

## Vaccines and COVID-19 (updated 4<sup>th</sup> May 2021)

The Australian Government is working hard to ensure we all have access to safe, effective, and free COVID-19 vaccines. Here is a list of the common types of questions you may have about COVID-19 vaccines.

### Is there a vaccine for COVID-19?

There are currently two COVID-19 vaccines approved for use in Australia. These vaccines are called:

- Pfizer, also known as BioNTech (COMIRNATY)
- AstraZeneca, also known as University of Oxford AstraZeneca.

Australia has 4 options for the supply of COVID-19 vaccines. These options include:

- Pfizer also known as BioNTech (COMIRNATY)
- AstraZeneca, also known as University of Oxford AstraZeneca
- Novavax
- COVAX Facility

All vaccines must pass many stages of research trials to prove they are safe and effective before they can be used.

For more information, see: [COVID-19 vaccination – Easy Read resources](#) (A series of fact sheets about COVID-19 vaccines in Easy Read format).

### Why is there more than one COVID-19 vaccine?

Even though multiple COVID-19 vaccines are being developed to guard against the same virus, they are not all the same.

Different research groups have different methods for researching and developing vaccines.

Some groups are focusing on the whole virus, while others are focusing on the proteins that are produced by the virus.

There are several methods – known as technologies or platforms – used to develop vaccines against viruses.

In the race to develop a COVID-19 vaccine, the commonly used methods include:

- live weakened vaccines, like the vaccine used for measles-mumps-rubella (MMR)
- Disabled vaccines, like the vaccine used for hepatitis A
- Protein subunit vaccines, like the vaccine used for hepatitis B

- Virus-like-particles, like the vaccine against human papillomavirus (HPV)
- Viral vector and nucleic acid (DNA or RNA, including messenger or mRNA).

## How long does it take to develop and test a COVID-19 vaccine?

Ensuring COVID-19 vaccines are safe and effective takes time.

Historically, developing some vaccines has taken up to 10 years. This is because vaccines must pass many tests before they can be widely used.

Testing first begins with research in a lab. Animal studies are then performed. Finally, human clinical trials are carried out.

Clinical trials must demonstrate that the benefits of a vaccine greatly outweigh any risks. This often involves testing the vaccine in thousands of volunteers. Trials are done in phases.

In the past, different testing phases of a vaccine were often completed one after another. For COVID-19 vaccines, some of these phases have been combined.

Having these overlapping time frames has helped develop COVID-19 vaccines quickly. This also makes the vaccine available earlier to help save lives.

Safe and effective COVID-19 vaccines have been able to be developed faster than any other vaccine because of several reasons:

- a level of funding not seen before
- the availability of new technology; and
- researchers and developers around the world working together.

## Are COVID-19 vaccines safe and how are they approved for use in Australia?

A COVID-19 vaccine must be independently checked and approved by the Australian Therapeutic Goods Administration (TGA). This check must happen before the vaccine can be used in Australia.

The TGA checks the vaccine for safety, quality and how well it works. The checking gets done in multiple stages by technical experts.

The TGA checks:

- how research trials were designed
- whether research trials were done for a sufficient amount of time
- whether there were enough people in the trial to ensure the vaccine works

The TGA also requires vaccine producers meet high manufacturing quality standards.

The TGA will check the quality of every batch of a COVID-19 vaccine before it can be supplied in Australia.

## Will a vaccine offer immunity to COVID-19?

Vaccines help by building up the body's natural immune response to a condition or illness.

Vaccines use disabled or weak infectious agents. These may include viruses or bacteria to trick the immune system into producing antibodies.

Viral vaccines help your body fight off viruses. After receiving a vaccine, the body's immune system recognises and remembers the virus.

If a person is exposed to the virus, their immune system has a better chance of fighting the infection. It can do this because it has already produced antibodies to the virus.

Viral vaccines can work in two ways:

1. In some instances, they can prevent infection.
2. At other times, people can still be infected with the virus. But the vaccine reduces the severity of symptoms and stops people from getting very sick.

Not all vaccines provide long-lasting immunity. Protection against a virus can decrease over time. This is why booster doses are needed in some circumstances, such as with the tetanus vaccine.

## Can I choose which COVID-19 vaccine I will receive?

The type of COVID-19 vaccine offered will depend on:

- which priority group the person is part of
- the person's work or residential location,
- the quantity of vaccine available,
- and the TGA recommended guidelines for each vaccine.

There are currently two COVID-19 vaccines approved for use in Australia. These vaccines are called:

- Pfizer, also known as BioNTech (COMIRNATY)
- AstraZeneca, also known as University of Oxford AstraZeneca.

Currently, the Pfizer vaccine is preferred for adults under the age of 50. The AstraZeneca vaccine will be made available to all people aged 50 or over.

