

Immunization and Children with Special Health Care Needs

with Dr. Manish Sadarangani

Monday, August 29
12:00-1:00pm



Partnership of Family Support Institute (FSI) and BCCH Complex Care program



With funding from Sick Kids Community Conference Grant

Summary of:

Immunization and Children with Special Care Needs (Monday August 29, 2022 12pm PST).

Speaker: Dr. Manish Sadarangani, Director of Vaccine Evaluation Centre and BC Children's Hospital Family Immunization Clinic

Question and Answer Facilitator: Dr. Esther Lee, Pediatrician, BC Children's Hospital Complex Care Program

COVID-19 Facts and Figures

- The count of total cases of COVID-19 in Canada was 4,158,491 as of August 20, 2022
- The count of total deaths of COVID-19 in Canada was 43,797 as of August 20, 2022
- For COVID-19 in BC, the peak of hospitalizations was in January-March 2022, whereas the peak of COVID-19 deaths in BC was in December-March 2021. Vaccination programs after 2021 have helped to lessen the high peaks of COVID-19 deaths.
- Children
 - There were 32 cases of Multisystem Inflammatory Syndrome in children who had COVID-19 a few weeks after their infection. However, there were no new cases since May 20, 2022

- Most children in BC have likely had COVID-19 infection. Antibody studies indicated that 30-70% of children have been infected with COVID-19
- Most recent research study looking at risk factors for severe COVID-19 in hospitalized children in Canada from March 2020 to May 2021 found 544 hospital admissions. 61% were admitted because of COVID-19, and 43% had at least one other chronic medical condition.
- Overall, severe outcomes are relatively rare; however, children with some medical conditions have higher risk of severe COVID-19. For example, the same study found that children with obesity, **chronic neurologic conditions, chronic lung disease, and pre-existing technology dependence requirements** (e.g. at least one of: presence of tracheostomy, home oxygen, parenteral nutrition, dialysis) were more likely to have severe disease.

COVID-19 Vaccinations

- At this time, the two COVID-19 vaccines available for children are Moderna Spikevax and Pfizer Comirnaty (both mRNA vaccines)

COVID-19 vaccines available for children in Canada

Age	Moderna Spikevax	Pfizer Comirnaty
<6 months	Not available	Not available
	Protected indirectly via immunization in mothers, including during pregnancy	
6 months to 4 years	25mcg, 2 doses	Not available
5 years		10mcg, 2 doses
6 to 11 years	50mcg, 2 doses	
12 to 17 years	100mcg, 2 doses	30 mcg, 2 doses
	Usual recommendation is 8 weeks between doses	
Severe immune compromise	3 doses instead of 2 – all ages, both vaccines, 4-8 weeks between doses	
Boosters	Recommended for all high-risk children, 6 months after initial doses	



- Current data shows that vaccines provide strong protection against COVID-19, specifically for symptomatic infection and severe disease
- Common side effects of the vaccine (>~50%) include injection site pain, along with fatigue and headache for 6-11 year old, and irritability/crying for 6 months-5 years old
- Even if children have already been affected, vaccinations still safely add additional protection
- Booster (3rd dose for most children) vaccine is available for children in BC now. (6 months after the 2nd dose). (Sep 9, 22 - There was a delay in notification for the booster. Government had a computer glitch and it is now being fixed)

- New variant vaccines are coming. Vaccination is the safest way to protect those with underlying medical conditions and should be a high priority
- Don't forget the flu vaccine (when available) and other routine (and additional) vaccines, for example Pneumococcal 23 for those who qualify.

Support for children during immunization

- For infants and young children: preparing your child before the visit depending on their needs: consider numbing cream and patches, comfort during appointment, distractions during immunization, breast-feeding or sugar water
- For school-aged children and teens: prepare your child before the visit, deep breathing, distraction, consider numbing cream and patches, recognize the emotional effort of going to an appointment
- Be aware of the support services. For example, there is a [family immunization clinic](#) at BCCH that delivers all publicly funded vaccines

Question and Answer Main Points

- It is important for children who are vulnerable to be immunized and for those closest to them to also be immunized, especially as most transmission occurs in the household setting (even more so than public environments such as schools)
- If there has been a COVID infection, children should wait 8 weeks before getting the vaccine to optimize the immune response (although this is not strict. It is still safe to get it sooner than 8 weeks)
- There is currently no evidence showing that children with specific conditions (e.g., autism or epilepsy) having increased risk of adverse effects to the vaccine.
- For children with special needs, if accommodations are needed, it is recommended to contact the clinic beforehand the immunization appointment to collaboratively prepare for the visit together

Resources:

- COVID-19 Vaccine Booster doses for children 5-11 years old
 - <https://www2.gov.bc.ca/gov/content/covid-19/vaccine/booster>
- Support for children during immunization
 - <https://immunizebc.ca/reducing-pain-stress-anxiety>
- Family Immunization Clinic at BCCH
 - <http://www.bcchildrens.ca/our-services/clinics/family-immunization>
- Vaccination Evaluation Center at BCCH
 - <https://www.bcchr.ca/vec>

Summary by Sanya Grover (UBC Medical School Year 2) and Esther Lee (BCCH Complex Care)