

Immunizing Children with Confidence

Vaccination Conversations Pop Up Event January 27, 2022



Santé
des enfants
Canada



Event Recap

The Vaccination Conversations Pop-Up event, led by Children's Healthcare Canada, delivered in collaboration with Solutions for Kids in Pain and co-hosted by Stollery Children's Hospital & Alberta Health Services, provided healthcare professionals with the skills, tools, and information necessary to confidently promote and provide vaccinations to children and their families. This event was hosted as part of Children's Healthcare Canada's Immunizing Children with Confidence project with funding from the Public Health Agency of Canada's Immunization Partnership Fund.

What is Immunizing Children with Confidence?

Through tailored interventions and resources, [Immunizing Children with Confidence](#) will build the capacity and confidence of Canadian healthcare providers as vaccinators and vaccine promoters serving children and youth. More specifically, this project will improve access to, awareness and use of knowledge and resources available to front-line child and youth healthcare providers who are responsible for vaccine communication and vaccine provision with children, youth, and families.

The resources co-developed with healthcare professionals and family partners will enable clinicians to safely and confidently promote vaccination for and vaccinate children, including those who are at increased risk due to COVID and other vaccine-preventable infectious diseases (e.g., children with disabilities, medical complexity, acute illness). This timely and critical content was developed in partnership with the Immunizing Children with Confidence [Advisory Committee](#) comprised of children's healthcare, infectious disease, vaccine development and approval, health policy, and other specialists as well as family partners. To ensure you stay up-to-date on all the latest News, Events, and resources make sure to subscribe to our newsletter the [SPARK Bulletin](#).

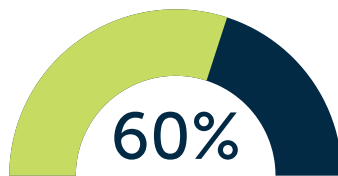
Stollery Children's Hospital Keynote | Needles and robots and prizes, oh my! Better experiences mean more vaccinated children

Now more than ever, we need to improve the vaccine experience for families to increase the uptake of COVID-19 (and routine) vaccines among children and youth. Our keynote speakers Drs. Samina Ali and Elise Kammerer of the Stollery Children's Hospital, shared evidence-based techniques to reduce children's pain and distress associated with vaccinations across the age spectrum.

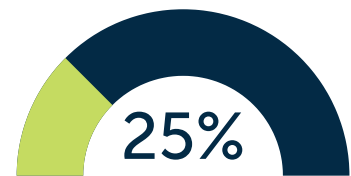
These specialists in procedural pain management stressed the importance of enabling healthcare providers to create better experiences for children and families, because better experiences mean better vaccine uptake among kids. Vaccination hesitancy in youth is often linked to needle fear and pain.



of patients avoid vaccines due to needle fear



of children have a fear of needles
*over 60%



of parents have needle fear which they inadvertently project onto their children

The presenters emphasized that vaccines work and are one of the greatest public health tools we have. We must reduce needle fear and pain to help improve vaccine uptake for COVID and other routine childhood immunizations. The more people in the community who are vaccinated, the harder it will be for COVID to spread. The approved COVID-19 mRNA vaccines for children and youth are not experimental, but rather have been created after decades of research, long before COVID-19 existed.

Parents indicated their biggest concerns prior to Vaccination are:

Side effects 62%

Reducing needle pain 20%

Safety of the vaccine 62%

Reducing needle fear 10%

Effectiveness 53%

Healthcare providers can significantly reduce those last two barriers regarding needle fear and pain by using the 5 P's

Procedural

- Aspiration for intramuscular vaccines is not necessary and can cause increased pain and anxiety.
- Administer quickly, the quicker the better.
- Give most painful needle last to decrease overall distress as pain can escalate with each subsequent needle.
- Administer to the child with the highest anxieties first so as not to prolong their fear.

