



Update: Oxford-AstraZeneca COVID-19 Vaccine

March 29, 2021

Background

The Oxford-AstraZeneca COVID-19 vaccine has been a hot topic of discussion over the past few weeks. This is a result of some reports of blood clots in patients after receiving the Oxford-AstraZeneca vaccine and the potential link between the vaccine and an increased risk of very rare blood clots in younger adults. To date, there have been no reports of this vaccine causing these rare clots in Canada.

On March 29th, 2021, the National Advisory Committee on Immunization (NACI) [recommended the use of the Oxford-AstraZeneca vaccine be paused for adults under the age of 55](#), pending investigation into whether or not the vaccine is linked to very rare cases of vaccine-induced prothrombotic immune thrombocytopenia (VIPIT).ⁱ Recent studies conducted in Europe could not find a correlation between the vaccine and blood clots in general, however the European Medicines Agency (EMA) was not able to definitively rule out a potential link to a very rare type of blood clot known as a 'cerebral venous sinus thrombosis' or CVST, associated with VIPIT.ⁱⁱ When VIPIT occurs, vaccine-induced antibodies begin to activate blood platelets, which in turn can potentially stimulate the formation of blood clots.ⁱⁱⁱ This subtype of blood clot that may be linked to VIPIT is extremely rare to begin with and may be an outcome of approximately 1 out of 100,000 Oxford-AstraZeneca vaccines deployed.^{iv,v} Of the approximately 20 million Oxford-AstraZeneca vaccines administered in the UK and the European Economic Area (EEA), as of March 16th there have only been 18 reported cases of CVST.^{vi} Further research is required to determine if there is a causal link between the two. This research is underway by Health Canada who will report their findings. In the meantime, the Oxford-AstraZeneca vaccine will continue to be used to vaccinate people aged 55 and over. The pause in use of the vaccine for people under the age of 55 is only temporary until NACI can review the updated investigation results from Health Canada, provide a risk/benefit analysis and make additional recommendations.

This new information comes after the NACI [previously approved the use of the Oxford-AstraZeneca vaccine for all adults over the age of 18](#), including those over 65, on March 16th.^{vii} Prior to this, the use of the Oxford-AstraZeneca vaccine had been limited to adults only between the ages of 18 and 64 due to insufficient data on the efficacy of this vaccine for seniors over 65. However, the NACI cited emerging real-world data which showed that the vaccine was very effective at preventing serious illness and hospitalizations caused by COVID-19 in seniors.

Some European and Asian countries temporarily paused the use of Oxford-AstraZeneca due to several reports of people developing blood clots after receiving the Oxford-AstraZeneca vaccine. As of March 19th, European countries began administering the Oxford-AstraZeneca vaccine once again, as health agencies including the EMA reported that the vaccine could not be linked to an increase in blood clots overall.^{viii} Experts have noted that the number of people who experienced blood clots after receiving their Oxford-AstraZeneca vaccine were not proportionate to the overall number of people worldwide who have received the same vaccine.^{ix} As well, blood clots are already a known symptom of illness caused by COVID-19.^x To date, evidence still shows that the incidence of general blood clots is roughly on par with the incidence of these conditions in the general population.^{xi} As of March 15th, the British medicines regulator also stated that there has been no overall increase in blood clots in the UK, with more than 11 million people having been immunized with the Oxford-AstraZeneca vaccine.^{xii} The World Health Organization (WHO) has also stated that there is no indication of any link between this vaccine and the incidents, and evidence continues to demonstrate that this vaccine remains an effective way to prevent illness caused by COVID-19.^{xiii}

Nurses are ideally positioned to communicate the science and evidence that demonstrates the safety and efficacy of COVID-19 vaccines, including the Oxford-AstraZeneca vaccine. It is imperative that the general population understand that the vaccines approved for use in Canada are both safe and effective and have undergone rigorous testing prior to their approval. Real-world data now exists that demonstrates the effectiveness of the Oxford-AstraZeneca vaccine in all adults aged 18 and older and no evidence supports the idea that it has caused blood clots. It is important that British Columbians know that the best COVID-19 vaccine is the one available to them now, as all approved vaccines are shown to slow, and/or prevent the transmission of the COVID-19 virus in addition to being highly effective against serious illness and death.



