# COVID-19 Vaccines for Children (ages five to 11)





### Can children get the COVID-19 vaccine? If so, which vaccine should they get?

- Yes. Health Canada has approved of a Pfizer-BioNTech Comirnaty COVID-19 vaccine, which was developed for children five to 11 years of age, and the Moderna Spikevax COVID-19 vaccine which was developed for children six to 11 years of age<sup>1,2,3</sup>.
- The Pfizer-BioNTech and Moderna Spikevax vaccines for children consist of smaller doses than the vaccines made for individuals 12 years of age and older<sup>1,2</sup>. Vaccine doses are based on age and maturity of the immune system<sup>4</sup>. In clinical trials, these lower doses provided very good protection against COVID-19 for children<sup>1,2,5,6</sup>.
- Although the Moderna Spikevax vaccine may be offered as an alternative to the Pfizer-BioNTech vaccine, it is recommended that children receive the Pfizer-BioNTech vaccine. The Pfizer-BioNTech vaccine is preferred for children 5 to 11 years old because more data is available from the real-world use of this vaccine and millions of children have safely received this vaccine in Canada and around the world<sup>5</sup>.

#### Is the COVID-19 vaccine safe for children?

In clinical trials, no safety issues were detected when the pediatric formulas of the Pfizer-BioNTech and Moderna Spikevax vaccines were tested on children<sup>5,6,8</sup>. The evidence continues to demonstrate that these vaccines are effective against severe outcomes in children and are very safe<sup>5</sup>. Serious side effects from vaccination also continue to be rare in children<sup>5,8</sup>, Data on the safety of COVID-19 vaccines will continue to be monitored as they are more widely used.

### How effective is the COVID-19 vaccine for children?

- Clinical trials showed that the Pfizer-BioNTech vaccine was 90.7% effective in protecting child participants from COVID-19 infection one week after receiving their second dose<sup>1</sup>
- The Moderna Spikevax clinical trials show that this vaccine was 94.1% effective in protecting children from COVID-19 infection two weeks after the second dose<sup>2</sup>.

#### How many doses do children need?

NACI recommends that children ages 5 to 11 years receive two doses of an mRNA vaccine with at least eight weeks between doses<sup>7</sup>.
 Children five years of age should receive two doses of the Pfizer-BioNTech vaccine<sup>1</sup>. Children six to 11 years of age should receive two doses of the Pfizer-BioNTech vaccine or the Moderna Spikevax vaccine, although the Pfizer-BioNTech vaccine is recommended<sup>1,2,7</sup>. Children who are moderately to severely immunocompromised should receive three doses, waiting four to eight weeks between each dose<sup>5,9</sup>.



### Why do children need the vaccine if they are less likely to get very sick from COVID-19?

Although children are less likely to experience severe outcomes from COVID-19, the number of children becoming severely ill is increasing due to rising cases in children<sup>6</sup>. Some children who contract COVID-19 may require hospitalization or experience long-term effects<sup>4</sup>. Children infected with COVID-19 may also be asymptomatic and capable of spreading the virus to other populations who may be at greater risk, such as immunocompromised individuals and seniors<sup>5</sup>. It is essential that children get fully vaccinated against COVID-19 to protect themselves and others in their community<sup>5,10</sup>.

### What are the side effects of COVID-19 vaccination for children?

 Children experience similar side effects from vaccination as adults, such as redness, soreness and swelling at the site of injection<sup>1,2,10</sup>. They may also experience chills, fatigue, joint pain, headache, fever, and muscle aches<sup>1,2,10</sup>. Side effects that do occur are typically mild and clear up within a few days<sup>1,2,5</sup>.

## If my child is turning five years old this year, do they need to wait until their birthday to get vaccinated?

 Yes. Children must be five years of age to receive the paediatric dose of a COVID-19 vaccine<sup>1,4</sup>. Clinical trials for vaccines made for children six months to four years of age are currently underway and results are expected in late winter of 2022<sup>4</sup>.

## If my child is turning 12 years old in 2022, should I wait for them to turn 12 and be eligible for the adult dose?

No. Children should get vaccinated as soon as possible and receive the appropriate vaccine for their current age, to increase their protection against COVID-19<sup>4</sup>. Children who are currently under the age of 12 should receive the paediatric dose for their first dose<sup>4</sup>. Children who turn 12 years of age between their first and second dose should receive the adult dose for their second dose<sup>4</sup>.

### Do children need a booster shot or a third dose?

 At this time, a third dose or booster shot is not recommended for children ages five to 11 years<sup>11</sup>. Children are considered fully vaccinated once they have received two doses of the pediatric vaccine<sup>1,2</sup>. However, children who are moderately to severely immunocompromised should receive three doses of a COVID-19 vaccine<sup>3,9</sup>.

