

## COVID-19 vaccination in 5-11 years old children: Drivers of vaccine hesitancy among parents in Quebec

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### ABSTRACT

The Pfizer-BioNTech COVID-19 vaccine was recently authorized for Canadian children aged 5 to 11 years old. Previous studies have indicated that low parental vaccination intention can be anticipated. To better understand drivers of vaccine hesitancy among parents of 5–11 years old children, four focus group discussions were conducted. Interviewed parents generally showed little concern about the risk of COVID-19 for their child(ren) and many mentioned that children are at low risk of complications from COVID-19. Out of 28 participants, seven intended to vaccinate their child(ren) while the remaining were unsure or unwilling. Even if parents were themselves vaccinated, many hesitated for their child(ren). These parents perceived that it was unnecessary (due to low risk of complications) and were concerned about risks of side effects. Clear communication on vaccine safety and usefulness will be critical to reassure parents and foster vaccine acceptance.

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As of November 19, 2021, the National Advisory Committee on Immunization (NACI) recommended that a complete series of the pediatric formulation of the Pfizer-BioNTech COVID-19 vaccine may be offered to Canadian children aged 5–11 years old who do not have contraindications to the vaccine.<sup>1</sup> On November 23, 2021, the Quebec Immunization Committee (CIQ) also recommended that the vaccine be offered to children aged 5–11 years old who do not have contraindications to the vaccine.<sup>2</sup> The vaccination campaign for this age group started the next day throughout Quebec in mass vaccination centers, while vaccination in schools began a week later.

As highlighted in different surveys conducted prior to the approval of the vaccine for this age group, lower vaccination intention for this age group can be anticipated.

In Quebec, Canada, for the period from October 15 to 27, 2021, most parents of children aged 5 to 11 years old surveyed through online surveys conducted weekly in the province since March 2020, said they intended to vaccinate their child (65%), while 11% were unsure and 24% somewhat or strongly opposed to vaccinating their child against COVID-19 vaccination for their child.<sup>3</sup> Parents' intention to vaccinate their child was higher in May 2020, following the announcement that the vaccine would be offered to 12 to 17 years old in Quebec.<sup>4</sup> To better understand drivers of vaccine hesitancy among parents of 5 to 11 years old children, 4 focus group discussions were conducted with 28 vaccine-hesitant parents on November 8 and 9, 2021, three weeks after the submission of Pfizer-BioNTech' application to Health Canada for approval of its pediatric formulation of its COVID-19 vaccine.

Interviewed parents generally showed little concern about the risk of COVID-19 for their child(ren) and many mentioned that children are at low risk of complications from COVID-19. Many parents said they were more concerned at the beginning of the pandemic, when there was a lot of uncertainty about the virus:

I have done some research and I can see that for children, it is quite okay if they catch COVID. [...] I don't have any fear as such for my children's health. (Parent, Focus Group no4, Nov 10, 2021)

Out of 28 participants, seven intended to vaccinate their child(ren) while the remaining were unsure or unwilling. Even if parents were themselves vaccinated, many hesitated for their child(ren).

Parents with positive vaccination intention were mainly motivated by a desire to return to some kind of "normality," by contributing to decrease transmission (because children are an important vector) and to protect their child(ren) and society in general:

But I'll be honest with you tonight, it's also to get rid of it that I want to vaccinate my children. I don't mind being politically correct, but at some point, you want to get it over with. (Parent, Focus Group no1, Nov 9, 2021)

A lot of parents who intended to refuse the vaccine for their child(ren) perceived that it was unnecessary (due to low risk of complications) and were concerned about vaccine safety (e.g., myocarditis, unknown risks due to rapid development of the vaccine). Some were worried about the fact that children will have to be vaccinated to participate in group activities (e.g., sport, art) and others were concerned about the political pressure linked with vaccination of children (i.e., announcement that the state of emergency could be lifted once a sufficient proportion of children will be vaccinated):<sup>5</sup>

Why vaccinate children aged 5 to 11? That's the question. [...] We were asked to vaccinate to protect ourselves and others. We are 95% vaccinated. That's good. The people who need to protect are protected. Why are we asking our children to have this vaccine? For what purpose? In order to protect themselves? They are not at risk. To protect others? They are all already vaccinated. I'm sorry. There is no reason for our little ones to be vaccinated. (Parent, Focus Group no2, Nov 9, 2021)

I find it difficult that they [the children] have that burden to carry and I find it ungrateful, actually. I think it's using children. As was mentioned, we have 90% of the population vaccinated. I don't think that the small percentage of children between the ages of 5 and 11 is going to change the game to the point where everything can change. I have the impression that we are in something "political" and at this level, it bothers me a lot. (Parent, Focus Group no2, Nov 9, 2021)

Moreover, the young age of the children added a weight on the parents' shoulders (children cannot decide for themselves). Parents who also had older children noted that the decision was easier, as older children were able to understand the information and voice their opinions (e.g., many parents were reluctant for their teens' vaccination, but agreed because their child(ren) wanted to be vaccinated).

