



Australian Government



Information on Vaxzevria (AstraZeneca)

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About the vaccine

Vaxzevria (AstraZeneca) can prevent people from becoming ill from COVID-19. Two doses are required initially (called the primary course). These 2 doses are usually given 4-12 weeks apart.

The AstraZeneca vaccine can also be used as an additional booster dose, 3 months or more after the primary course, although Comirnaty (Pfizer) or Spikevax (Moderna) are preferred for this booster.

This vaccine does not contain any live SARS-CoV-2 virus, and cannot give you COVID-19. It contains the genetic code for an important part of the SARS-CoV-2 virus called the spike protein. This code is inserted into a harmless common cold virus (an adenovirus), which brings it into your cells. Your body then makes copies of the spike protein, and your immune system learns to recognise and fight the SARS-CoV-2 virus. The adenovirus has been modified so that it cannot replicate once it is inside cells. This means it cannot spread to other cells and cause infection.

Vaccination is voluntary and free. You can discuss any concerns or questions you have about COVID-19 vaccination with your immunisation provider and/or your GP before you receive the vaccine.

Benefits of vaccination

AstraZeneca protects people from becoming ill from COVID-19. It particularly prevents severe illness, hospitalisation and death. The vaccine has been shown to be highly effective in both clinical trials (before it was registered for use) and in studies of people vaccinated in the 'real world' in England and Scotland.

COVID-19 is a very serious disease which can cause serious illness in people of all ages. It has caused millions of deaths and hundreds of millions of infections worldwide. Vaccination helps protect both individual people and benefits all people in the community by reducing the spread of COVID-19.

Who can receive this vaccine

People aged 18 years and older can receive AstraZeneca.

An alternative COVID-19 vaccine brand is preferred over AstraZeneca for people aged under 60 years. However, AstraZeneca can be used in adults aged under 60 years if an alternative is not available and if the person has made an informed decision based on an understanding of the risks and benefits.

Booster doses

A booster dose refers to an additional vaccine dose after the primary vaccine course. It is intended to strengthen and prolong protection against COVID-19.

If you are 16 years or older, you can receive a booster dose if it has been 3 months or more after your primary course. Some adolescents aged 12-15 years may also have a booster dose if they:

- are severely immunocompromised
- have a disability with significant or complex health needs
- have complex and/or multiple health conditions that increase the risk of severe COVID-19.

People aged 12 and over can have a booster dose of Pfizer.

For people aged 18 years and over, Pfizer or Moderna are preferred for the booster dose, including for those who had two doses of AstraZeneca for the primary course.

However, AstraZeneca or Novavax can be given to people aged 18 years and older who cannot have the Pfizer or Moderna vaccines for medical reasons (e.g. severe allergic reaction) or for people who do not prefer an mRNA vaccine.

Some people at high risk of severe illness from COVID-19 are recommended to have a 4th dose 3 months after the first booster.

For more information on booster and 4th doses see: <https://www.health.gov.au/initiatives-and-programs/covid-19-vaccines/getting-your-vaccination/booster-doses>

Staying up to date

To be considered up to date with COVID-19 vaccination, you must have completed all the doses recommended for your age and health status.

Find out about how to stay up to date with COVID-19 vaccines at:

<https://www.health.gov.au/initiatives-and-programs/covid-19-vaccines/getting-your-vaccination/stay-up-to-date>

Risks of vaccination

As with any vaccine, you may have some temporary side effects after receiving a COVID-19 vaccine. Common side effects after AstraZeneca include injection site pain or tenderness, tiredness, headache, muscle pain, and fever and chills. Most side effects are mild and temporary, going away within 1-2 days. As with any medicine or vaccine, there may be rare and/or unknown side effects.

Thrombosis with thrombocytopenia syndrome (TTS)

AstraZeneca appears to be linked with a very rare side effect called thrombosis with thrombocytopenia syndrome (TTS).

What is TTS?

TTS involves blood clots (thrombosis) and low levels of blood platelets (thrombocytopenia), and occurs around 4 to 42 days after vaccination. The blood clots can occur in different parts of the body, such as the brain (called cerebral venous sinus thrombosis or CVST) or in the abdomen (idiopathic splanchnic thrombosis).

TTS is rare, but it can make people very unwell and can lead to long term disability or death.

The mechanism that causes TTS is not fully understood, but it appears similar to heparin-induced thrombocytopenia (or HIT), a rare reaction to heparin treatment.

Are any groups more at risk of TTS?

The rate of TTS reported in Australia and overseas is higher in younger adults and appears more common in women. Cases have also been reported, however, in men and in older people. It is not yet clear if women are at higher risk.

Based on current information, we have not identified any pre-existing medical conditions that may contribute to developing TTS or make it worse if it occurs.

Is the AstraZeneca vaccine safe in people who have had blood clots in the past?

If you have had other types of blood clots in the past, such as deep vein thrombosis (DVT) or pulmonary embolism (PE), or if you have risk factors for blood clots, you can still have the AstraZeneca vaccine. There is no evidence that people who have had a past history of other types of blood clots have an increased risk of developing TTS or becoming more ill from it if it occurs.

For more information on TTS please see: www.health.gov.au/initiatives-and-programs/covid-19-vaccines/advice-for-providers/tts.

What if I have had my first dose of AstraZeneca vaccine?

