Australian Government

COVID-19 VACCINATION

COVID-19 vaccination decision guide for frail older people, including those in residential aged care facilities

Version 4.1
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What has changed:

- People at high risk of severe COVID-19 are recommended to receive an additional winter booster dose, from 4 months after their first booster dose.

Please note:

- Comirnaty COVID-19 vaccine (Pfizer) is referred to throughout this guide as Pfizer
- Spikevax COVID-19 vaccine (Moderna) is referred to throughout this guide as Moderna
- Vaxzevria COVID-19 vaccine (AstraZeneca) is referred to throughout this guide as AstraZeneca
- Nuvaxovid COVID-19 vaccine (Novavax) is referred to throughout this guide as Novavax.

Key points

- Pfizer, Moderna, AstraZeneca and Novavax are vaccines for preventing COVID-19. They are available in Australia.
- These vaccines are safe and effective at preventing serious illness or death from COVID-19, including in very old adults.
- Having a COVID-19 vaccine will lower the chance of you getting sick, especially getting very sick or needing to go to hospital. You may also be less likely to spread the virus to others.
- Billions of people around the world have safely received these vaccines. This includes very old adults, people living in aged care facilities, and people with chronic medical conditions.
- Studies from the United Kingdom and the United States of America show that people who receive these vaccines have very good protection from severe illness caused by COVID-19. This includes very old adults.
- The vaccines have been found to protect older adults against COVID-19. The protection is slightly lower in older adults than in younger adults.
- COVID-19 vaccination is recommended for all people aged 5 years and older to protect against COVID-19. For most people, a primary vaccination course consists of 2 doses.
- A third primary dose is recommended for people aged 5 years and over with severe immunocompromise.

- For more information, see: www.health.gov.au/resources/publications/atagi-recommendations-on-the-use-of-a-third-primary-dose-of-covid-19-vaccine-in-individuals-who-are-severely-immunocompromised.
- A single booster dose is recommended for people aged 16 years and older, from 3 months after the primary course.
- Some people at high risk of severe illness from COVID-19 are also recommended to receive an additional winter booster dose of COVID-19 vaccine from 4 months after their first booster dose.
- For more information on boosters and winter doses, see: https://www.health.gov.au/initiatives-and-programs/covid-19-vaccines/getting-your-vaccination/booster-doses

Coronavirus (COVID-19) risks for older people

- The Coronavirus disease (COVID-19) is much more likely to be severe in older people and people with certain medical problems than in young healthy people.
- About 1 in every 3 people over the age of 80 years who get COVID-19 will die from it. It is a very serious disease in older people. It is causing millions of people worldwide to go to hospital.
- COVID-19 can spread very quickly in residential care facilities because people are susceptible and live close to each other.
- A residential care facility will want as many residents as possible to be vaccinated to reduce the chance of COVID-19 spreading in the facility.

Current known side effects of Pfizer, Moderna, AstraZeneca and Novavax

- The COVID-19 vaccines are given as an injection in the upper arm muscle.
- The needle will be uncomfortable when it goes in for a few seconds.
- Most people will have a slightly sore arm where they receive the needle for 1-2 days after receiving it.
- It is quite common that people will feel tired for 1-3 days after receiving the vaccine and may have a headache, muscle aches or chills.
- Some people will have more significant flu-like symptoms after the COVID-19 vaccine compared to other vaccines. This may require time away from normal activities for 1-3 days.
- These side effects show your body is responding to the vaccine.
- You can have paracetamol or take extra care after the vaccine if you need it.
- A very rare side effect involving blood clotting and low blood platelet count may occur after the AstraZeneca vaccine.
- This condition is very rare and it appears to be less likely in older adults than in younger adults. For older persons, the benefits of being protected from severe COVID-19 through vaccination greatly outweigh the risk of harm from this condition.
- Pfizer and Moderna are not associated with a risk of TTS. Novavax is a new vaccine and to date it has not been associated with any rare side effects, including TTS.

For more information about TTS, refer to: www.health.gov.au/initiatives-and-programs/covid-19-vaccines/advice-for-providers/clinical-guidance/adverse-events#vaxzevria-astrazeneca.

- Very rarely, myocarditis and pericarditis can occur following vaccination with the Pfizer and Moderna vaccines. Most reported cases have been mild and have resolved quickly. It has predominantly occurred after the second dose and predominantly in younger males (aged under 30 years). AstraZeneca is not associated with an increased risk of myocarditis/pericarditis.

Further considerations for people close to the end of their life

- If you are close to the end of your life, you may have many things to weigh up when making your decision about whether to have the COVID-19 vaccine.
- There will be different considerations for each person.
- If you are exposed to COVID-19, being vaccinated may help you to protect your family and carers from being infected.
- You, your family, carers and other decision makers can also choose to engage with clinical staff at your facility, a GP or other health professionals. They can help you discuss the benefits and risks of vaccination, and whether it is suitable for you to receive the COVID-19 vaccine.