The AstraZeneca COVID-19 vaccine can still be given to adults under 50 years of age if Pfizer is not available, if the benefit of vaccination is likely to outweigh risk, and where informed consent has been obtained.

### How many doses of COVID-19 vaccine will be required?

The number and timing of doses will vary between different COVID-19 vaccines. Most will require two doses to provide best protection.

At present, it is recommended that people have two doses of the same COVID-19 vaccine to be adequately immunised.

### How long does a COVID-19 vaccine last?

It is not yet known how long the protection afforded by a COVID-19 vaccine will last. This is being evaluated in ongoing research.

### Will I need boosters?

Most COVID-19 vaccines require two initial doses. This includes the AstraZeneca and Pfizer vaccine. Whether you will need additional booster doses, such as an annual booster, for COVID-19 vaccines is still being determined by ongoing clinical trials.

### Will the COVID-19 vaccine be mandatory?

The COVID-19 vaccine will be voluntary, available to everyone, and free. The Government aims to have as many Australians as possible choose to be vaccinated for COVID-19.

If people choose not to have a COVID-19 vaccine, this will **not** affect:

- their family's eligibility for Family Tax Benefit Part A
- childcare fee assistance, which only includes National Immunisation Program vaccines for those aged under 20 years.

In future, vaccination against COVID-19 might become a requirement for:

- travel to certain destinations
- for people working in certain high-risk workplaces.

If this becomes the case, there will be exemptions in place for people who are unable to be vaccinated.

## How will COVID-19 vaccines be distributed?

Early vaccines are for initial priority groups. They will be sent to 30 to 50 hospital locations. The locations will be in urban and rural areas.

Vaccination teams will go out to aged care and disability care facilities. These teams will be managed by the Australian Government.

As the roll out continues, more locations will become available. These include:

- GP respiratory clinics,
- General Practices that meet specific requirements,
- Aboriginal Controlled Community Health Services,
- State-run vaccination clinics.

Other locations may open in the future, including:

- some workplace vaccination sites
- community pharmacies that meet specific requirements

## When will I get access to the COVID-19 vaccine?

Due to supply and demand, vaccine doses will initially be limited. High priority groups will receive the first doses.

A staged rollout of vaccines will occur as follows:

### Phase 1a:

- Quarantine, border, and front-line health care workers.
- Aged care and disability care staff
- Aged care and disability care residents

### Phase 1b:

- Elderly adults aged 80 years and over
- Elderly adults aged between 70 to 79 years
- Other health care workers
- Aboriginal and Torres Strait Islander people > 55
- Adults with an underlying medical condition, including those with a disability
- Critical and high-risk workers including defence, police, fire, emergency services and meat processing

### Phase 2a:

- Adults aged 60-69 years
- Adults aged 50-59 years
- Aboriginal and Torres Strait Islander people 18-54

- Other critical and high-risk workers

**Phase 2b:**

- Rest of adult population
- Catch up any unvaccinated Australians from previous phases

**Phase 3:**

- People under 16 years of age, if recommended

### Can COVID-19 vaccines be used in children?

The Pfizer vaccine is recommended for people over the age of 16. The AstraZeneca vaccine is used to protect people aged 18 years and older\*.

No vaccine has currently been approved for ages younger than 16.

Research and clinical trials are currently underway to determine whether children should be vaccinated for COVID-19.

\* In Australia, the Pfizer vaccine is currently preferred for adults under the age of 50.

### Can COVID-19 vaccines be used in women who are pregnant, breastfeeding, or planning pregnancy?

In preparation for vaccine roll-out, the Australian Technical Advisory Group on Immunisation has provided advice for breastfeeding and pregnant women:

- [COVID-19 vaccination decision guide for women who are pregnant, breastfeeding, or planning pregnancy](#)

Women who are pregnant, breastfeeding, or planning pregnancy should have a discussion with their doctor about the vaccine.

### Can COVID-19 vaccines be used in the frail and elderly (over 85)?

The Pfizer vaccine can be used by patients 16 years and older. However, clinical trial data for use in the frail elderly (greater than 85 years of age) is limited.

People older than 85 years of age are very susceptible to the impacts of the COVID-19 infection. In most cases the benefits of vaccination are considered to outweigh the risks.

People over 85 should have a discussion with their doctor about the vaccine.

For more information, see: [COVID-19 vaccination – COVID-19 vaccination decision guide for frail older people, including those in residential aged care facilities](#)

## Could I experience a side effect after receiving a COVID-19 vaccine?

Like other medicines, all vaccines can cause side effects. Most side effects are mild and temporary. The TGA carefully looks at all vaccines to ensure benefits outweigh the risks. This is done before allowing the vaccine to be used in Australia.

Trials of COVID-19 vaccines have reported side effects such as pain at the injection site, fever, or muscle aches. When they occur, these side effects usually last for 1-2 days.

Tell healthcare staff before you are vaccinated if you have ever had a serious allergic reaction.

