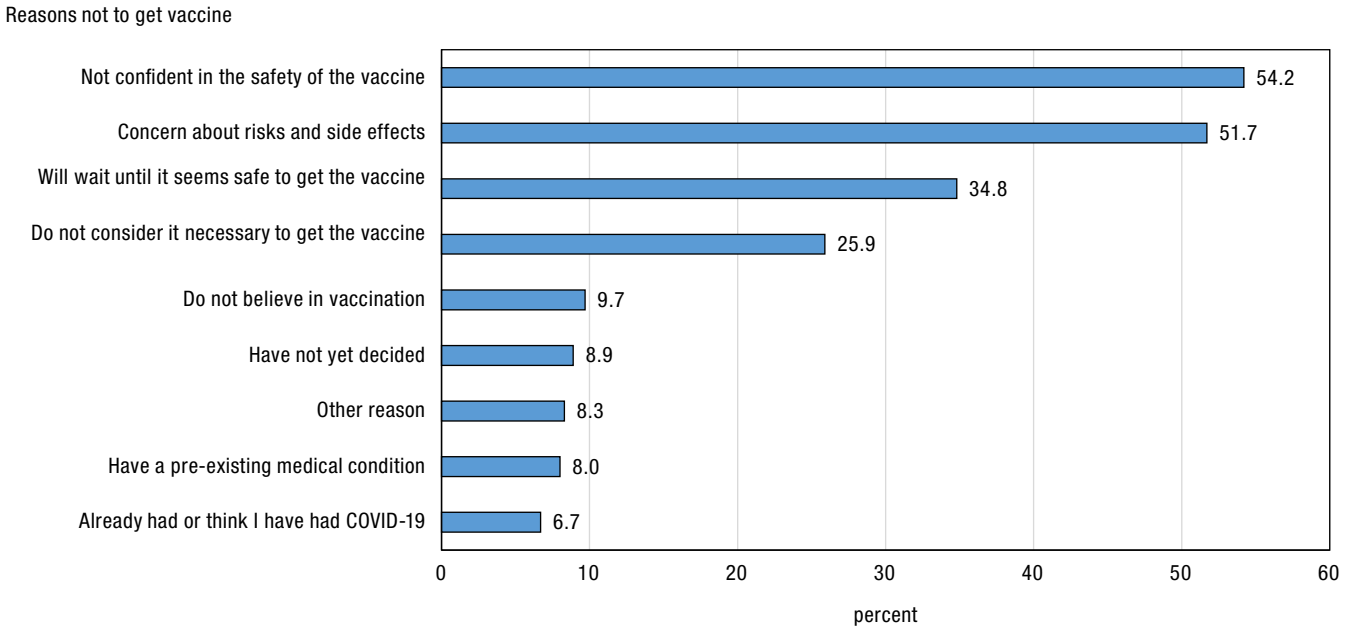
Notes: Respondents' willingness to get a COVID-19 vaccine was measured on a five-point scale, ranging from "very likely" to "don't know." In this table, "not very likely" includes response categories indicating "somewhat likely", "somewhat unlikely", "very unlikely", and "don't know". This group is compared to the response category "very likely" .
Source: Statistics Canada, Canadian Perspectives Survey Series 3 (June 2020).

Canadians who are unlikely to get vaccinated mostly concerned about vaccine safety, risks and side effects

Canadians who indicated that they are somewhat unlikely or very unlikely to get a COVID-19 vaccine when one becomes available were asked to indicate their reasons why (Chart 2). The top two reasons were a lack of confidence in the safety of the vaccine (54.2%) and concerns about its risks and side effects (51.7%). About one-third of Canadians

who are unlikely to get vaccinated indicated that they will wait until it seems safe to get the vaccine (34.8%), while about one-quarter did not consider it necessary to get the vaccine (25.9%).

Chart 2
Canadians' reasons for not getting the COVID-19 vaccine



Note: Categories do not sum to 100% because respondents could select more than one response.
Source: Statistics Canada, Canadian Perspectives Survey Series 3 (June 2020).

A general disbelief in vaccinations was a factor for about 1 in 10 Canadians who are unlikely to get a COVID-19 vaccine (9.7%). However, reasons that were unrelated to individuals' confidence in the safety of the vaccine were also reported. For example, 8.0% indicated that they would not be vaccinated due to a pre-existing medical condition and 6.7% reported that they already had or thought they have had COVID-19. Additionally, 8.9% of Canadians who indicated that they are unlikely to get vaccinated have not yet decided if they will get a COVID-19 vaccine.

Methodology

This study uses data from the third wave of Statistics Canada's Canadian Perspectives Survey Series (CPSS), collected between June 15 and June 21, 2020. The CPSS is a new web panel survey administered by Statistics Canada to obtain information related to the impacts of the COVID-19 pandemic on Canadians residing in the ten provinces. The third wave of the CPSS focused on respondents' perspectives on resuming economic and social activities during COVID-19. About 4,000 respondents participated in this wave of the CPSS. Because the CPSS targets a subsample of the Labour Force Survey (LFS) sample, sociodemographic variables such as age, sex, and highest level of education were drawn from the LFS data. Canadians' willingness to get a COVID-19 vaccine was measured with the survey question "When a COVID-19 vaccine becomes available, how likely is it that you will choose to get it?"

References

Dourado, E. 2020. *Accelerating availability of vaccine candidates for COVID-19*. Mercatus Center Research Paper Series. Arlington, VA: George Mason University.

Dubé, E., C. Laberge, M. Guay, P. Bramadat, R. Roy and J. A. Bettinger. 2013. "Vaccine hesitancy: an overview". *Human Vaccines & Immunotherapeutics*, 9:8, pp.1763-1773. DOI: 10.4161/hv.24657.

Frank, K. and R. Arim. 2020a. "Canadians' willingness to get a COVID-19 vaccine when one becomes available: What role does trust play?" Statistics Canada Catalogue No. 45280001. No. 00043. Ottawa: Statistics Canada.

Frank, K. and R. Arim. 2020b. "COVID-19 testing: Do Canadians plan to get tested and why?" Statistics Canada, Catalogue no. 45-28-0001. No. 00072. Ottawa: Statistics Canada.

Thunstrom, L., M. Ashworth, D. Finoff and S.C. Newbold. 2020. *Hesitancy towards a COVID-19 vaccine and prospects for herd immunity*. Accessed July 17, 2020. Available at: https://ssrn.com/abstract=3593098.

World Health Organization (WHO). 2019. *Ten threats to global health in 2019*. Accessed July 14, 2020. Available at: https://www.who.int/news-room/feature-stories/ten-threats-to-global-health-in-2019.