More information

For more information about COVID-19 and COVID-19 vaccines, refer to:

- ATAGI recommendations on a winter booster dose of COVID-19 vaccine: https://www.health.gov.au/news/atagi-statement-on-recommendations-on-a-winter-booster-dose-of-covid-19-vaccine
- ATAGI recommendations on the use of a 3rd primary dose of COVID-19 vaccine in individuals who are severely immunocompromised: www.health.gov.au/resources/publications/atagi-recommendations-on-the-use-of-a-third-primary-dose-of-covid-19-vaccine-in-individuals-who-are-severely-immunocompromised
- ATAGI recommendations on the use of a booster dose of COVID-19 vaccine: www.health.gov.au/resources/publications/atagi-recommendations-on-the-use-of-a-booster-dose-of-covid-19-vaccine
- Preparing for COVID-19 vaccination: www.health.gov.au/resources/publications/covid-19-vaccination-preparing-for-covid-19-vaccination
- Resources for Pfizer COVID-19 vaccine: www.health.gov.au/resources/collections/covid-19-vaccination-patient-resources#resources-for-pfizerbiontech-vaccine-comirnaty
- Resources for Moderna COVID-19 vaccine: www.health.gov.au/resources/collections/covid-19-vaccination-patient-resources#resources-for-spikevax-moderna
- Resources for COVID-19 Vaccine AstraZeneca: www.health.gov.au/resources/collections/covid-19-vaccination-patient-resources#resources-for-astrazeneca-vaccine
- Resources for Novavax COVID-19 vaccine: www.health.gov.au/resources/collections/covid-19-vaccination-patient-resources#resources-for-nuvaxovid-novavax-vaccine
- Department of Health website: www.health.gov.au/covid19-vaccines.

Information for aged care and healthcare providers, workers and substitute decision makers

What are the risks of the COVID-19 disease in older people?

- Older people who get COVID-19 are much more likely to require admission to a hospital for treatment compared with younger people.
- Among people who got COVID-19 in Australia, 1 in 127 died if they were between 60–79 years of age. About 1 in 12 died if they were 80 years or over.
- Among adults who got COVID-19, those who were frail were more likely to die compared with those who were not frail.
- Many older people have chronic medical conditions that further increase their risk of severe COVID-19, such as chronic heart or lung disease or diabetes.
- Even when pre-existing medical conditions are considered, there is a much higher likelihood of death from COVID-19 in people 80 years of age or older.
- Residents of aged care facilities are more likely to get COVID-19 than others if it is introduced into the facility. This is because they live in a communal (shared) environment. Aged care facilities have been the setting for a number of serious COVID-19 outbreaks in Australia.

Have the COVID-19 vaccines Pfizer, Moderna, AstraZeneca and Novavax been tested on older people?

- The trials for all vaccines include older people. This includes people with stable chronic diseases such as heart disease, lung disease or diabetes. The clinical trials for Pfizer and AstraZeneca vaccines did not include older people who live in aged care facilities. The clinical trial for Moderna only included a very small number of people living in an assisted living facility. However, many residents in aged care facilities have been safely vaccinated during the roll out of all three vaccines.
- So far there are more data for very old people available from trials of Pfizer and Moderna compared with AstraZeneca and Novavax. More detailed data on the efficacy and safety of Novavax among older people will be available from trials that are ongoing.
- Millions of older people around the world have now received Pfizer, Moderna, orAstraZeneca . All vaccines have shown to be safe in vaccine programs in Australia and in many other countries, such as the United Kingdom and United States of America.

What are the benefits of getting Pfizer, Moderna, AstraZeneca and Novavax?

- All four vaccines are effective for preventing older people from getting COVID-19.
- In clinical trials of Pfizer, people who received two doses of Pfizer were 95% less likely to get COVID-19 compared with those who did not. It was found to be just as effective in older adults (aged 65 years or over) as in younger adults.
- In the clinical trial for Moderna, people who received two doses of the vaccine were 94% less likely to get COVID-19 compared to those who did not. Approximately one quarter of the participants in the trial were older (aged 65 years or over), and the vaccine was 86% effective at preventing COVID-19 in this age group.
- In the clinical trial for AstraZeneca, people who received two doses of the vaccine were between 62-70% less likely to get COVID-19 compared to those who did not. The trial also

found that the vaccines was 85% effective at preventing COVID-19 in adults aged 65 years and older.

- In the clinical trial for Novavax, people who received two doses of the vaccine were 90% less likely to get COVID-19 compared to those who did not. Over a quarter of the participants were older (aged 65 years or over), and the vaccine was 89% effective at preventing COVID-19 in this age group.
- These trials were conducted before the Omicron variant became widespread. The effectiveness of the COVID-19 vaccines is lower against Omicron compared with older variants, but the vaccines are still expected to provide strong protection against severe illness and death.
- All vaccines were also shown to be similarly effective in people who had stable chronic medical conditions compared to those without.
- We do not know exactly how much the vaccine will benefit frail older people, but we expect it will be very protective.

What is the chance of side effects after getting Pfizer, Moderna, AstraZeneca or Novavax?