Several participants were critical of the current vaccination campaign. According to some, there is high pressure to accept vaccination (i.e., vaccine passport, mandatory for some employers, vaccination presented as the only way to stop the pandemic), making it in some ways "mandatory." Many deplored the nonrecognition of "natural" immunity for people who have had COVID-19. Parents need to feel that they have a choice about whether or not to have their child(ren) vaccinated (school-based vaccination makes this choice less obvious, as well as stigmatizing children who do not get vaccinated). Several participants also noted the significant polarization of ideas and opposition between the vaccinated and the non-vaccinated. The approach and tone of the authorities fostered this intolerance of the non-vaccinated:

It's really sad and it shouldn't necessarily be like that in a society. I think the choice should be free. Really free. I also think that it was not very clear and not very honest and that bothers me too. (Parent, Focus Group no3, Nov 10, 2021)

The government's stick technique, I'm really against it. I am 100% against it. For me, OK, I have to, but for my children, depriving them of activities? No. It risks making people who were not anti-vaccine before who will become so. (Parent, Focus Group no3, Nov 10, 2021)

What I find regrettable is that at the beginning, everyone said that we would respect those who did not want to be vaccinated. But as the rate of vaccination increased, intolerance was established in Quebec and in society, of being pointed out, between neighbors, family, friends. (Parent, Focus Group no2, Nov 9, 2021)

Focus groups were conducted with vaccine-hesitant parents and their views might not be representative of those of most parents. It is likely that parental intention to vaccinate increases after the start of the campaign, as it has been observed in surveys of other target groups in

Quebec.<sup>6</sup> Indeed, two weeks after the launch of the campaign for children, about of a third of Quebec children had either received a first dose or booked an appointment to do so.<sup>7</sup> As shown by our findings, vaccine hesitancy may remain an important barrier in reaching high vaccine uptake rates in this age group, however.

As safety concerns and perceptions that children do not need to be vaccinated against COVID-19 are among the main reasons for vaccine hesitancy and refusal,<sup>8-10</sup> clear communication regarding these issues will be critical to reassure parents and foster vaccine acceptance. A good understanding of the factors that impact vaccine hesitancy is critical to develop tailored interventions. In the current "infodemic," many rumors about vaccines are circulating in social and traditional media, which can negatively impact parents' vaccination attitudes and behaviors.

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## References

1. Government of Canada. *National advisory committee on immunization (NACI) statement: Recommendation on the use of the Pfizer-BioNTech COVID-19 vaccine (10mcg) in children 5 to 11 years of age*. Public Health Agency of Canada; 2021 [accessed 2021 Oct 7]. <https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/recommendations-use-covid-19-vaccines/pfizer-biontech-10-mcg-children-5-11-years-age.html>.
2. Comité sur l'immunisation du Québec. *Vaccination contre la COVID-19 chez les jeunes âgés de 5 à 11 ans au Québec*. Québec, Canada: Institut national de santé publique du Québec; 2021 [accessed 2021 Dec 7]. <https://www.inspq.qc.ca/publications/3181-vaccination-covid19-jeunes-5-11-ans>.
3. Institut national de santé publique du Québec. *COVID-19 - Sondages sur les attitudes et comportements des adultes québécois 2021* [accessed 2021 Dec 7]. <https://www.inspq.qc.ca/covid-19/sondages-attitudescomportements-quebeois>.
4. Institut national de santé publique du Québec. *Pandémie et vaccination contre la COVID-19 - 15 juin 2021*. 2021 [accessed 2021 Dec 7]. <https://www.inspq.qc.ca/covid-19/sondages-attitudescomportements-quebeois/vaccination-15-juin-2021>.
5. Saint-Arnaud P. *François Legault ne lèvera pas l'état d'urgence avant 2022*. La Presse; 2021 [accessed 2021 Dec 10]. <https://www.lapresse.ca/actualites/politique/2021-11-18/francois-legault-ne-lèvera-pas-l-etat-d-urgence-avant-2022.php>.
6. Dubé È, Dionne M, Pelletier C, Hamel D, Gadio S. COVID-19 vaccination attitudes and intention among Quebecers during the first and second waves of the pandemic: findings from repeated cross-sectional surveys. *Hum Vaccin Immunother*. 2021;1-11. doi:10.1080/21645515.2021.1947096.

7. Institut national de santé publique du Québec. *Vigie des activités de vaccination contre la COVID-19 et de suivi des couvertures vaccinales au Québec*. 2021 [accessed 2021 Dec 7]. <https://www.inspq.qc.ca/sites/default/files/covid/vaccination/vigie-vaccination-20211207.pdf>.
8. Evans S, Klas A, Mikocka-Walus A, German B, Rogers GD, Ling M, Fernando JW, Kothe E, Westrupp EM. “Poison” or “protection”? A mixed methods exploration of Australian parents’ COVID-19 vaccination intentions. *J Psychosom Res*. 2021;150:110626. doi:10.1016/j.jpsychores.2021.110626.
9. Teasdale CA, Borrell LN, Kimball S, Rinke ML, Rane M, Fleary SA, Nash D. Plans to vaccinate children for coronavirus disease 2019: a survey of United States parents. *J Pediatr*. 2021;237:292–97. doi:10.1016/j.jpeds.2021.07.021.
10. Teasdale CA, Borrell LN, Shen Y, Kimball S, Rinke ML, Fleary SA, Nash D. Parental plans to vaccinate children for COVID-19 in New York city. *Vaccine*. 2021;39(36):5082–86. doi:10.1016/j.vaccine.2021.07.058.