Physical

- Involve the caregiver, encourage physical touch such as an arm around the child, this also makes the child more secure and less distressed.
- Ensure the child is in the most comfortable positioning
- Encourage skin to skin contact for babies
- Breastfeeding (or pacifier) during injection for babies

Psychological

- Distraction
- Engage in conversation or encourage the child to wiggle their toes or focus elsewhere.
- Therapy Animals, Music, Games, Videos, or even Virtual Reality can be incredibly effective.
- When possible, encourage Child Life Specialists to be present at vaccination sites.
- Use verbal signals and positive language with the child and reward them for a job well done.

Pharmacologic

- Topical anesthetic patches or numbing creams, such as Emlatm or Maxilenetm, can be very effective. Ensure the injection site is prepared sufficiently in advance.
- Use sugar water for babies, especially those who are not breastfed

Process

- The CARD System is one of the leading procedural frameworks for managing needle fear and pain in children.
- Provide education related to effective procedural (vaccination) pain management before and on the day of vaccination.
- For any children ≥ 3 y explain what you are doing (the vaccination process) in language they can understand.

Using the 5 Ps Healthcare Professionals can reduce a critical barrier to vaccination, needle fear and pain.

CARD: Playing your best hand to improve the vaccination experience

Dr. Anna Taddio was next on our stage. As one of the leading voices on pain management across Canada, she shared her work, which is funded by the Public Health Agency of Canada (PHAC) and the Canadian Institutes of Health Research (CIHR), to implement and evaluate a vaccination delivery framework called the CARD system. CARD aims to reduce immunization stress-related responses and promote more positive vaccination experiences. The CARD system is one of the most user-friendly and evidence-informed systems available to professionals to improve vaccination experiences. The [CARD Game for Kids](#) is a great resource to share with parents before a vaccination appointment



NERVOUS ABOUT GETTING NEEDLES?

Use the CARD system to have a more positive vaccination experience.

<p>COMFORT</p> <p>Find ways to get comfortable.</p> 	<p>ASK</p> <p>Ask questions to be prepared.</p> 	<p>RELAX</p> <p>Keep yourself calm.</p> 	<p>DISTRACT</p> <p>Shift your attention to something else.</p> 
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The **CARD system (Comfort, Ask, Relax, Distract)** provides groups of strategies that can be used to make your vaccination experience a more positive one. Learn how you can play your cards and use the different strategies to reduce the pain, stress and worries associated with vaccinations. To learn more about CARD, go to CardSystem.ca.

Choose what **CARDs** you want to play. There's no wrong move. Look on the back for ideas.



Roundtable Q&A Speakers: Drs. Samina Ali, Elise Kammerer, & Anna Taddio

Our morning presenters joined together for a question and answer session about pain management, needle fear, and best practices for clinic set-up from our audience of immunizers from across Canada.

[Detailed responses can be found here](#)

Understanding the Risks and Communicating Uncertainty: an up-to-date review of the latest science and knowledge gaps

Next up was Fatima Tokhmafshan, geneticist, bioethicist and medical student. She currently serves as the Director of Community Outreach and Patient Engagement for the CIHR-funded [Coronavirus Variants Rapid Response Network](#), helping to make the science of variants accessible to the public, healthcare providers, and policy makers. She shared the best current research available regarding vaccine safety and efficacy in the wake of Omicron.

"Vaccine-generated immunity is natural and diverse compared to infection-generated immunity, the COVID-19 mRNA vaccines are safe and effective, and they are the best way to reduce likelihood of new variants." - Fatima Tokhmafshan

The likelihood of myocarditis after infection is roughly **30X higher** than after vaccination. Fatima underscored the importance of plain language analogies: "The chances of head injury without a helmet are ~ 149/100,000, the chance of head injury with a helmet is ~0.3-5/100,000". Vaccines also reduce the chance of Multisystem Inflammatory Syndrome in Children (MIS-C) by **91%**. While the current vaccines don't stop infection, they affect transmission by reducing disease symptoms and emission loads from vaccinated individuals by impeding the virus's ability to copy itself. Omicron's mutations have changed the biology of the virus which now can enter the body and infect more types of cells. For a deep dive into the research, you can view the references from Fatima's presentation here:

