

FAQ FOR HEALTH CARE PROVIDERS: COVID-19 VACCINES FOR CHILDREN UNDER 5

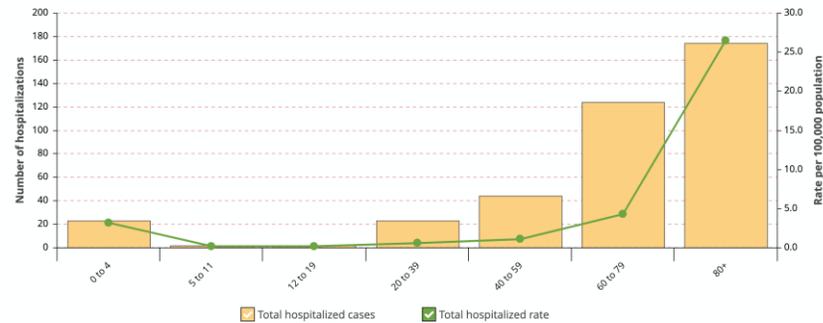
COMMON QUESTIONS AND EVIDENCE-BASED ANSWERS

York Region parents and caregivers have shared their questions about the vaccine for children under the age of 5 through a short survey. The following is a compilation of top questions and evidence-based responses to support your discussions.

QUESTION	KEY POINT	SUPPORT	SOURCE
Are children under 5 years old at risk from COVID-19 infection?	Yes, children under 5 years old are at risk from COVID-19 infection. Although not common, children aged 0-4 years old are at higher risk of hospitalization due to COVID-19 infection compared to school aged-children. Most COVID-19 related hospitalizations in this age group have occurred because of the Omicron variants.	<p>Although increasing age is the strongest risk factor for severe COVID-19 infection, children of all ages can develop serious illness requiring ICU admission and some children have died. COVID-19 can also lead to rare but severe complications such as multisystem inflammatory syndrome (MIS-C) and post-COVID condition complications (long COVID).</p> <p>We don't have clear data on who is at risk of requiring hospitalization, developing MIS-C or other post-COVID conditions, but we do know that severe illness and complications of COVID-19 have occurred in both healthy children and in those with underlying health conditions. As with other age groups, children under 5 years old with underlying medical conditions are at a higher risk of severe COVID-19.</p> <p>It is challenging to predict how the risk associated with future variants will evolve. In many respiratory infections (i.e., RSV, pertussis, influenza, tuberculosis) severe outcomes are more common in infants and young children compared to adults. Although we do not see this with our current COVID-19 variants to the same degree, we are unable to anticipate how future variants will evolve.</p>	Public Health Ontario: Pediatric Post-acute COVID-19 Syndrome (PACS) and Multisystem Inflammatory Syndrome in Children (MIS-C) –What We Know So Far



Counts and rates of recent hospitalizations among COVID-19 cases by age group in Ontario - Last updated July 2, 2022



[Public Health Ontario: Ontario COVID-19 Data Tool](#)

Why vaccinate young children now?

COVID-19 variants are expected to continue to cause illness worldwide in the months to come. The Omicron virus subvariants are very contagious and can evade immunity. This leads to a significant burden of illness, even affecting those who have previously had a COVID-19 infection.

In York Region, we are currently monitoring rising levels of omicron subvariants BA.4 and BA.5 as Ontario enters a seventh wave. Vaccinating young children now will allow them to receive their second dose (and complete the vaccine series) before the start of the school year.

[University of Waterloo: What are the reasons to vaccinate my young child against COVID-19](#)

		<p style="text-align: center;">Province-Wide COVID-19 Wastewater Signal</p> <p style="text-align: center;">COVID-19 Science Table Dashboard</p> <p>With the return to indoor environments this fall, the incidence of COVID-19 illness may increase again, although there is uncertainty around timing and impact of this projected eighth wave. Transmission of seasonal viruses including influenza are also expected to increase in the fall, leading to the potential for co-infections and possibly increased severity of respiratory disease in children.</p>	
<p>Which vaccines are approved for children aged 6 months – under 5 years?</p>	<p>Health Canada has approved Moderna’s two dose vaccine for children aged 6 months to under 5 years. The two doses are given a minimum of 1 month apart. For children with certain kinds of immunocompromise, there is a third dose to</p>	<p>Moderna’s dose for children under 5 years old is 25-micrograms, compared to 50-microgram doses for ages 6 to 12, and 100-microgram doses in ages 12 and up.</p> <p>Pfizer has also applied to Health Canada for approval of their three-dose vaccine for children aged 6 months to under 5 years. At this time, we don’t have information on when this vaccine will be an option for Canadian children.</p>	<p>WHO: Vaccine efficacy, effectiveness and protection</p>

