

# COVID-19 vaccine information for children (ages five to 11)

Reviewed by SickKids Staff | Last updated: November 19th 2021

Learn about the status of the COVID-19 vaccine for children five to 11 years of age. Learn about the benefits of getting the vaccine for children. Also, find a discussion about the concerns and possible side effects of the vaccine for this age group.

## Key points

- Vaccines against COVID-19 have been shown to be safe and effective against the disease.
- As of November 19, 2021, the Pfizer vaccine has been approved for use in children aged five to 11 years of age.
- Children five to 11 years of age will get a smaller dose of the vaccine. They will still need to get two doses.
- Side effects in children five to 11 years of age are similar to those seen in adults and older children.

## What is the status of COVID-19 vaccines for children in Canada?

In November 2021, Health Canada approved the use of the Pfizer vaccine for children five to 11 years of age.

NOTE: For ages six months to four years, preliminary clinical trial results are expected around December 2021. The full results are expected to be submitted to Health Canada sometime in 2022, after which the full Health Canada review process will take place.



## What evidence is there that the vaccine is safe and effective for children?

Over 3,000 children aged five to 11 received the vaccine through the clinical trial and no serious side effects have been detected in the ongoing study after more than three months of follow-up. The vaccine was shown to be 91 per cent effective against symptomatic COVID-19 with mild side effects like those seen in adults and older children. These side effects include arm tenderness, fatigue, headache, muscle pain, joint pain, chills and fever, which can also be seen with other vaccines recommended for children. Rare side-effects that have been seen in older teens and young adults are expected to be extremely rare in children. Read about the [clinical trial results in the New England Journal of Medicine](#).

## Why should children get vaccinated if they do not get sick from COVID-19?

Although severe illness due to acute COVID-19 infection is less frequent in children compared to adults, children can still be hospitalized and even require admission to an intensive care unit (ICU) due to COVID-19. Some children can also develop other complications from COVID-19 beyond the infection itself, including a condition called multisystem inflammatory syndrome (MIS-C). While highly treatable and rare, approximately one in three children hospitalized with MIS-C will require ICU care. Further studies will be needed to assess how well the vaccines protect against such complications from COVID-19.

## Should I be concerned about how quickly these vaccines were approved?

Work on coronavirus vaccines has been ongoing for more than 10 years, due in part to the SARS-CoV-1 outbreak in 2003. It was important to develop the COVID-19 vaccine quickly because of how many people were dying and getting sick, and because of the disruptions to everyday life as a result of the pandemic. Even though the vaccines were developed quickly, all the usual steps for the approval of vaccines occurred, including clinical trials with the appropriate number of participants. Because of the large amount of resources that were made available to develop a COVID-19 vaccine and the large number of COVID-19 cases the clinical trials were able to happen quickly. This made it easier to tell quickly whether or not the vaccines worked to prevent cases of COVID-19. The vaccine was rapidly shown to be effective in protecting against COVID-19.

## Do children under 12 need one vaccination or two? Is a different vaccine dose used in younger children?

Children aged five to 11 receive a two-dose schedule of a smaller Pfizer vaccine dose than the one used in people 12 and older (10 µg instead of 30µg). The National Advisory Committee on Immunization recommends that the second dose should be given at least eight weeks after the first dose. Children who turn 12 before their second dose may receive an adult dose.

## My child is turning 12 years old in 2022. Now that a vaccine is approved for children under 12 years of age, should I wait to vaccinate my child when they are 12 years old and eligible for the adult dose?

The first COVID-19 vaccine that is available for your child will be the best vaccine to get, as it will provide protection against COVID-19 to your child as soon as possible. Before Health Canada approves any vaccine, they review the evidence and scientific data. To be approved the evidence must show that the vaccine:

- is safe, effective and of good quality
- demonstrates that the benefits outweigh the risks

This process applied to the paediatric dose (10µg) of the Pfizer-BioNTech COVID-19 vaccine for children aged five to 11 years old inclusively.

