



COVID-19 Vaccine Hesitancy and Needle Fear Survey

EXECUTIVE SUMMARY

June 2021



About Solutions for Kids in Pain (SKIP)

Solutions for Kids in Pain (SKIP) is a knowledge mobilization network, based at Dalhousie University and co-led by Children's Healthcare Canada, that seeks to bridge the gap between current treatment practices and available evidence-based solutions for children's pain in Canadian health institutions. SKIP's vision is healthier Canadians through better pain management for children, with a mission to improve children's pain management by mobilizing evidence-based solutions through coordination and collaboration. SKIP brings together Canada's world-renowned pediatric pain research community, front-line knowledge user organizations and end beneficiaries.

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About Healthcare Excellence Canada

Healthcare Excellence Canada is a new organization with a relentless focus on improving healthcare, with – and for – everyone in Canada. Launched in spring 2021, Healthcare Excellence Canada brings together the Canadian Patient Safety Institute and Canadian Foundation for Healthcare Improvement. The newly amalgamated organization works with partners to share proven innovations and best practices in patient safety and healthcare quality. Working together with patients and other partners, we can deliver lasting improvement in patient safety and experience, work life of healthcare providers, value for money and the health of everyone in Canada. Healthcare Excellence Canada is an independent not-for-profit charity funded by Health Canada.

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BACKGROUND

Many factors contribute to vaccine hesitancy, including confidence (i.e., trust in vaccine safety and effectiveness, the system that delivers the vaccine, motivations of policymakers), complacency (i.e., perceived risk of vaccine-preventable diseases), and convenience (i.e., accessibility, affordability, quality of service).³ There are also people across Canada who may avoid the COVID-19 vaccination due to concerns about pain and discomfort related to the vaccine and/or fear of needles.

Needle fears are common, impacting more than 60% of children, 20-50% of adolescents, and 20-30% of adults.⁴ Studies tell us that fear of needles is a primary reason for immunization non-compliance for approximately 7% of adults and 8% of children.⁸ Poorly managed pain and discomfort related to needles contributes to the development of needle fears and the potential avoidance of vaccinations. Thankfully, there are science-backed strategies that address these challenges and mitigate needle fears and pain as contributing factors to vaccine hesitancy.^{5,7}

In December 2020, Healthcare Excellence Canada (formerly the Canadian Foundation for Healthcare Improvement) and Solutions for Kids in Pain (SKIP) conducted a national online survey to explore contributors to vaccine hesitancy in the context of the COVID-19 pandemic for parents. Our goal was to identify: the extent of COVID-19 vaccine hesitancy related to pain and discomfort from vaccines or fear of needles; information people in Canada would like to have to inform their decisions to get a COVID-19 vaccination; and information sources people in Canada would consult to inform their decision to get the COVID-19 vaccine. The data collected represents a point in time when only two vaccines had been approved for use in Canada (Pfizer-BioNTech, Moderna), and the country was in the first phase of the vaccine rollout.

SURVEY PARTICIPANTS AND RESULTS (DECEMBER 2020)

A representative sample of 1506 Canadian adults responded to the online survey, issued by Pollara Strategic Insights, between December 17-18, 2020. The margin of error for a probability sample of this size is $\pm 2.5\%$, 19 times out of 20. Results were weighted by region, sex/gender and age, using the latest census data, to be representative of the adult Canadian population as a whole. More details regarding the sample and specific survey questions are included in the Appendices below.

Barriers to Getting the COVID-19 Vaccine

Overall, a strong majority of Canadians intended to get the COVID-19 vaccine for themselves and their children 16 years of age and younger, either as soon as it became available to them or eventually. However, they were somewhat more hesitant about getting the vaccine for their children than they were for themselves.

Three-quarters (76%) of Canadians planned on getting the COVID-19 vaccine, with almost half (45%) saying they would get it as soon as possible and 31% saying they would get it eventually but would want to wait a while. One-in-ten (12%) said they would not get it, and 12% were not sure.

