Vaccinations for Adult Solid Organ Transplant Recipients

Are your vaccines up to date?

Why get vaccinated?

- Vaccines save lives and protect against dangerous and deadly infections. Organ transplant recipients are at an increased risk of infections because of the anti-rejection medications you are taking. These can weaken your immune system.

- Ideally, you should receive all necessary vaccines before your transplant. However, if you did not have time to receive all the recommended vaccines before your transplant, you can safely get vaccines starting 3 to 6 months after transplantation.

Family and close contacts

Family members and close contacts are encouraged to check their vaccination status and receive any updates as appropriate. The more people around you who are vaccinated, the better your protection.

Where to get your vaccines?

- Public health clinic
- Family doctor's office
- Local pharmacies

Inactivated vaccines

Inactivated vaccines (also called killed or attenuated vaccines) are safe.

- Your transplant team recommends the following inactivated vaccines which are provided free of charge:

  (checked off by your transplant team if recommended)

  - ☐ Standard dose influenza (flu) vaccine (injection) annually
  - ☐ COVID-19 vaccine as per public health guidelines
  - ☐ Hepatitis B vaccine
  - ☐ Hepatitis A vaccine (for liver transplant recipients)
  - ☐ Tetanus, diphtheria (Td) or tetanus, diphtheria, pertussis (Tdap) vaccine
  - ☐ Inactivated polio vaccine (IPV) (for select indications only)
  - ☐ Hemophilus influenza type B vaccine (Hib)
  - ☐ Pneumococcal conjugate vaccine (Prevnar 20®)
  - ☐ Meningococcal ACWY vaccine (quadrivalent)

- Your transplant team recommends the following inactivated vaccines which are not publicly covered:

  (checked off by your transplant team if recommended)

  - ☐ Hepatitis A vaccine (for non-liver transplant recipients)
  - ☐ Human papillomavirus vaccine (Gardasil®)*
  - ☐ Meningococcal B vaccine
  - ☐ Shingles vaccine (Shingrix®)

  *May be covered for select populations

Live vaccines

Some live vaccines may be safe for transplant recipients in certain circumstances.

Please check with your transplant team before getting these vaccines:

(checked off by your transplant team if recommended)

- ☐ Measles, mumps, rubella live vaccine (MMR)
- ☐ Varicella-zoster live vaccine

Appendix A: Inactivated vaccine information

Vaccine	Disease Protection	How Disease is Spread	Vaccine Schedule	Publicly Funded in BC?
Influenza (flu) vaccine	The flu (influenza infection) can cause serious life-threatening disease and increase your risk of other infections.	It is spread from person to person through coughing, sneezing, or face-to-face contact. It is also spread by touching contaminated surfaces and then touching your mouth, nose, or eyes.	Given every year to protect against the seasonal flu.	Yes for standard dose (inactivated injection) No for high dose
COVID-19 vaccine	COVID-19 is a respiratory illness caused by the SARS-CoV-2 coronavirus and can cause serious life-threatening disease and increase your risk of other infections.	It is spread from person to person through coughing, sneezing, or face-to-face contact. It is also spread by touching contaminated surfaces and then touching your mouth, nose, or eyes.	Given as additional COVID-19 doses as per public health guidelines. Discuss with your healthcare team.	Yes
Hepatitis B vaccine	Hepatitis B is a virus that attacks the liver. It can cause serious disease, including permanent liver damage, liver cancer and death.	Hepatitis B is spread through blood or body fluids.	Given as 3 doses over 3 months. A blood test is done between 1 to 2 months after you receive the last dose to check if you responded to the vaccines.	Yes
Hepatitis A vaccine	Hepatitis A is a virus that attacks the liver. It can cause serious disease, including liver damage, and death.	Hepatitis A is spread through blood or body fluids, contaminated water, or eating raw or undercooked shellfish contaminated with sewage.	Given as 2 doses 6 months apart.	Yes (for liver transplant recipients)