## What if my child's weight is above average in their age group?

Vaccine doses are based on age and the maturity of the immune system, not weight. The clinical trials showed the pediatric dose given to children aged five to 11 (a third of the dose given to people aged 12 and up), was effective and also resulted in fewer side effects. Therefore, children who are almost 12 or weigh more than average would not benefit from receiving the adult dose.

## Are COVID-19 cases among children on the rise?

According to the Public Health Agency of Canada's updated COVID-19 epidemiology and modelling, children under 12 are currently accounting for more cases of COVID-19 compared with their proportion of the Canadian population. In addition, COVID-19 outbreaks in schools

and childcare settings are currently uncommon, but predominantly involve children under 12 years of age.

## **Can vaccination improve the physical and mental health of children?**

[SickKids-led research](#) has shown a serious, sustained negative impact on the mental health of Ontario children, youth and their families due to the COVID-19 pandemic. Before the pandemic, a study showed that about 60 per cent of participants engaged in school sports and/or other extracurricular activities. During the pandemic, only 27 per cent participated in sports and 16 per cent in extracurriculars. These activities are known to boost physical and mental health. Vaccination will help return children to their regular activities and thus help improve the mental health and psychosocial well-being of children.

## **Should I be concerned about how the vaccine could affect puberty and fertility for children in the future?**

There is no evidence and no scientific reason to believe that the COVID-19 vaccine can affect puberty and fertility in children. Clinical trials of those who have been vaccinated in the general population have shown that the vaccine is very safe.

## **What are the vaccine's side-effects in children under 12?**

Clinical trial data show that the Pfizer vaccine is well tolerated in children aged 5 to 11 years old, with side-effects generally comparable to those observed in age groups 12 and above. The most common side-effect was a sore arm. The benefits of the COVID-19 vaccine for eligible children far outweigh any risks, which are rare and for the most part treatable.

## **What about reports of vaccine side-effects like myocarditis and pericarditis in younger people?**

Myocarditis (inflammation of the heart muscle) or pericarditis (inflammation of heart's outer lining) is overall rare and most commonly experienced by older adolescents and young adults. There were no reports of myocarditis or pericarditis in the clinical trial for children five to 11 years old to date. Once children aged five to 11 years start receiving the COVID-19 vaccine, there will be multiple surveillance mechanisms in place to ensure that they are not at increased risk of myocarditis and pericarditis, as well as other potential very rare side effects.

## I cannot decide if vaccinating my child is the right thing to do. Who can I talk to?

Contact the SickKids COVID-19 Vaccine Consult Service, a by-appointment phone service for Ontario residents that provides a safe, judgment-free space to have an open conversation about the COVID-19 vaccine with a paediatric registered nurse. Book an appointment online at [sickkids.ca/vaccineconsult](https://sickkids.ca/vaccineconsult) or by calling 1-888-304-6558.

For general information on COVID-19, please visit the [COVID-19 learning hub](#).

For more information on COVID-19 vaccines visit the [COVID-19 vaccines general information](#) page and the [COVID-19 vaccine information for youth \(ages 12+\)](#) page.

## Information on how to prepare and support your child with their COVID-19 vaccine

CARD System Learning Hub

<https://www.aboutkidshealth.ca/card>

Needle pokes: Reducing pain in children aged 18 months or over

<https://www.aboutkidshealth.ca/Article?contentid=990&language=English>

Needle pokes: Reducing pain with comfort positions and distraction

<https://www.aboutkidshealth.ca/Article?contentid=3629&language=English>

Needle pokes: Reducing pain with numbing cream

<https://www.aboutkidshealth.ca/Article?contentid=3627&language=English>

Pain relief: Comfort kit

<https://www.aboutkidshealth.ca/Article?contentid=1258&language=English>

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Please visit [AboutKidsHealth.ca](https://www.aboutkidshealth.ca) for more child health information.

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