- Most people receiving a COVID-19 vaccine will have some mild side effects for a day or two after the vaccine.
- For all four vaccines, side effects are milder and less common in older adults than younger adults.
- Anaphylaxis, a rare but severe type of allergic reaction, can occur after receiving any vaccine.
- For the Pfizer vaccine in older adults:
    - The most common side effects are injection site pain, fever, fatigue and headache.
    - Pain at the injection site is very common, occurring in about two-thirds of people.
    - Up to 1 in 9 people aged 55 years and under will have a fever for 1–2 days, more commonly after the second dose. The fever is usually mild/moderate and goes away after 1-2 days.
    - About 1 in 3 people will have side effects such as tiredness and headache. These most commonly begin 1–2 days after getting the vaccine and go away after around 1–2 days.
    - Most people who have these side effects can still carry on their usual daily activities. Less than 1 in 4 people may experience tiredness that lowers their ability to carry out daily activities. 1 in 40 may have tiredness severe enough to prevent their daily activities, for up to a few days.
    - Very rarely, myocarditis and pericarditis can occur following vaccination with the Pfizer vaccine. Most reported cases have been mild, self-limiting and patients have recovered quickly. It has predominantly occurred after the second dose and predominantly in younger males (aged under 30 years).
    - The rate of anaphylaxis following Pfizer is around 11.1 per million people vaccinated.
- For the Moderna vaccine in older adults:
    - The most common side effects are injection site pain, headache, fatigue and muscle pain.
    - Pain at the injection site occurs in about two-thirds after the first vaccine dose and more than 4 out of every 5 people after the second dose.
    - Among people aged 65 years or over, less than 1 in 100 people experiences a fever after the first dose, and about 10 in 100 after the second dose. This fever is mostly mild to moderate, and resolves after 1-2 days.
    - Fatigue, headache and muscle pains occur in about 1 in every 2 people who receive the vaccine, mostly after the second dose. These symptoms are usually mild to moderate, start within two days after the vaccine, and resolve within 2-3 days.

- Most people who experience these side effects can still carry on their usual daily activities. Most side effects will resolve within three days.
- Similar to Pfizer, very rarely, myocarditis and/or pericarditis has occurred following vaccination with Moderna. Most of the reported cases have been mild and self-limiting, and patients have recovered quickly. This side effect has predominantly occurred after the second dose, and in younger males (under 30 years).
- The rate of anaphylaxis following Moderna is around 2.5 per million people vaccinated.

- **For AstraZeneca,** information on the side effects for older adults is limited. In general, based on adult trial participants:
  - The most common side effects are injection site pain, headache, fatigue, muscle pain and malaise.
  - Injection site pain occurred in about half of the people vaccinated.
  - Generally, less side effects are experienced after the second dose compared to the first.
  - About 1 in 3 people will have fever and 1 in 2 will have headache and fatigue.
  - Most of the side effects are mild to moderate in severity and go away in few days.
  - Most people who have these side effects can still carry on their usual daily activities. Of those aged 70 years or over who received this vaccine in a clinical trial, 1 in 8-10 adults experienced general symptoms. These symptoms were severe enough to reduce their ability to carry on daily activities. This was within the first few days after vaccination. Less than 1 in 15 experienced side effects at the injection site severe enough to affect their daily activities.
  - A very rare but serious side effect involving thrombosis (clotting) with thrombocytopenia (low blood platelet count) has been associated with AstraZeneca. This condition is called thrombosis with thrombocytopenia syndrome (TTS). It appears to be less likely in older adults than younger adults, but remains very rare.
  - Anaphylaxis after AstraZeneca is very rare. The rate in Australia appears similar to any other vaccine.

- **For Novavax,** information on the side effects for older adults is limited. In general, based on adult trial participants:
  - People who receive Novavax are likely to have some mild side effects for a day or two after the vaccine. The most common side effects are injection site pain, tiredness, headache, muscle and joint pain and flu-like symptoms.
  - Rare side effects that have been reported after Novavax are: severe allergic reaction (anaphylaxis).
  - We don't yet know if there are any other rare side effects after Novavax vaccine. This is because only relatively small numbers of people have received this vaccine worldwide. More information will be available over time.

Other things to consider

- If a person has any expected side effects they can take simple steps to help them feel better. For example, if an older person feels tired in the days after the vaccine, they may need more rest at that time. If there is pain at the injection site or fever, then taking paracetamol can help.
- Some health problems or symptoms may occur after vaccination by coincidence. In the clinical trials of Pfizer, Moderna, AstraZeneca and Novavax, some medical conditions occurred after receiving the vaccines. The vaccines do not appear to be the cause of these. A person who has been vaccinated (or their carer) should report concerns about an unexpected or serious health problem to their healthcare provider.
- There were reports of deaths occurring after a COVID-19 vaccine dose in older people, including some living in aged care facilities, in some countries overseas. Investigations of this found that receiving COVID-19 vaccine did not make dying more likely. The deaths were thought to have occurred because of the age or health of the person.