[Understanding the Risks and Communicating Uncertainty – References](#)

The use of Motivational Interviewing when discussing with vaccine hesitant parents: Lessons from Quebec's PromoVac Project

Dr. Arnaud Gagneur, a pediatrician with a PhD in Virology, currently full professor at the Faculty of Medicine and Health Sciences of the University of Sherbrooke, spoke next. Dr. Gagneur has developed the PromoVac strategy, which promotes vaccination using motivational interviewing (MI) techniques with parents before they leave maternity hospitals with their newborns. This approach was validated through a pilot study in the Eastern Townships and in randomized controlled trials (RCTs) conducted in Quebec and Canada.

Dr. Gagneur highlighted some of the many drivers of hesitancy, including perceived risks and benefits, distrust in health authorities, insufficient knowledge, or subjective norms. He noted that the concept of hesitancy exists on a scale along which individuals must be moved gradually. Healthcare professionals can inadvertently increase hesitancy when they simply provide more information having assumed it is simply the result of an information gap. This provision of information is often perceived as a directive, which can then place themselves in conflict with the child's parent.

Instead, Dr. Gagneur uses the PromoVac strategy, incorporating early intervention MI techniques, which adapt the intervention according to the parents' needs and ability to change, addressing only the relevant drivers of hesitancy and prioritizing building trust. When used, this approach has resulted in a 15% increase in parental vaccination intention compared. It is anticipated that this approach, if implemented widely, will reach 20% of the population in 10 years. To see the PromoVac approach in action, you can read about a [motivational interviewer with a hesitant family](#).



Building Confidence Through Conversation: Useful tools to address hesitancy when discussing the vaccine

Dr. Cora Constantinescu is a vaccine hesitancy communication expert from Alberta who explores what motivates uptake of the pediatric COVID-19 vaccine and how best to support patients and parents to protect their children.

Understanding how to counsel vaccine hesitant families is crucial to improving the rates of vaccination in Canada.

Vaccine hesitant parents, in general:

- are more concerned about vaccine safety
- feel their children are not at high risk of COVID-19 complications
- may feel their kids have already had COVID-19 and have natural immunity
- don't trust governments and health agencies
- have had a negative interaction with healthcare providers in the past
- have had a negative experience with vaccines in the past
- may not have had vaccine themselves



Confidence

**Vaccine related:
Efficacy, safety
Trust:
pharmaceuticals,
government, HCW**



Complacency

**Perceived low
risk of disease
Perceived low
risk of severity,
Exceptionalism**



Convenience

**Availability,
accessibility, and
appeal of
vaccine services**

Dr. Constantinescu reaffirmed the message again that healthcare providers are the most trusted source when a parent makes a vaccination decision. She encouraged public level messaging to have a sense of urgency to combat complacency, highlight successes like the 8.3 million children vaccinated in the United States, and use presumptive statements about vaccination as a norm and not an option. For 1-on-1 messaging with parents build trust in a non-judgmental space and explore past history with regards to cultural trauma, negative or positive interaction with healthcare, or perceived personal contraindications to immunization. Healthcare Professionals should focus their messaging on the personal health benefits of vaccine, children's mental health and socialization, how you or others in your circle have vaccinated your children and have trust in vaccines. It is important to remember to connect before you communicate; be curious; validate their emotions; and keep it personal.

Roundtable Q&A Speakers: Fatima Tokhmafshan, Dr. Arnaud Gagneur, Dr. Cora Constantinescu

Our afternoon presenters joined together for a Q & A answering questions about the current science behind vaccines and COVID-19, and about vaccine communication tools and strategies asked by vaccine communicators from across Canada.

