# COVID-19 Vaccines for Primary School Kids

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## How does COVID-19 affect kids in primary school?

**All children are at risk of getting COVID-19, but the good news is their symptoms are generally mild.**

Many children experience a cough, fever, and a runny nose, and only require rest at home, recovering quickly.[1] A very small percentage of children experience a barking cough, prolonged fever, breathing difficulties and abdominal pain, and these children are advised to see their doctor.

**Children with underlying health conditions** are at higher risk of experiencing severe COVID-19 symptoms. Conditions include asthma, obesity, prematurity, and compromised immune systems.[2-5]

## How do COVID-19 vaccines work?

**In Australia, children receive mRNA COVID-19 vaccines.**

***An mRNA vaccine is a way to deliver a message to cells in the body.***


- For mRNA COVID-19 vaccines, the message delivered to cells is the instructions on how to make just one part of the COVID-19 virus – the "spike protein".
- Cells then start making this spike protein. Because the message in the mRNA vaccine tells the body to make only the spike protein, and not the entire COVID-19 virus, it can't make a person sick from COVID-19.
- The immune system recognises the generated spike proteins on the cells as being foreign to the body and starts training itself to fight off the virus. **If a vaccinated person is exposed to COVID-19, the immune system immediately recognises the COVID-19 spike protein and generates a strong and rapid immune response to try and limit the infection.**

## Why do children need a COVID-19 vaccine if they're not getting very sick?

**While severe disease and hospitalisation is uncommon in children, it can occur in some cases and vaccinating children helps to protect against this.[6] Vaccination also benefits the entire family, as well as the community around your child**, as it may help to slow the virus spreading to vulnerable people such as elderly grandparents and younger kids who aren't yet able to be vaccinated. It is important that we let children keep on doing what children do. We have seen the disruption that COVID-19 can have on young lives from a schooling perspective and also on the social and emotional aspects of their lives.[7,8]

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## How many doses do kids need? Will they be required to have booster shots?

The **Pfizer** vaccine is recommended for children aged **five to 11 years**. They should receive two doses, given eight weeks apart. The interval can be shortened in special circumstances to a minimum of 3 weeks, for higher risk groups (such as those with medical risk factors for severe illness) in the context of ongoing community transmission. For children aged five to 11 years, each dose is one third of the dose people aged 12 years and older receive. This dosage is based on age, not weight.[9]

Children aged **six to 11 years** can also receive the **Moderna** vaccine. It's recommended they receive two doses, given 8 weeks apart.[10] The interval can also be shortened in special circumstances to a minimum of 4 weeks. Each dose is one half of the dose that people aged 12 years and older receive. This dosage is based on age, not weight.

Children have incredibly robust immune systems that have a fantastic response to the vaccine and, at this stage, it is not recommended that children receive boosters. ***However, it is now recommended that severely immunocompromised children aged five or older should receive three initial COVID-19 vaccines (either Pfizer for children aged five years and older, or Moderna for children aged six years and older), with the third dose given 2 to 4 months after the second dose.***[10,11]

## Is vaccinating children safe?

The Pfizer vaccine has undergone rigorous testing in clinical trials and monitoring in the "real world" and has been shown to be **safe** for primary school-aged children.[12]

More primary school-aged children in America have now received a COVID-19 vaccine than the entire population of children this age in Australia, and this has shown us that it is **safe for children**.[13]

Research demonstrates that the **benefit of having a COVID-19 vaccine far outweighs the risks.** It provides vital protection against severe complications and hospitalisation from the virus and significant vaccine-associated side effects are very rare.[14]

Some parents have raised concerns about COVID-19 vaccines and fertility. Studies show that there's **no difference in fertility levels** in women or men before and after COVID-19 vaccination.[15-18]

Clinical trials of the Moderna vaccine also show that it's as safe in children as it is in adults. At this stage, there is limited "real-world" data available as the vaccine has not yet been used extensively overseas in primary school-aged children." [10]

## What side effects might my child have after vaccination?

***Many children only experience mild side effects after receiving the Pfizer vaccine such as pain and swelling in the arm, feeling tired, a mild fever, headache and sore muscles and joints.[9] Side-effects after the Moderna vaccine are also mild, but may be more common than those following Pfizer vaccination.[10] The most common side effects after Moderna vaccination include pain in the arm, swelling of lymph nodes, fever, headache and nausea.[10]***

There have been rare reports of more serious side effects such as heart inflammation (myocarditis and pericarditis) in children and adults after both the Pfizer and Moderna vaccine.[19,20]

Heart inflammation is more likely to occur from a COVID-19 infection rather than from the Pfizer vaccine.[21]

If your child complains of a sore chest, shortness of breath or a fast heartbeat within 5 days of their vaccine, please seek medical care.

## How effective is the COVID-19 vaccine in this age group?

Research has shown that the ***Pfizer vaccine*** given to this age group can prevent more than **90% of COVID-19 infections seven days after receiving the second dose.[14]**
The Pfizer vaccine is ***highly effective against preventing infection and severe complications that require hospitalisation.[14]***

***The clinical trial of the Moderna vaccine showed that it creates a similar immune response in children aged six to 11 years when compared to young adults.[10] Though there is limited "real world" data at this stage on how effective the Moderna vaccine is for children, it is likely that Moderna will be very effective at reducing the likelihood of severe COVID-19 in children, including against Omicron.[10]***

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## Where can my child get vaccinated?

In WA, children can be vaccinated at:

- GP clinics,
- state-run clinics,
- some pharmacies and
- Aboriginal Medical Services.

Visit **Roll Up WA** for more information and to make a booking.

## For more information on COVID-19 in kids visit tacklingcovid19.org.au

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This resource was developed by Dr Samantha Carlson and Professor Christopher Blyth. It was guided by findings in the 'Coronavax' project[22], as well as input from the Telethon Kids Institute National Consumer Advisory Group for COVID-19 Research. Information was also reviewed by Associate Professor Asha Bowen, Dr Tim Ford and Dr Daniel Yeoh.

This document is correct as of 24 February 2022. Please continue to check online for the most recent version/information.

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