

COVID-19 Vaccine & Heart Conditions

What People in Canada Should Know

The COVID-19 vaccine is now available. Like many people, you may have questions about the vaccine. These include its safety, who should get it first, and the side effects. This information is based on scientific publications in leading medical journals and has been reviewed by medical experts who care for heart patients.



Should people with heart conditions and risk factors get the COVID-19 vaccine?

Yes. Health Canada is advising most people to be vaccinated, unless you have been informed by a healthcare professional not to get the vaccine [1,2,3].

Are the vaccines safe for people with heart conditions or risk factors since they were developed in less than a year?

On February 25, 2021, a study of 1.2 million people who received COVID-19 vaccines was published in *The New England Journal of Medicine* [4]. The study further confirms the safety and effectiveness of the vaccines in people with heart conditions or risk factors. Real-world studies continue to monitor the safety and effectiveness of the vaccines in people with heart conditions or risk factors.



As a person living with a heart condition, you should not be concerned about the speed of the vaccine development. Standard practices for creating vaccines were in place and researchers and public health regulators are continuously monitoring the outcome of COVID-19 vaccines.



Why is the COVID-19 vaccine important for people with heart conditions?

People with heart conditions and risk factors for heart disease are at greater risk for serious illness or death from COVID-19 [2,5]. The vaccine works by teaching your body how to fight the virus that causes COVID-19. If you do get COVID-19 and are vaccinated, you are less likely to get severely ill or die.



Were the vaccines tested on people like me?

Yes. Studies included people with heart conditions and/or risk factors [6-12].



Should children with heart problems get the COVID-19 vaccine?

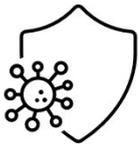
In most places children cannot get the vaccine yet. This is because it is still being tested in children. Children are much less likely to get very sick from COVID-19 than adults. This includes children with heart problems. Your care team will let you know when your child can get a vaccine.

COVID-19 Vaccine & Heart Conditions

What People in Canada Should Know

What do the healthcare experts say about COVID-19 vaccine safety for people with heart conditions?

On January 15, 2021, the American Heart Association released a [statement](#) urging people with heart conditions to get the COVID-19 vaccine as soon as possible:



"In particular, people with cardiovascular risk factors, heart disease, and heart attack and stroke survivors should get vaccinated as soon as possible because they are at much greater risk from the virus than they are from the vaccine."

On February 12, 2021, the American College of Cardiology (ACC) published a study in the *Journal of American College of Cardiology* [2]. The ACC study recommends the vaccine should be first made available to people with greater risk for serious illness or death from COVID-19 (e.g., people with heart conditions or risk factors) ahead of lower-risk populations. If you are unsure, discuss your COVID-19 and vaccination risks with a healthcare provider.

Do people with heart conditions get sicker with COVID-19?

Compared to people with a healthy heart, people with heart conditions are at greater chance of getting very sick or dying from COVID-19. According to the study published in the *Journal of American College of Cardiology* [2], of those with heart problems, some are at even greater risk.

These include:

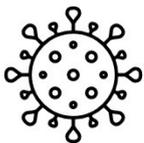
- Problems with heart strength or heart failure
- Heart transplant
- Complex adult congenital heart disease
- Blockage of arteries and those with angina
- High pressure in the blood vessels of the lung (pulmonary hypertension)
- Problems with heart rhythm
- People who have been hospitalized for a heart problem within the last six months



Are there other health problems that can make COVID-19 more dangerous?

People who have health issues that may lead to heart problems are also at greater chance of getting very sick due to COVID-19, such as:

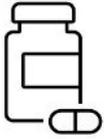
- Diabetes
- High blood pressure (Hypertension)
- Being overweight or obese
- Having one or more risk factors for heart disease



This is why it is important to get the vaccine to protect yourself from getting very sick from COVID-19.

COVID-19 Vaccine & Heart Conditions

What People in Canada Should Know



Can people on blood thinners get the vaccine?

Yes. You may get a bigger bruise at the place where you got your shot. You may also have a little more bleeding at the injection site. This is more likely if your blood thinner level is too high. Make sure to get any blood tests you need to check your blood thinner level before being vaccinated.

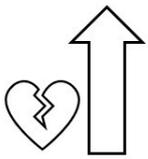
Will the vaccine make me feel sick?