Key Messages

- The Oxford-AstraZeneca COVID-19 vaccine has been temporarily paused for use in adults under the age of 55, pending additional investigation into a potential correlation to a very rare type of blood clots.
- The COVID-19 vaccines that have been approved for use in Canada are safe and effective tools in combatting the spread of COVID-19.
- The Oxford-AstraZeneca vaccine is highly effective at stopping transmission of and/or reducing the severity of COVID-19 illness.
- The National Advisory Committee on Immunization (NACI) approved the use of the Oxford-AstraZeneca vaccine for use in people over the age of 65 based on emerging evidence indicating its effectiveness in older age groups.
- Out of approximately 20 million people who have received the vaccine in the UK and the EEA, only 18 cases of the rare blood clot called CVST (cerebral venous sinus thrombosis) have been reported.
- Nurses are ideally positioned to communicate the science and evidence that demonstrates the safety and efficacy of all COVID-19 vaccines approved for use in Canada.
- NNPBC believes that it is imperative that British Columbians understand that the best COVID-19 vaccine is the one available to them now.
- 'Vaccine shopping', or refusing vaccine because people are hoping to receive a different type, is detrimental to public health and is unnecessary given that all vaccines approved for use in Canada are safe and effective.

Further Reading/Resources

- [NACI rapid response: Recommended use of AstraZeneca COVID-19 vaccine in younger adults](#)
- [NACI: Summary of updated vaccine statement, March 16, 2021](#)
- [COVID-19 Vaccines Guide](#)
- [ImmunizeBC: COVID-19 Vaccine FAQ](#)
- [Government of Canada: AstraZeneca COVID-19 Vaccine – What you should know](#)
- [CDC: Benefits of Getting a COVID-19 Vaccine](#)
- [WHO: Coronavirus Disease \(COVID-19\) Vaccines](#)

Please feel free to direct questions and additional comments to info@nnpbc.com.

ⁱ Health Canada. [NACI rapid response: Recommended use of AstraZeneca COVID-19 vaccine in younger adults](#). March 29, 2021.

ⁱⁱ Health Canada. [NACI rapid response: Recommended use of AstraZeneca COVID-19 vaccine in younger adults](#). March 29, 2021.

ⁱⁱⁱ Health Canada. [NACI rapid response: Recommended use of AstraZeneca COVID-19 vaccine in younger adults](#). March 29, 2021.

^{iv} Cochrane D, Tasker JP. [Immunization committee to recommend provinces stop giving AstraZeneca vaccine to those under 55: sources](#). CBC News. March 29, 2021.

^v Paul-Ehrlich-Institut. [COVID-19 Vaccine AstraZeneca – Safety Assessment Result: The Vaccine is Safe and Effective in the Fight against COVID-19](#). March 19, 2021.

^{vi} European Medicines Agency. [COVID-19 Vaccine AstraZeneca: benefits still outweigh the risks despite possible link to rare blood clots with low blood platelets](#). March 18, 2021.

^{vii} Canada.ca. [National Advisory Committee on Immunization \(NACI\): Summary of updated vaccine statement of March 16, 2021](#).

^{viii} Gera V. [AstraZeneca vaccinations resume in Europe after clot scare](#). CTV News. March 19, 2021.

^{ix} Couto Zuber M. [How effective is the AstraZeneca COVID-19 vaccine? What you need to know](#). CTV News. March 16, 2021.

^x Seladi-Schulman J, MD. [What to Know About COVID-19 and Blood Clots](#). Healthline. October 1, 2020.

^{xi} AstraZeneca. [Update on the safety of COVID-19 Vaccine AstraZeneca](#). March 14, 2021.

^{xii} Mackintosh E. [WHO meets to discuss AstraZeneca vaccine as more EU countries halt rollout](#). CNN. March 16, 2021.

^{xiii} Mackintosh E. [WHO meets to discuss AstraZeneca vaccine as more EU countries halt rollout](#). CNN. March 16, 2021.