Two-thirds (68%) of parents with children 16 or younger planned on getting the vaccine for their children, either as soon as possible (39%) or eventually, but would wait awhile (29%). Almost one-fifth (17%) said they would not, while

15% were not sure.

How Vaccination and Needle Fear Impacts Willingness to Get a COVID-19 Vaccine

Three-quarters of Canadians said they had never missed or delayed a vaccination for themselves (72%). A few had done so because of the pain related to the vaccination (4%) or due to a fear of needles (6%).

Of those who were not planning on or were not sure about getting the vaccine, a few (2% of those who said no and 1% of those who were not sure) had delayed past vaccines due to the pain associated with it and almost one-in-ten (8% of those who said no and 7% of those who were not sure) due to a fear of needles.

When it comes to their children, a just slightly higher proportion said that they had delayed vaccines due to the pain involved (8%) or their child's fear of needles (8%), while 19% said that they had delayed them for another reason and 67% reported never delaying them.

Of those who would not or were not sure that they would get their child vaccinated, 7% said that they had delayed other vaccinations due to the pain involved and 8% due to a fear of needles. One-quarter (28%) said past delays were due to another reason.

Parents' Interest in Information about Vaccines and Vaccination Pain

Most Canadians reported having not delayed theirs 'or their children's vaccinations. Of those who had, few (less than 10%) said they had done so due to the pain involved in vaccinations or a fear of needles. To help in the decision for getting the COVID-19 vaccination, Canadians overall – and parents specifically – were looking for information about the potential side effects and safety of the vaccines. While few believed information about reducing pain or fear of needles would help them make the decision for themselves, some said they were interested in this information for their children. They were most likely to turn to their doctor, or government entities (Public Health or government websites) for information about the vaccines.

To encourage getting the vaccine for themselves when it became available, Canadians most strongly said they were looking for information about potential side effects or health risks (64%). Half also wanted to see information about the safety of the vaccine (54%) or its effectiveness (50%). Almost one-in-ten (8%) said they wanted information about how to reduce the pain related to the vaccine, and 5% how to reduce the fear of needles. Overall, people in the 18 to 34 age category were more interested in information about reducing pain (12%) or reducing the fear of needles (10%).

Among those who did not plan on or were not sure about getting the vaccination for themselves, the same proportion were interested in information about reducing pain (not getting it 6%, not sure 7%) or reducing fear of needles (not getting it 5%, not sure 6%).

To encourage getting the vaccine for their children when it became available, parents said they wanted to see information about potential side effects or health risks (64%) or the safety of the vaccine (62%). Half also wanted to know how effective it was (53%). Close to one-fifths (17%) wanted information about reducing the pain related to the vaccine, while one-in-ten (11%) said they wanted information about reducing the fear of needles.



Those who were hesitant about getting the vaccine for their children were more likely to want to see information about potential side effects (68%) or the safety of the vaccine (67%) than those who were planning on getting the vaccine for their child as soon as it became available (50% and 49%). Those who have no hesitation about getting the vaccine were more likely to want to see information on how to reduce pain (24% vs. 13% of those waiting awhile and 12% among those who were not getting it/not sure) or how to reduce the pain of needles (15% vs. 5% of those who will wait awhile and 11% among those who were not getting it/not sure).

Canadians were most likely to turn to their doctors for information to help them decide whether or not to get the vaccine (60%), while many said they would also look to government entities (Public Health 52%, government websites 42%). One-fifth said they would turn to news media (TV or newspapers 22%) or internet searches (Google 19%).

SUMMARY OF KEY FINDINGS

This survey contributes new information to existing COVID-19 vaccine surveys^{1,2,6} by identifying vaccine-related pain and needle fears as relevant contributors to COVID-19 vaccine hesitancy for both adults and children in Canada (4-8%). A proportion of survey respondents (10-17%) wanted information about how to reduce pain related to the COVID-19 vaccine and needle fears, particularly individuals 18-34 years of age and parents. Concerns related to vaccine safety, effectiveness, and side effects were more common contributors to COVID-19 vaccine hesitancy overall (50-64% of respondents).