You may have some side effects but they should last less than 2 days after getting each dose. Side effects mean that your body is building immunity to COVID-19. Common side effects are considered far less serious than COVID-19 itself. These include:



- Pain at the injection site
- Muscle and joint pain
- Headaches
- Chills
- Fever
- Fatigue

According to the Centers for Disease Control and Prevention, side effects are more common after the second dose. Rarely, individuals may experience allergic reactions. A small number of people have severe side effects that may disrupt daily activities.



Are the side effects worse for heart patients?

There is currently NO evidence to suggest that people with heart conditions or risk factors have worse or more side effects than people without heart conditions.

Will anxiety about the vaccine make me feel sick?



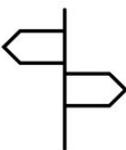
Maybe. It is important to understand that anxiety about vaccination, not the vaccine itself, could cause similar side effects such as headaches, muscle pain, and chills. Tips to relax include listening to your favourite music, going for a walk with a mask on, meditating, or taking a family member or friend with you when getting your vaccine.

Once I am vaccinated, do I still have to wear a mask and physical distance?



Yes. Proper personal protection equipment precautions (e.g. mask) and physical distancing, as recommended by public health, is still important after your vaccination. This is because if you get COVID-19 you are still able to spread it to vulnerable and unvaccinated people.

Which vaccine should I take?



The choice of the ideal vaccine will be determined by public health based on age and risk factors. Currently, Health Canada is advising that people 55 years and younger avoid the AstraZeneca vaccine until more is known about the rare risk of blood clots in younger adults [13].

COVID-19 Vaccine & Heart Conditions

What People in Canada Should Know

I am still worried about getting the vaccine. What can I do?

You can also learn more about COVID-19 and the vaccine at the following highly respected websites that discuss safety, the vaccination rollout plan, science, and Canadian COVID-19 data:



- [Canadian Medical Association: Questions and Answers on COVID-19.](#)
- [Government of Canada: Vaccines for COVID-19.](#)
- [American College of Cardiology: COVID-19 Hub.](#)
- [Canadian Cardiovascular Society: COVID-19 resources.](#)
- [Canadian Institute of Health Information: COVID-19 Data and Information.](#)

If you still need more information, discuss with family members or contact your healthcare provider. However, healthcare providers are extremely busy and may not be able to address your issues immediately.



I want to get the vaccine. How can I get it?

COVID-19 vaccine timeline and priority groups vary by region, province, and territories. Check the [Government of Canada website](#) to find information about your region's vaccine eligibility and timeline.

What should I do before my vaccination appointment?

Check out our [Top 10 Vaccination Tips for People with Heart Conditions](#) on the [resource page](#) of HeartLife Foundation website.

This information is brought to you by the HeartLife Foundation (heartlife.ca) in partnership with the Chinese Canadian Heart and Brain Association (cchaba.ca) and in collaboration with heart disease experts.

This resource is endorsed by the Canadian Cardiovascular Society (ccs.ca).

References:

1. Awerbach, et al. COVID-19 Vaccination in Adults with Congenital Heart Disease. American College of Cardiology. 24 February 2021. [URL](#).
2. Driggin E, et al. ACC Health Policy Statement on Cardiovascular Disease Considerations for COVID-19 Vaccine Prioritization. 17 February 2021. [URL](#).
3. Ministry of Health. COVID-19 Vaccination Recommendations for Special Populations. 12 February 2021. [URL](#).
4. Dagan B, et al. BNT162b2 mRNA Covid-19 Vaccine in a Nationwide Mass Vaccination Setting. 24 February 2021. [URL](#).
5. Botly L, et al. COVID-19 Pandemic: Global Impact and Potential Implications for Cardiovascular Disease in Canada. 6 June 2020. [URL](#).
6. Polack F, et al. Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine. 31 December 2020. [URL](#).
7. FDA Briefing Document. Pfizer-BioNTech COVID-19 Vaccine. 10 December 2020. [URL](#).
8. Product Monograph for Health Canada. Pfizer-BioNTech COVID-19 Vaccine. 03 March 2021. [URL](#).
9. FDA Briefing Document. Janssen Ad26.COVS.S Vaccine for the Prevention of COVID-19. 26 February 2021. [URL](#).
10. Product Monograph for Health Canada. Janssen COVID-19 Vaccine. 05 March 2021. [URL](#).
11. FDA Briefing Document. Moderna COVID-19 Vaccine. 17 December 2020. [URL](#).
12. Product Monograph for Health Canada. Moderna COVID-19 Vaccine. 22 February 2021. [URL](#).
13. Product Monograph for Health Canada. AstraZeneca COVID-19 Vaccine. 24 March 2021. [URL](#).