	be given 1 month after the second dose.		
How effective is this vaccine in young children?	<p>COVID-19 vaccines are relatively effective at preventing symptomatic infection and we have good reason to believe they are likely to be even more effective in preventing severe illness and hospitalizations.</p>	<p>In Moderna’s trials for children 6 months to 5 years old, most of the illness in vaccinated children was mild and there was no severe COVID-19 disease. The Moderna vaccine for young children builds a level of antibody protection against symptomatic disease comparable to the adult immune response after vaccination.</p> <p>The Moderna vaccine is 30-50% effective against preventing symptomatic infection in those 6 months to 5 years when Omicron is the dominant variant. Specifically, it is 51% effective in preventing milder illness in children 6 months to 2 years old and 37.5% effective in preventing milder illness in children 2 to 6 years old. We expect the level of protection to be even higher against severe disease and hospitalization.</p> <p>Also, the estimates of efficacy against symptomatic disease are similar when you compare Moderna 25mcg among children 6 months to 5 years with Pfizer-BioNTech Comirnaty (10 mcg) vaccine among children 5 to 11 years of age during the Omicron wave.</p>	
How was this vaccine studied in young children?	<p>The Moderna vaccine for children 6 months to 5 years old was studied during the Omicron wave. Approximately 4,000 children from the United States and Canada participated in testing this vaccine.</p>	<p>Health Canada conducts rigorous approvals for vaccines prior to use and after reviewing the study data has determined that the benefits of this vaccine outweigh the known and potential risks.</p> <p>The FDA approved vaccines for use in children under 5 years old in the United States in June 2022 after concluding a similar rigorous approval process.</p> <p>COVID-19 vaccines undergo the same comprehensive evaluation as other vaccines including routine childhood vaccines. The research process is faster due to significantly increased funding as well as earlier research on mRNA vaccines which provided a foundation to build on.</p>	<p>FDA approval</p> <p>Moderna study data</p> <p>Health Canada: Infographic on Canadian vaccine approval process</p> <p>Centre for Effective Practice: Answering</p>

			questions about COVID-19 vaccines - a guide for healthcare providers
What are the expected <u>short-term</u> side effects of this vaccine?	The side effects of the COVID-19 vaccine are similar to common side effects from other childhood vaccines.	<p>The most common side effects of the Moderna vaccine for children aged 6 months to under 5 years old are:</p> <ul style="list-style-type: none"> • Irritability/crying • Pain at the injection site • Tiredness/fatigue • Low appetite • Fever • Headache and muscle pain <p>The clinical trials for this age group did not report any rare side effects of myocarditis or pericarditis. The risk of these rare cardiac side effects is highest in young adults and adolescents.</p>	University of Waterloo: Myocarditis and Pericarditis FAQ Public Health Ontario infographic on safety of COVID-19 vaccine in 5-11 year olds. Moderna health care provider Information sheet
What do we know about <u>long term</u> side-effects of this vaccine?	Doctors and scientists are confident in the long-term safety of COVID-19 vaccines due decades of studying mRNA vaccines and our rigorous vaccine safety system.	<p>Canada requires 8 weeks of safety data before approving a vaccine because most side-effects occur within the first 6 weeks of receiving a vaccine. This vaccine would not have been approved if there were safety concerns.</p> <p>mRNA vaccines have been studied for decades (Phase 1 and 2 trials in humans for Zika, rabies, cytomegalovirus, flu) and we have not seen any long-term side effects of this technology.</p> <p>Canada's vaccine safety monitoring system is robust and COVID-19 vaccines are continuously monitored as people get vaccinated to ensure that any adverse events are found. We now have over 1 year of data on millions of individuals vaccinated with COVID-19 vaccines in Canada</p>	Ontario vaccination statistics Canadian vaccination statistics Our World in Data

		<p>which show no long-term adverse effects. Over 12 billion doses of COVID-19 vaccine have been given worldwide.</p> <p>From this long-term data, there is emerging evidence to show that vaccination reduces the risk of having persistent symptoms and developing long COVID.</p>	
<p>Is there any benefit in getting vaccinated after having COVID-19?</p>	<p>Yes, re-infection can occur with novel variants of COVID-19 and vaccination may prevent severe disease. There is emerging evidence that hybrid immunity (vaccination following infection) offers greater protection against future COVID-19 infection.</p>	<p>Recent data shows that close to 50% of children in Canada less than 5 years old have already been infected with COVID-19.</p> <p>As immunity from infection will decrease over time, vaccination can decrease the risk of severe disease from re-infection. However, it is uncertain if this effect will continue to be seen with new variants and if this finding is applicable to the youngest group.</p> <p>NACI recommends children 6 months - 5 years old wait 8 weeks after COVID-19 infection to receive the first dose. This interval will improve immune response and build stronger protection.</p>	<p>University of Waterloo: Timing of vaccines for young children FAQ</p> <p>Government of Canada: COVID-19 vaccination after infection</p>

Contact York Region Public Health

If you have questions about COVID-19 or COVID-19 vaccines, call the York Region Public Health phone line for health care professionals at **1-877-464-9675 ext. 77280** (8:30 a.m. to 4:30 p.m., Monday to Friday) or visit york.ca/healthprofessionals

Please encourage your patients to visit york.ca/COVID19Vaccine regularly for updated information.