

**Important Safety Information on
AstraZeneca COVID-19 Vaccine and COVISHIELD:
Risk of Thrombosis with Thrombocytopenia**



2021/03/24

Audience

Healthcare professionals including infectious disease physicians, family physicians, emergency room physicians, hematologists, neurologists, pharmacists, public health officials, nurses and nurse practitioners, and healthcare professionals at identified points of use.

Key messages

- **A combination of thrombosis and thrombocytopenia, in some cases accompanied by bleeding, has been observed very rarely following vaccination with the AstraZeneca COVID-19 Vaccine.**
- **Health Canada has assessed the available data on the reported events and has determined that the AstraZeneca COVID-19 Vaccine and COVISHIELD (the version of the AstraZeneca COVID-19 Vaccine manufactured by the Serum Institute of India that is currently being distributed in Canada) have not been associated with an increase in the overall risk of thrombosis.**
- **Healthcare professionals should be alert to the signs and symptoms of thromboembolism and thrombocytopenia.**
- **Individuals vaccinated with AstraZeneca COVID-19 Vaccine or COVISHIELD should be instructed to seek immediate medical attention if they develop symptoms such as shortness of breath, chest pain, leg swelling and persistent abdominal pain following vaccination. Additionally, anyone with neurological symptoms including sudden onset of severe or persistent worsening headaches or blurred vision several days after vaccination, or who experience skin bruising (other than at the site of vaccination) or petechiae starting a few days or more after vaccination, should seek prompt medical attention.**
- **Health Canada worked with the manufacturers of AstraZeneca COVID-19 Vaccine and COVISHIELD to update the Product Monographs for these products to include this new safety information.**
- **The benefits of the AstraZeneca COVID-19 Vaccine and COVISHIELD in protecting Canadians from COVID-19 continue to outweigh the risks. Canadians are encouraged to get immunized with any of the COVID-19 vaccines that are authorized and available in Canada.**
- **Health Canada continues to work closely with international regulators to**

review data as it becomes available on these very rare events and will make further updates to product labelling or take other actions as needed.

What is the issue?

The AstraZeneca COVID-19 Vaccine and COVISHIELD were authorized for use in Canada on February 26, 2021, in accordance with the [Interim Order Respecting the Importation, Sale and Advertising of Drugs for Use in Relation to COVID-19](#). Since the time of authorization, there have been very rare reports in Europe of thrombosis with thrombocytopenia following administration of the AstraZeneca COVID-19 Vaccine. Health Canada is working with international regulators and public health authorities to review data and evidence as it becomes available on these very rare events.

Products affected

AstraZeneca COVID-19 Vaccine, COVID-19 Vaccine (ChAdOx1-S [recombinant])
5 mL solution for intramuscular injection, multiple dose vials.

Each vial contains 10 doses (each dose is 0.5 mL).

DIN: 02510847

4 mL solution for intramuscular injection, multiple dose vials.

Each vial contains 8 doses (each dose is 0.5 mL).

DIN: 02511444

Manufacturer: AstraZeneca Canada Inc.

Canadian Importer and Distributor: AstraZeneca Canada Inc.

COVISHIELD, COVID-19 Vaccine (ChAdOx1-S [recombinant])

5 mL solution for intramuscular injection, multiple dose vials.

Each vial contains 10 doses (each dose is 0.5 mL).

DIN: 02512947

Manufacturer: Serum Institute of India Pvt. Ltd.

Canadian Importer and Distributor: Verity Pharmaceuticals Inc.

Background information

The AstraZeneca COVID-19 Vaccine and COVISHIELD are indicated for active immunization of individuals 18 years of age and older for the prevention of coronavirus disease 2019 (COVID-19).

Very rare cases of thromboembolic events have been reported following administration of the AstraZeneca COVID-19 Vaccine in several European Economic Area countries. A combination of thrombosis and thrombocytopenia, in some cases accompanied by bleeding, has been observed very rarely in the post-market setting following vaccination with the AstraZeneca COVID-19 Vaccine. This includes severe cases presenting as venous thrombosis, occurring at unusual sites such as cerebral venous sinus thrombosis, mesenteric vein thrombosis, as well as arterial thrombosis, concomitant with thrombocytopenia. The majority of these cases in Europe occurred within the first 7 to 14 days following vaccination. Some cases had a fatal outcome. To date, similar cases have not been reported in Canada.

Health Canada first communicated on this issue on [March 11, 2021](#), followed by [March 18, 2021](#), to inform Canadians that it was assessing these events in collaboration with international regulatory partners, and to reassure Canadians that the benefits of these vaccines continue to outweigh the risks.