You should not have the COVID-19 vaccine if you have ever had a serious allergic reaction (including anaphylaxis) to:

- a previous dose of the same vaccine
- any of the ingredients in the vaccine
  - [Pfizer/COMIRNATY Covid-19 Vaccine](#) - Consumer Medicine Information about the Pfizer vaccine, including list of ingredients.
  - [AstraZeneca COVID-19 Vaccine](#) - Consumer Medicine Information about the AstraZeneca vaccine, including list of ingredients.

Serious allergic reactions are rare. If you do have a reaction to the vaccine, it usually happens in minutes. Staff giving the vaccine are trained to deal with allergic reactions and treat them immediately.

## Clotting disorder information

The AstraZeneca COVID-19 vaccine is very effective in preventing severe disease and death due to COVID-19 in adults of all ages. Millions of doses have been administered around the world to adults of all ages with very few serious side effects.

However, a very rare side effect involving blood clotting with low blood platelet count – thrombosis with thrombocytopenia syndrome (TTS) – may occur after a first dose of AstraZeneca COVID-19 vaccine. Initial experience in the first 3 months of vaccination in Europe (including the UK) suggests this occurs in approximately four to six in a million people. It appears to be less likely in older adults than younger adults – but remains very rare. This condition is serious and requires hospital treatment. About one in four people with this condition may die.

The Australian Technical Advisory Group on Immunisation (ATAGI) advises that while both the AstraZeneca and Pfizer COVID-19 vaccines are recommended in all adults, the COVID-19 Pfizer vaccine is preferred over the AstraZeneca vaccine for use in adults aged under 50 years.

The AstraZeneca vaccine can be used in adults aged under 50 where the benefits are likely to outweigh the risk and the patient has made an informed decision based on an understanding of the risks and benefits.

For more information, see: [ATAGI statement on AstraZeneca vaccine in response to new vaccine safety concerns](#) - A statement from the Australian Technical Advisory Group on Immunisation (ATAGI) on the AstraZeneca COVID-19 vaccine in response to new vaccine safety concerns.

### **Can I import COVID-19 vaccines or buy vaccines online?**

No. Do not import COVID-19 vaccines or buy vaccines from websites. The Australian Government is offering safe, effective, and free COVID-19 vaccines to all Australians.

Vaccines bought online are likely to be unsafe and ineffective. These vaccines could be counterfeit (fake).

People or websites claiming to sell a COVID-19 vaccine may not deliver a product. They may try to steal your money or personal information. Scammers may create websites, advertise through social media, or use SMS messages that look genuine. Always verify the information by checking an independent or trusted source.

### **Do I still need to get the flu vaccination?**

Yes. While the influenza vaccine will not protect you against COVID-19 it will reduce your risk of the flu. Having the flu vaccination will help protect you and other vulnerable people from getting the flu.

Many people are admitted to hospital every year due to flu and death is not uncommon. If a person catches COVID-19 on top of the flu, it is likely they will become severely sick or die. Elderly people or those with a weak immune system may be at higher risk.

Getting the flu vaccination may help free up health workers so they can concentrate on people who present with COVID-19.

## Where can I get more information?

Hunter New England [Patientinfo](#) is a health information portal that links to you to reliable COVID-19 information from around the web, as well as information on local services.

Australian Government Department of Health:

- [COVID-19 vaccine information in your language](#) 
- [COVID-19 vaccines](#) - The latest news and information about COVID-19 vaccines.
- [COVID-19 Vaccination: Easy Read Resources](#) - fact sheets about COVID-19 vaccines in Easy Read format.

## Useful phone numbers

### **National Coronavirus and COVID-19 vaccine helpline: 1800 020 080**

Call this line if you need information about COVID-19, COVID-19 vaccines or help with the COVIDSafe app. The line operates 24 hours a day, 7 days a week.

### **Service NSW: 13 77 88**

For information and advice on assistance available for NSW residents. Operates 24 hours a day, seven days a week

### **HealthDirect: 1800 022 222**

For health concerns that are not urgent. You can speak with a registered nurse. Operates 24 hours a day seven days per week.

### **Coronavirus Mental Wellbeing Support Service (Beyond Blue): 1800 512 348**

Operates 24 hours a day, seven days a week.

### **NSW Domestic Violence Line: 1800 65 64 63**

Operates 24 hours a day, seven days a week.

This resource was adapted from:

- <https://www.tga.gov.au/covid-19-vaccine-information-consumers-and-health-professionals>
- <https://www.nps.org.au/vaccines-and-covid-19>
- <https://www.ncirs.org.au/covid-19/covid-19-vaccines-frequently-asked-questions>
- <https://www.health.gov.au/initiatives-and-programs/covid-19-vaccines>
- <https://www.science.org.au/curious/people-medicine/covid-19-facts>
- <https://www.health.nsw.gov.au/Infectious/covid-19/vaccine/Pages/default.aspx>