#### What if I have more questions about COVID-19 vaccination for children?

Parents and caregivers who have questions about COVID-19 vaccines for children and youth can also visit <a href="www.sickkids.ca/vaccineconsult">www.sickkids.ca/vaccineconsult</a> or call toll-free at 1-888-304-6558 to book a phone appointment with a SickKids clinician<sup>12</sup>. This service is available in multiple languages with the support of an interpreter on the call. You can also speak to your family physician if you have any questions or concerns regarding COVID-19 vaccination for children.

#### References

- 1. Government of Canada. Pfizer-BioNTech Comirnaty COVID-19 vaccine. Published December 23, 2021. Accessed February 22, 2022. <a href="https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/drugs-vaccines-treatments/vaccines/pfizer-biontech.html">https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/drugs-vaccines-treatments/vaccines/pfizer-biontech.html</a>
- 2. Government of Canada. Moderna Spikevax COVID-19 vaccine. Published December 24, 2021. Accessed March 4, 2022. <a href="https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/drugs-vaccines-treatments/vaccines/moderna.html">https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/drugs-vaccines-treatments/vaccines/moderna.html</a>
- 3. National Advisory Committee on Immunization (NACI). Updated recommendations on the use of COVID-19 vaccines in children 5 to 11 years of age. Published January 25, 2022. Accessed February 17, 2022. <a href="https://www.canada.ca/content/dam/phac-aspc/documents/services/immunization/national-advisory-committee-on-immunization-naci/updated-recommendations-use-covid-19-vaccines-children-5-11-years-age.pdf">https://www.canada.ca/content/dam/phac-aspc/documents/services/immunization/national-advisory-committee-on-immunization-naci/updated-recommendations-use-covid-19-vaccines-children-5-11-years-age.pdf</a>
- 4. SickKids staff. COVID-19 vaccine information for children (ages five to 11). Published February 17, 2022. Accessed February 18, 2022. <a href="https://www.aboutkidshealth.ca/article?contentid=4001&language=English">https://www.aboutkidshealth.ca/article?contentid=4001&language=English</a>
- 5. Government of Canada. Vaccines for children: COVID-19. Published January 28, 2021. Accessed February 18, 2022. https://www.canada.ca/en/public-health/services/vaccination-children/covid-19.html
- 6. Walter EB, Talaat KR, Sabharwal C, et al. Evaluation of the BNT162b2 Covid-19 Vaccine in Children 5 to 11 Years of Age. *N Engl J Med.* 2022;386(1):35-46. doi:10.1056/NEJMoa2116298
- 7. Government of Canada. NACI statement: Recommendations on the use of Moderna Spikevax COVID-19 vaccine in children 6 to 11 years of age. Published March 17, 2022. Accessed April 20, 2022. <a href="https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/recommendations-use-moderna-spikevax-covid-19-vaccine-children-6-11-years-age.html">https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/recommendations-use-moderna-spikevax-covid-19-vaccine-children-6-11-years-age.html</a>
- 8. Government of Canada. COVID-19: Making vaccination decisions for children 5 to 11 years of age. Published March 17, 2022. Accessed April 20, 2022. <a href="https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/recommendations-use-moderna-spikevax-covid-19-vaccine-children-6-11-years-age.html">https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/recommendations-use-moderna-spikevax-covid-19-vaccine-children-6-11-years-age.html</a>
- 9. Public Health Agency of Canada. Summary of NACI Statement of January 25, 2022: Updated recommendations on the use of COVID-19 vaccines in children 5 to 11 years of age. Published January 25, 2022. Accessed February 17, 2022. <a href="https://www.canada.ca/content/dam/phac-aspc/documents/services/immunization/national-advisory-committee-on-immunization-naci/summary.pdf">https://www.canada.ca/content/dam/phac-aspc/documents/services/immunization/national-advisory-committee-on-immunization-naci/summary.pdf</a>
- City of Toronto. Pediatric Pfizer-BioNTech COVID-19 Vaccine- Children age 5 to 11. Published November 25, 2021. Accessed February 22, 2022. <a href="https://www.toronto.ca/wp-content/uploads/2021/11/96dc-COVID19-Fact-Sheet-Children-Nov-25-2021.pdf">https://www.toronto.ca/wp-content/uploads/2021/11/96dc-COVID19-Fact-Sheet-Children-Nov-25-2021.pdf</a>
- 11. Government of Canada. Quick reference guide on use of COVID-19 vaccines in children 5 to 11 years of age: Recommendations for use. Published January 14, 2022. Accessed February 22, 2022 <a href="https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/guidance-documents/quick-reference-guide-covid-19-vaccines-children/recommendations-for-use.html#a2">https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/guidance-documents/quick-reference-guide-covid-19-vaccines-children/recommendations-for-use.html#a2</a>
- 12. SickKids. COVID-19 Vaccine Consult Service. Accessed February 18, 2022. <a href="https://www.sickkids.ca/vaccineconsult">https://www.sickkids.ca/vaccineconsult</a>