

COVID-19 vaccination - Pfizer

Information for students and parents



What type of vaccine is the Comirnaty (Pfizer) COVID-19 vaccine?

The Comirnaty (Pfizer) vaccine is an mRNA vaccine. The Pfizer vaccine is registered for use in people aged **12 years and older** and is currently the preferred COVID-19 vaccine brand for use in people under 60 years of age.

Why should I get a COVID-19 vaccine?

COVID-19 is a disease caused by the virus SARS-CoV-2. It can cause severe lung and generalised disease. It has caused over 4 million deaths worldwide, with more than 192 million cases reported.

Although the elderly and people with underlying medical conditions are at the highest risk, even healthy young people, can get severe COVID-19. In some people, COVID-19 may cause long-term symptoms of fatigue and breathlessness. We are still learning about other long-term complications caused by COVID-19.

The virus that causes COVID-19 is easily spread by people with few or no symptoms. If you are infected you may not become unwell with COVID-19, but you may pass the virus on to your family and friends without knowing it and they may become very ill.

By getting vaccinated, you are protecting yourself and others from severe COVID-19. Once a large proportion of the population is vaccinated, this will decrease the spread of COVID-19 in our community.

What is Comirnaty (Pfizer) vaccine and how does it work?

Vaccine name: Comirnaty (Pfizer, generic name BNT162b2)

Comirnaty (Pfizer) vaccine is a COVID-19 mRNA vaccine. This means the vaccine contains the genetic code for an important part of the COVID-19 virus 'spike protein'. After getting the vaccine, your body reads the genetic code and makes copies of the spike protein. The immune system then detects these spike proteins and learns how to recognise and fight COVID-19 if you are exposed to the virus later. The genetic code is quickly broken down and cleared away by the body.

How effective is Comirnaty (Pfizer) vaccine? How long will the protection from the vaccine last?

In clinical trials COVID-19 vaccines have been shown to provide excellent protection from getting sick with COVID-19. In these trials, after two doses the Comirnaty (Pfizer) vaccine was about 95% effective. In an Israeli study, the Pfizer vaccine was 87% effective against COVID-19 requiring hospitalisations from 7 days after two doses.

The Comirnaty (Pfizer) vaccine was found to be around 91% effective against symptomatic COVID-19 up to 6 months after the second dose. More information on the duration of protection of COVID-19 vaccines will be available over the coming months.

Is the Comirnaty (Pfizer) vaccine effective against new variants of the virus?

Some recent variants of SARS-CoV-2 are more easily spread and have been associated with increased numbers of cases in some countries.

Current evidence from clinical trials indicates that the antibodies that your body produces after COVID-19 vaccination are likely to provide protection to a variety of mutations and minor changes in the virus.

A recent <u>study from the UK</u> found the Comirnaty (Pfizer) vaccine is 96% effective against hospitalisation for the Delta variant after the second dose of vaccine.

Can children and adolescents have the COVID-19 vaccine?

The Pfizer vaccine is registered for use in people aged **12 years and older** and is currently the preferred COVID-19 vaccine brand for use in people under 60 years of age.

On 23 July 2021, the Therapeutics Goods Administration (TGA) provisionally approved the use of the Pfizer vaccine in people aged 12 years and older. Previously, the Pfizer vaccine was provisionally approved for use in people aged 16 years and older.

In the US, as of 25 July 2021, 27.7% of the children aged 12–15 years were fully vaccinated and 37% had received at least one dose .

On 31 March 2021, Pfizer announced the <u>results of a study</u> in adolescents aged 12–15 years vaccinated with the Pfizer vaccine. The study showed that the Pfizer vaccine was extremely good at developing high levels of protective antibody and was considered safe in this age group.

What side-effects might occur after vaccination with the Comirnaty (Pfizer) vaccine?

Common side effects after **Comirnaty** include:

- · pain or swelling at the injection site
- tiredness
- headache
- muscle pain
- fever and chills
- joint pain.

Less common side effects after Comirnaty include:

- · redness at the injection site
- nausea
- enlarged lymph nodes
- feeling unwell
- pain in limb
- insomnia
- itching at the injection site.

Rare side effects that have been reported after Comirnaty are:

- severe allergic reaction (anaphylaxis).
- inflammation of the heart muscle, called myocarditis and pericarditis

A patient factsheet can be downloaded and is available:

https://www.health.gov.au/resources/publications/covid-19-vaccination-after-your-pfizer-comirnaty-vaccine

What is myocarditis and pericarditis? Does the Comirnaty (Pfizer) vaccine cause these conditions?

Myocarditis is inflammation of the heart muscle. Pericarditis is inflammation of the outer lining of the heart. Myopericarditis is where these two conditions occur together. There are many conditions that can cause myocarditis and pericarditis, and these include autoimmune conditions, viruses and bacteria, certain cancers and certain medications. People who get sick with COVID-19 can develop myocarditis and pericarditis.

Myocarditis and pericarditis have been seen in people who have had mRNA COVID-19 vaccines (including the Pfizer vaccine) overseas. Cases have been reported more commonly in **males aged <30 years**, mostly after the second dose of vaccine and typically within the first few days of COVID-19 vaccination. The exact rate is not yet known but it is rare. Most cases have been mild and respond to simple measures such as pain relief. The WHO's <u>Global Advisory Committee on Vaccine Safety</u> continue to recommend that the benefits of mRNA COVID-19 vaccine strongly outweigh the risk of myocarditis or pericarditis.

Cases of myocarditis and pericarditis after vaccination have also been reported in Australia. The TGA is monitoring these cases. Both these conditions occur relatively commonly in the general population, and not all cases that are reported after vaccination will be caused by the vaccine (that is, some may occur coincidentally).

ATAGI and the Cardiac Society of Australia and New Zealand (CSANZ) have jointly provided guidance on myocarditis and pericarditis after mRNA vaccines. The guidance has been published on the Department of Health website.

What are the symptoms of myocarditis or pericarditis and when should I seek help?

Symptoms of pericarditis and myocarditis typically occur within 1 to 5 days (and up to 10 days) of vaccination and include:

- Chest pain (often sharp in nature but can also be stabling or aching)
- Feelings of having a fast-beating, fluttering, or pounding heart
- Fainting
- Shortness of breath

If your child develops any of these symptoms, please seek medical attention and let your health care provider know about your recent vaccination history.

Reporting side effects

You can report suspected side effects to your vaccination provider or other healthcare professional. They will then make a formal report on your behalf.

If you would prefer to report it yourself, please visit the <u>reporting suspected side effects associated with a COVID-19 vaccine webpage on the TGA website and follow the directions on the page.</u>

For more information

- https://www.health.gov.au/resources/publications/covid-19-vaccination-atagi-clinical-guidance-on-covid-19-vaccine-in-australia-in-2021
- https://www.ncirs.org.au/health-professionals/ncirs-fact-sheets-faqs
- https://www.ncirs.org.au/public/covid-19-vaccines
- https://www.health.gov.au/resources/publications/covid-19-vaccination-information-on-covid-19-pfizer-comirnaty-vaccine
- https://www.health.gov.au/initiatives-and-programs/covid-19-vaccines/getting-vaccinated-for-covid-19/what-happens-after-i-am-vaccinated-for-covid-19
- https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/myocarditis.html