

COVID-19 Vaccination – Information for Transplant Recipients

This FAQ will be updated as more information becomes available. Current information regarding vaccines is available through the Health Canada and your local Health Unit. For references or more information, visit our website: www.lhsc.on.ca/transplant. If you have more questions, check with your doctor.

Does COVID-19 affect transplant recipients?
COVID in transplant recipients can be unpredictable. Several organ transplant recipients have developed COVID-19. While some have had only mild symptom, others have had a severe illness requiring admission to intensive care unit. There have also been deaths in transplant recipients as a result of COVID-19. Generally, transplant recipients have had worse outcomes to COVID-19 than the general public, but newer treatments have improved outcomes. COVID-19 disease may be worse in some transplant recipients because of the other medical conditions that they may also have (for example diabetes).
How do vaccines work?
Our immune system is the body's primary defense against anything that is dangerous including viruses. Antibodies are one of the primary defenses we have against viruses. Vaccines contain a small non-infective piece of the virus that triggers your immune system including antibodies to be produced against the full virus. There are several other defenses that are boosted by vaccines, that help fight viruses including white blood cells.
How effective is the vaccine in transplant recipients?
Vaccines approved by Health Canada have been shown to be very effective in the general population. All of the approved vaccines were shown to be effective in preventing severe COVID-19 infection. Studies have shown that transplant recipients may have a lower antibody response to the vaccine than the general public. Remember though that antibodies are only one part of your immune system. Some studies have also shown that transplant recipients may have a 'T-cell response' to the vaccine. T-cells are white blood cells that make up another part of your immune system.
Can the COVID-19 vaccine harm my transplanted organ?
Since the vaccine triggers your immune system, you may wonder if the vaccine can lead to rejection. The vaccine should not cause any harm to your transplanted organ since the immune response from the vaccine targets the COVID-19 virus and not your new transplanted organ. There is no evidence that COVID vaccines pose a risk to your transplanted organ. The best protection for your new organ is a healthy body that is protected from COVID.
Does the vaccine have side effects?
Side effects in general have been reported in 26% of study participants who received the vaccine compared to 12% of those who received the placebo. Reported side effects are generally mild and include the usual fever, muscle aches, and fatigue that can come from vaccines in general. There is a rare (21 in 1 million) chance of developing myocarditis or pericarditis (inflammation of the heart) with the vaccine and this has happened mostly in men between the ages of 16 and 29 years). In most of these cases, recipients responded well to treatment and had quick improvement.
Is there anyone who should NOT get the vaccine?
People with a history of severe reactions (either allergic or other) to previous COVID-19 vaccines or to vaccines in general should talk to their transplant physician about getting the vaccine.
Can I get COVID-19 from the vaccine?
No. The vaccine does not contain live virus.
Should transplant recipients get vaccinated?
Yes, the vaccine is recommended for almost all recipients. Like with all vaccines, recipients need to consider the risks and benefits. If you are concerned about receiving the vaccine, you should discuss this with your Transplant Team. So far studies in transplant recipients have shown that the vaccines are very protective and are safe with side effects that are no different in transplant recipients than the general public. Since the risk of serious disease is higher in unvaccinated transplant recipients, it is recommended that all transplant recipients get the vaccine. It is also very important that all family members, especially those in the same house, receive the COVID-19 vaccine to prevent any infection spread from them. This is similar to flu shots as we encourage all household members to protect transplant recipients by protecting themselves.
Which vaccine should I get?
We recommend that you accept either Pfizer-BioNTech or Moderna. For those who are unable to receive an mRNA vaccine, the Novavax Nuvaxovid vaccine may be an option. This vaccine has been given to transplant recipients but results have not been compared to other vaccines in this population.