Health Canada has assessed the available data on the reported events and has determined that the AstraZeneca COVID-19 Vaccine and COVISHIELD have not been associated with an increase in the overall risk of thrombosis. However, Health Canada continues to work with international regulators to review data and evidence as it becomes available on the very rare events characterized by thrombosis with thrombocytopenia that have been reported following immunization with the AstraZeneca COVID-19 Vaccine.

AstraZeneca and Verity Pharmaceuticals Inc. will continue to work closely with health authorities to monitor and ensure that the appropriate analysis and reporting of adverse events are shared with regulatory authorities around the world.

Information for consumers

A combination of blood clots with low level of platelets (elements in the blood that help it to clot), in some cases together with bleeding, has been observed very rarely following vaccination with the AstraZeneca COVID-19 Vaccine.

Patients should seek immediate medical attention if they develop shortness of breath, chest pain, leg swelling, or persistent abdominal pain following vaccination with AstraZeneca COVID-19 Vaccine or COVISHIELD. Patients should also seek immediate medical attention if they experience sudden onset of severe or persistent worsening headaches or blurred vision that starts several days after vaccination, or experience skin bruising or pinpoint round spots (other than at the site of vaccination) which starts a few days or more after vaccination.

Health Canada confirms that the benefits of the AstraZeneca COVID-19 Vaccine and COVISHIELD in protecting Canadians from COVID-19 continue to outweigh the risks, and encourages Canadians to get immunized with any of the COVID-19 vaccines that are authorized and available in Canada.

Information for healthcare professionals

The AstraZeneca COVID-19 Vaccine and COVISHIELD Product Monographs have been updated to include the risk of thrombosis with thrombocytopenia.

Healthcare professionals should be alert to the signs and symptoms of thromboembolism and/or thrombocytopenia and report cases through their respective jurisdiction's Adverse Events Following Immunization (AEFI) surveillance system.

Individuals vaccinated with AstraZeneca COVID-19 Vaccine or COVISHIELD should be instructed to seek immediate medical attention if they develop symptoms such as shortness of breath, chest pain, leg swelling, or persistent abdominal pain

following vaccination. Additionally, anyone with neurological symptoms including sudden onset of severe or persistent worsening headaches or blurred vision several days after vaccination, or who experiences skin bruising (other than at the site of vaccination) or petechiae starting a few days or more after vaccination, should seek prompt medical attention.

Action taken by Health Canada

Health Canada has worked closely with international regulators and reviewed the available data. Health Canada continues to gather Canadian and international information from manufacturers, international regulators and other experts, and will communicate any new information as needed.

Health Canada worked with the manufacturers to update the respective Product Monographs of AstraZeneca COVID-19 Vaccine and COVISHIELD to reflect current knowledge of this safety issue in a timely manner. Further updates will be made or other actions will be taken, if required, based on emerging evidence.

Health Canada has worked with the manufacturers to prepare this update. Health Canada is communicating this important safety information to healthcare professionals and Canadians via the [Recalls and Safety Alerts Database](#) on the Healthy Canadians Web Site. This communication will be further distributed through the MedEffect™ e-Notice email notification system, as well as through social media channels, including LinkedIn and Twitter.

Report health or safety concerns

Managing marketed health product-related side effects depends on healthcare professionals and consumers reporting them. Any serious or unexpected side effects in patients receiving the AstraZeneca COVID-19 Vaccine or COVISHIELD should be reported to your local Health Unit or the manufacturers (see "Products affected").

AstraZeneca Canada Inc. 1004 Middlegate Road, Suite 5000 Mississauga Ontario, Canada, L4Y 1M4 <i>For any medical questions related to AstraZeneca COVID-19 Vaccine, contact Medical Information at 1-800-668-6000) or submit a form online at www.azcovid-19.com.</i>	Verity Pharmaceuticals Inc. 2560 Matheson Blvd. East, Suite 220 Mississauga Ontario, Canada, L4W 4Y9 <i>For any medical questions related to COVISHIELD, contact Medical Information at 1-800-977-9778) or submit a form online at www.covishield-canada.ca.</i>
If a patient experiences a side effect following immunization, please complete the Adverse Events Following Immunization (AEFI) Form appropriate for your province/territory (https://www.canada.ca/en/public-health/services/immunization/reporting-adverse-events-following-immunization/form.html) and send it to your local Health Unit. Alternatively, you can report adverse events to AstraZeneca online at https://contactazmedical.astrazeneca.com .	
For other health product inquiries related to this communication, contact Health Canada at: Biologic and Radiopharmaceutical Drugs Directorate E-mail: hc.brdd.dgo.enquiries.sc@canada.ca	

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