People of any age without contraindications who have had their first dose of AstraZeneca without any serious adverse events should receive a second dose of the same vaccine. The risk of TTS is much lower after the second dose and is currently 0.3 in every 100,000 vaccinated people (compared to a risk of 2 in every 100,000 vaccinated people after the first dose).

Who should not receive this vaccine

You should not receive this vaccine if you have had:

- anaphylaxis (a type of severe allergic reaction) to a previous dose of the vaccine
- anaphylaxis after exposure to any component of the vaccine, including polysorbate 80
- a history of capillary leak syndrome
- TTS occurring after a previous dose of the vaccine
- any other serious adverse event, that following review by an experienced immunisation provider/medical specialist, was attributed to a previous dose of the vaccine (and without another cause identified).

Precautions

People with certain conditions may need additional precautions such as staying for 30 minutes of observation after having their vaccine or consulting an allergy specialist. Tell your immunisation provider if you have had:

- an **allergic reaction to a previous dose** of a COVID-19 vaccine or to an ingredient of the vaccine

- **anaphylaxis to other vaccines or to other medicines.** Your provider can check to ensure there are no common ingredients with the COVID-19 vaccine you are receiving
- confirmed mastocytosis with recurrent anaphylaxis that requires treatment.

If **you have a bleeding disorder** or you are **taking a blood-thinning medication** (anticoagulant), tell your immunisation provider. Your immunisation provider can help determine whether it is safe for you to have an intramuscular injection and help to decide the best timing for injection.

Special circumstances to discuss before vaccination

People with precautionary conditions who are preferred not to have AstraZeneca

Pfizer or Moderna are recommended in people who have had one of the following rare causes of blood clots:

- cerebral venous sinus thrombosis
- heparin-induced thrombocytopenia
- idiopathic splanchnic thrombosis
- antiphospholipid syndrome with thrombosis.

If you have had other types of blood clots in the past, such as deep vein thrombosis (DVT) or pulmonary embolism (PE), or if you have risk factors for blood clots, you can still have the AstraZeneca vaccine. There is no evidence that people who have had a past history of other types of blood clots have an increased risk of developing TTS or becoming more ill from it if it occurs.

People with weakened immune systems (immunocompromise)

People with immunocompromise includes those who have a medical condition that weakens their immune system. It also includes those who may be taking medications that suppress their immune system. People with immunocompromise, including those living with HIV, have a higher risk of severe illness from COVID-19, including a higher risk of death.

AstraZeneca does not behave like a 'live vaccine'. The adenovirus carrier has been modified so that it cannot replicate or spread to other cells, and it cannot cause infection. It is safe in people with immunocompromise.

People with severe immunocompromise are recommended to have a third dose of Pfizer or Moderna for their primary course. Novavax can also be used for this third dose.

A small clinical trial found that the side effects and immune responses to AstraZeneca were similar in a small group of adults with stable HIV infection, compared with adults without HIV.

We do not know if AstraZeneca is as effective in people with immunocompromise compared to the rest of the population. It is possible that it might be less effective, and so it is important to continue other preventative measures such as physical distancing after vaccination.

For more information on use of the vaccine in immunocompromised, see: www.health.gov.au/resources/publications/atagi-covid-19-vaccination-shared-decision-making-guide-for-people-with-immunocompromise.

Severely immunocompromised people aged 16 years and over who have received a third primary dose are recommended to receive a booster dose (i.e. 4th dose) at 3 months, in line with the timing for the general population. Severely immunocompromised people are recommended to receive a 5th COVID-19 vaccine dose 3 months after the first booster dose.

Women who are pregnant or breastfeeding

Pfizer and Moderna are the preferred vaccine in adults under 60 years of age, and women who are pregnant or breastfeeding. You do not need to stop breastfeeding after vaccination. Pregnant

women who received a first dose of AstraZeneca can receive either Pfizer, Moderna or AstraZeneca for their second dose, although Pfizer or Moderna are preferred.

For more information on use of the vaccine in pregnancy and breastfeeding, see: www.health.gov.au/resources/publications/covid-19-vaccination-shared-decision-making-guide-for-women-who-are-pregnant-breastfeeding-or-planning-pregnancy.

People with a history of COVID-19

If you have had COVID-19 in the past, tell your immunisation provider. You should wait 3 months after a confirmed SARS-CoV-2 infection to have a COVID-19 vaccine dose. If you have ongoing illness from COVID-19, discuss the best timing of vaccination with your treating doctor.

AstraZeneca and children

AstraZeneca has only been provisionally approved for use in people aged 18 years or older. It cannot be given to people younger than 18.

Vaccine safety and reporting adverse events

The TGA assesses all vaccines in Australia. This ensures that in order for a vaccine to be approved it is safe, effective and manufactured to a very high quality standard. A description of the process for approval of COVID-19 vaccines is available here: www.tga.gov.au/covid-19-vaccine-approval-process.

The safety of COVID-19 vaccines will be monitored continuously throughout the COVID-19 vaccination program. Suspected side effects can be reported to your vaccination provider or other healthcare professional. They will then make a formal report on your behalf to your state or territory health department or directly to the Therapeutic Goods Administration (TGA).

If you would prefer to report it yourself, please visit www.tga.gov.au/reporting-suspected-side-effects-associated-covid-19-vaccine and follow the directions on the page.

More information

For more information, visit www.health.gov.au/covid19-vaccines-languages or call 1800 020 080.

For interpreting services, call 131 450.