How many doses should I get?
The Pfizer-BioNTech and Moderna vaccines require two doses. The timing of the second dose should not be delayed. Times are: Pfizer-BioNTech (3 weeks) and Moderna (4 weeks). 3 doses are considered a Primary COVID vaccine series for transplant recipients.
Should I get a booster dose?
Booster shots may increase your antibody levels. A bivalent vaccine from Moderna has been approved by Health Canada and is now available. This vaccine covers the B1 Omicron variant and may provide additional protection against the current B4 and B5 variants. It is not known when the B4/B5 bivalent vaccine will be approved in Canada. Booster dose can be either Pfizer or Moderna; they are interchangeable. Updated information on booster availability is available on our website.
Should I get Evusheld?
This really depends on which COVID-19 variants are dominant in the community at any given time and so recommendations can and will change as the variants change. Your Transplant Team can keep you updated with the best information available to them at any given time.
I am being assessed for transplant or am on the waiting list, should I get the vaccine?
Yes! If you are not vaccinated and you get COVID-19, your risk of becoming very ill or dying is higher than the general public. If you do not get your vaccine until after your transplant, the chance of getting a beneficial vaccine response after transplant is much lower. This is because you will be on anti-rejection drugs that dampen and reduce your immune response. Like most other vaccines, the COVID-19 vaccine is much more effective if received before transplant. Currently, the Multi Organ Transplant Program in London requires that you have at least two doses of an approved COVID-19 vaccine before being listed for transplant and encourages you to get 1 or 2 booster shots when offered to you. If you are on the waiting list and have not yet been vaccinated, you will be placed on hold until you can get 2 doses of the vaccine. You should be vaccinated (2 doses) at least one week before your transplant and further doses given after your transplant. Again, it is better to have booster vaccines given before you are given anti-rejection drugs to improve the protection. Exceptions to required vaccination are considered and you should discuss this with your Transplant Doctor.
Are there any cases where it is allowed to not be vaccinated?
Every recipient is unique and there may be cases where vaccination is not possible. Your transplant team will consider your situation and medical exemptions may be allowed. These exemptions are the same as those that the Ontario Ministry of Health has listed. Other exemptions include recipients who are too sick at this time to be vaccinated and need the transplant immediately. Children do not need to be vaccinated to be listed for transplant.
I've already received my transplant; when should I get the vaccine?
If you have just received your transplant and were not already vaccinated, you must wait at least one month before getting your first dose. If you have had one dose before transplant, you will also need to wait one month before getting your next dose. If you had your transplant over one month ago, you should get the vaccine as soon as possible. If you are being treated for rejection or have recently been treated for rejection, you should check with your Transplant Team about the timing of your vaccine.
Can I get the vaccine if I currently have COVID-19? How long do I need to wait to get the vaccine?
No. You should <u>not</u> get the vaccine until after you have recovered from COVID-19. You can get the vaccine once you are symptom free.
Do I need to get vaccinated if I have already been infected with COVID?
Yes. The antibodies that are produced in response to COVID-19 infections can decrease about 3 months after infection or sooner. The natural immunity that occurs in response to an infection varies and is not long lasting. It does not offer long-term protection. There have been reported cases of re-infection in recipients who have recently recovered from COVID-19.
Do I need to continue to take extra precautions once I am vaccinated?
Yes. Even if you get the COVID-19 vaccine, it is very important for you to continue to wear a mask, wash your hands and physically distance yourself from others, particularly when you are indoors.
Can I be vaccinated against other infections?
It is safe to receive other vaccines at the same time as you receive your COVID-19 vaccine. There are still some vaccines that we do not recommend be taken at the same time - follow your Transplant Team's advice.
Should transplant recipients get COVID-19 antibody testing?
We know that the antibody response in transplant recipients is less than in the general public. This is true for many of the vaccines that you will receive. Remember that antibodies are only one part of your immune system's response to COVID-19. An antibody test will not tell you the whole story of how effective a vaccine may be. Also, it is not yet known which antibody level correlates with protection against severe COVID. Antibody testing will therefore, give you very little useful information and is not covered by OHIP.