

Second dose for AstraZeneca/COVISHIELD recipients

Information

AstraZeneca/COVISHIELD (together referred to as “AstraZeneca”) vaccine lowers the risk of getting sick from COVID-19 infection, especially the risk of needing hospital care or dying. This vaccine has been an important and life-saving part of Alberta’s COVID-19 vaccine program. Over 258,000 doses have been given to adults 18 years of age and older in Alberta.



Two doses of AstraZeneca vaccine are needed to be fully immunized. Usually, when a vaccine needs to be given in more than one dose, the same vaccine is used for all doses. However, evidence currently shows that people who have had one dose of the AstraZeneca vaccine can receive a different COVID-19 vaccine for the second dose.

Albertans who received one dose of AstraZeneca can choose to:

1. **Get AstraZeneca vaccine as the second dose, or**
2. **Get an mRNA vaccine (Pfizer/Moderna) as a second dose**

No matter which vaccine you choose, the second dose:

- offers protection against COVID-19
- will be available when you are due for it as Alberta has supply of both mRNA and AstraZeneca vaccines
- will complete your COVID-19 two-dose series. All Canadian provinces and territories will recognize a first dose of AstraZeneca and a second dose of either an mRNA vaccine or AstraZeneca as a complete series. (International jurisdictions may or may not have the same criteria).
- If you choose an mRNA vaccine for your second dose, you do not need to start over.

However, there are other important things to consider before you make a choice.

Before choosing AstraZeneca, consider the following:

Effectiveness

When a vaccine needs to be given in more than one dose, the same vaccine is generally used for all doses because that is usually how the vaccine is studied by the companies making the vaccine. In clinical trials, starting two weeks after the second dose, AstraZeneca prevented 60-80% of sickness from COVID-19 and was even more effective in preventing severe illness and death.

Side Effects

Most like headache and tiredness after getting AstraZeneca vaccine are mild or moderate and short-lived. These side effects are rarer and even milder after the second dose of the vaccine.

Safety

A very rare but serious condition of blood clots combined with low levels of blood platelets (Vaccine-Induced Immune Thrombotic Thrombocytopenia, or VITT) has been reported after receiving AstraZeneca or COVISHIELD vaccines in Europe, the United Kingdom, and Canada.

- In Canada, after the first dose, there has been one case of VITT reported for every 55,000 doses of vaccine given.
- In Alberta, there have been five cases of VITT with one death.
- The rate of VITT after a second dose is not clear yet, but after about 9 million second doses of AstraZeneca vaccine, the United Kingdom has reported 15 VITT cases. This is 1 case per 600,000 doses, which is much rarer than after first doses. It is possible though, that this risk could change over time. For more information about VITT including symptoms, see below.

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Before choosing an mRNA vaccine as your second dose, consider the following:

Effectiveness

Most studies looking at giving an mRNA vaccine (such as Pfizer and Moderna) after a first dose of AstraZeneca are not finished yet, but one study from Spain showed that, compared with no second dose, immune response was greatly improved when the Pfizer vaccine was given 8 or more weeks after a dose of AstraZeneca vaccine.

It is possible that using different vaccines might stimulate the immune system in different ways and provide a stronger immune response, but we don't yet have studies that clearly prove this. The UK is performing a similar study and their results on this question should be ready in late June.

Side Effects

An ongoing mixing study from the UK showed that people who got the Pfizer vaccine 4 weeks after a dose of AstraZeneca vaccine had more general reactions like fever and aches than those who received the same vaccine for their second dose. Most symptoms happened in the 2 days after getting the second dose and went away on their own. In the study from Spain with AstraZeneca as the first dose and then Pfizer after 8 weeks, side effects were mild and went away on their own.

Safety

There have been no cases of VITT reported after getting an mRNA vaccine. There are currently no safety signals from either the UK study or the one in Spain that gave people an mRNA vaccine after an AstraZeneca vaccine. At this time, there is less data on mixing vaccines.

Second dose timing

No matter when you are eligible to book your second dose, we recommend you wait for at least 8 weeks after your first dose to get the best level of protection, for either vaccine. Studies looking at different timing for second doses of AstraZeneca show that waiting longer than 8 weeks is better than getting a second dose before then.



How to book your second dose

Albertans who received a first dose of AstraZeneca will have a choice:

- Book a second appointment for AstraZeneca by going to alberta.ca/vaccine and click on AHS's online booking site or calling 811, or go to a pharmacy listed on the Alberta Blue Cross website that is offering AstraZeneca, or
- Book a second appointment for an mRNA vaccine through any participating pharmacies or AHS.

More about VITT

VITT is very rare, but as a precaution, people who get an AstraZeneca vaccine should watch themselves for symptoms described below so they can get fast treatment if needed.

What are the symptoms of VITT to watch for?

If you experience any of these symptoms from 4 to 42 days after the vaccination, please seek medical attention as soon as possible:

- severe headache that does not go away
- seizure
- difficulty moving part(s) of the body
- new blurry vision that does not go away
- difficulty speaking
- shortness of breath
- chest pain
- severe abdominal pain
- new severe swelling, pain, or colour change of an arm or a leg

Safety data on the COVID-19 vaccines in use in Canada

Health Canada publishes information about each authorized vaccine, posted on the Health Canada website at <https://covid-vaccine.canada.ca/>.

Health Canada also publishes information and counts of all Adverse Events Following Immunizations (AEFI) at <https://health-infobase.canada.ca/covid-19/vaccine-safety/>.