[Detailed responses can be found here](#)

Live Poster Presentations

Shawn Hillhouse, Executive Director for Ambulatory & Inpatient Care at Stollery Children's Hospital, led the live poster tour presentation of our five amazing finalists:

Sonia Hsiung, Project Lead, Alliance for Healthier Communities: Equity, Community and Trust: Building vaccine confidence with marginalized populations [Link to Poster](#)

Dr. Julia Orkin, Physician, SickKids: Building Vaccine Confidence for Children and Youth: An Evaluation of a Nurse-Led Provincial Vaccine Consult Service [Link to Poster](#)

Dr. Katherine Kelly, Post Doctoral Fellow, U PEI: Development and implementation of the Prince Edward Island Vaccine Education Program: Description of a community-based intervention to reduce vaccine hesitancy [Link to Poster](#)

Sarah Loemba, Knowledge Broker, CHU Sainte-Justine: "Tout doux": Providing French-speaking Canadians families with adequate tools and resources on vaccination for their children in the context of a pandemic. [Link to Poster](#)

Kathy Reid, Project Coordinator, University of Alberta: Reducing childhood needle poke distress and pain: development and evaluation of novel KT tools for parents [Link to Poster](#)

Closing Remarks

Emily Gruenwoldt thanked all the attendees and speakers. She shared that recent polling done by Children's Healthcare Canada and Abacus Data found 83% of parents are still looking for more information 2/3 find themselves overwhelmed about where to turn. The good news is that children's hospitals, healthcare providers serving children are their most trusted sources of information when making these decisions. We need to take every opportunity to communicate with parents and hopefully with the information gained at these sessions you can be that trusted source.

[Click to view session recordings](#)

"On behalf of 8 million Canadian kids, I want to say thank you" – Emily Gruenwoldt

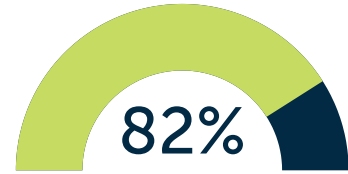
By The Numbers



attendees registered for the event.



unique organizations.



identified as either vaccine communicators, vaccinators, or both.

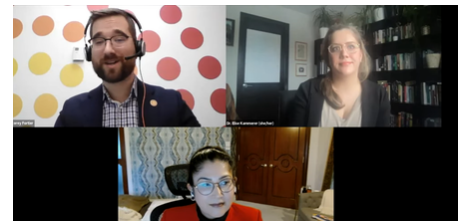
93% of Vaccinators and **96%** of Vaccine Communicators felt the information was **extremely** relevant.



Pre-event knowledge related to vaccine delivery and vaccine confidence promotion: **3.77 out of 5**. Post-event knowledge: **4.48 out of 5**.

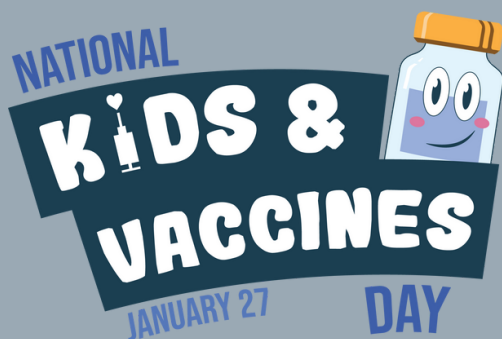
92% of attendees reported intention to incorporate the new knowledge into their practices.

Amazing conference. Credible and incredible presenters! Addressed so many relevant issues.
- Pop-Up Attendee



The Vaccination Conversations event was a part of National Kids and Vaccines Day!

This day brought together industry, influencers and experts from across disciplines to help move the needle (pun intended) and promote vaccine confidence to protect our largest unvaccinated cohort of Canadians.



Tweet impressions: 312K

Profile visits: 21.2K

Mentions: 2,167

Hashtag (#KidsVaccinesDay):

- 5,379 posts
- by 2,800 authors
- with 37.19M followers