Altogether, findings suggest that information about managing vaccine-related pain and needle fears should be integrated along with other evidence-based information about the COVID-19 vaccines to increase vaccine confidence for people in Canada. Based on the results of the survey, tools and resources sharing effective strategies for preventing vaccine-related pain and needle fears that primarily target parents, children, and younger adults, and that are developed with and shared by healthcare professional and public health/government as key sources of trustworthy information, are most likely to respond to needs.

NEEDLE FEAR AND VACCINE PAIN MANAGEMENT RESOURCES

Simple, evidence-informed strategies can improve vaccine experience and reduce pain and anxiety sometimes associated with vaccines. Below is a list of resources providers and families can use to effectively prevent and manage vaccine-related pain and needle fears.

[Needle Pain Management for Vaccinations & More](#)

Solutions for Kids in Pain (SKIP) - [#ItDoesntHavetoHurt](#)

[Needle Fear: When it Gets in the Way](#)

Immunize Canada

[Needle-Related Fainting: Why does it happen? What to do about it?](#)

Immunize Canada

[Vaccines for COVID-19: Getting your vaccine](#)

Public Health Agency of Canada (PHAC)

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APPENDIX 1: SAMPLE LOCATION, SEX/GENDER, LANGUAGE, AGE, INCOME, AND EDUCATION

Survey respondents were representative across the country.

| | |
|-------------------|---|
| Location | All Canadian provinces were represented by the respondents |
| Sex/Gender | 48% of respondents identified as female, and 52% identified as male |
| Language | 82% of respondents primarily spoke English, and 18% primarily spoke French |
| Age | 27% of respondents were between 18 and 34 years of age 33% were between 35 and 54 40% were aged 55 and up |
| Income | 30% of respondents earned less than \$50K per year 34% earned between \$50K and \$99K 22% earned \$100K or more |
| Education | 33% of respondents had earned a high school diploma or less 30% had earned a college diploma 36% had earned a university degree |

APPENDIX 2: SURVEY QUESTIONS

A. Intent to get the COVID-19 vaccine for you and your child

When a vaccine for COVID-19 becomes available, will you and your children *16 years of age and younger* (if applicable) get vaccinated?

| | Yes, as soon as possible | Yes, but will wait awhile | No | Not sure | Not applicable |
|---|--------------------------|---------------------------|----|----------|----------------|
| Yourself | | | | | |
| Your child (16 years of age or younger) | | | | | |



B. Vaccine avoidance because of fear or pain for you and your child

Have you ever delayed or missed getting a vaccination either for yourself or for any of your children *16 years of age or younger* due to any of the following reasons? Check all that apply.

| | Pain related to the vaccination | A fear of needles | Another reason | Have not missed or delayed |
|---|---------------------------------|-------------------|----------------|----------------------------|
| I've delayed or missed getting a vaccination for myself due to.... | | | | |
| I've delayed or missed getting a vaccination for any of my children 16 years of age or younger due to my child's..... | | | | |

C. Decision support to inform decision to get COVID-19 vaccine for you or your child

To help you decide whether to get a COVID-19 vaccine for yourself or your children 16 years of age or younger when it becomes available, do you need information about: Please check all that apply.

| | Myself | Your child (16 years or younger) |
|--|--------|----------------------------------|
| how to reduce pain related to vaccination (e.g., distraction, numbing cream during needle) | | |
| how to reduce fear of needles | | |
| effectiveness of the COVID 19 vaccine | | |
| safety of the COVID 19 vaccine | | |
| potential side effects/health risks of the COVID 19 vaccine | | |
| Other (specify) | | |
| None of the above | | |



D. Accessing information about the COVID-19 vaccine to help you decide whether to get it for you or your child

Where would you look for information to help you decide whether to get a COVID-19 vaccine for yourself or for any of your children 16 years of age or younger? Check all that apply.

- My doctor or other healthcare provider
- TV or newspaper
- Social media (e.g., twitter, Facebook)
- Government website
- Public health
- Google
- Other (specify)
- Not sure

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