Appendix A: Inactivated vaccine information continued

Vaccine	Disease Protection	How Disease is Spread	Vaccine Schedule	Publicly Funded in BC?
Tetanus, diphtheria (Td) or tetanus, diphtheria, pertussis (Tdap) vaccine	Tetanus is a bacteria found in dirt and soil that can cause severe and painful muscle tightening and spasms all over the body including the heart, which can lead to death. Diphtheria is a bacteria that can cause severe breathing problems, heart failure, paralysis, and death. Pertussis, also known as whooping cough, is a respiratory infection that can lead to pneumonia, seizures, brain damage, or death.	Tetanus is spread through exposure in open wounds. Diphtheria is spread person to person through coughing, sneezing, or direct skin-to-skin contact. Pertussis is spread person to person through coughing, sneezing, face-to-face contact, or saliva/spit.	The Td vaccine is given as 1 dose if not previously received, and then every 10 years. The pertussis vaccine is given as the Tdap vaccine as a 1 dose booster.	Yes
Inactivated polio vaccine (IPV)	Polio is a serious infection that can result in paralysis of arms or legs and even death.	It is spread through contact with an infected person's stool, including eating contaminated food or drinking contaminated water. There is no risk in Canada, however it is endemic in Afghanistan and Pakistan.	Given as 1 dose, or as a booster if received as a child	Yes
Hemophilus influenza type B vaccine (Hib)	Hib is a bacteria that can cause serious illness, hospitalization, and death including: ○ Meningitis: infection of the lining that covers the brain ○ Septicemia: infection of the blood.	It is spread from person to person through coughing, sneezing, face-to-face contact. Some people with no symptoms can also spread the disease.	Given as 1 dose	Yes

Appendix A: Inactivated vaccine information continued

Vaccine	Disease Protection	How Disease is Spread	Vaccine Schedule	Publicly Funded in BC?
Pneumococcal conjugate vaccine	The pneumococcal bacteria can cause serious and life-threatening diseases, such as: ○ Meningitis: infection of the lining that covers the brain ○ Pneumonia: infection of the lungs ○ Septicemia: infection of the blood.	Pneumococcal infection is spread from person to person through coughing, sneezing, close face-to-face contact, or saliva.	Given as 1 dose of Prevnar 20®	Yes (Prevnar 20®)
Human papillomavirus vaccine (Gardasil®)	The human papillomavirus (HPV) is the most common sexually transmitted infection, and can cause cervical, vaginal, vulval, anal, penis, mouth, and throat cancer, as well as genital warts.	HPV is a common sexually transmitted infection and is spread by skin-to-skin contact	Given as 3 doses over 6 months.	Yes for select populations
Meningococcal ACWY vaccine (quadrivalent)	The four most common types of meningococcal bacteria are A, C, Y, and W. It can cause serious and life-threatening infections, including infection of the blood and the brain. Complications can be serious and may include permanent brain damage, deafness, and loss of limbs.	Meningococcal infection is spread from person to person through coughing, sneezing, or face-to-face contact. It can also be spread through saliva	Given as 1 dose with a booster every 5 years	Yes
Shingles vaccine (Shingrix®)	The varicella-zoster virus can cause shingles (also known as herpes zoster). Shingles is a painful skin rash with blisters that may last for 2 to 4 weeks. About 1 in 3 individuals will get shingles in their lifetime. It is more common in people over 50-years-old and those with a weakened immune system.	In some people who have had chickenpox, the virus becomes active again later in life and causes shingles. If you are unvaccinated or have not had chickenpox, you can get chickenpox from someone with shingles through direct contact with fluid from the shingles blister.	Given as 2 doses, 2 to 6 months apart.	No

Appendix B: Live vaccine information

Vaccine	Disease Protection	How Disease is Spread	Vaccine Schedule	Publicly Funded in BC?
Measles, mumps, rubella live vaccine (MMR)	The measles virus can cause ear infections, diarrhea, infection of the lungs, inflammation of the brain, and death. Mumps can cause an inflammation of the brain that can lead to seizures or brain damage, as well as inflammation of the lining of the brain, deafness, painful swelling of the testicles or ovaries, and miscarriages. Rubella can cause miscarriages, stillbirth, and birth defects.	These are spread from person to person through breathing, coughing, sneezing, saliva, or through contaminated objects. For measles, small infectious particles can linger in the air for minutes to hours after someone has left a room.	Given as 2 doses, 3 months apart.	Yes
Varicella live vaccine	The varicella-zoster virus can cause chickenpox (also known as varicella), resulting in itchy fluid-filled blisters.	It is spread from person to person through coughing, sneezing, saliva, or through contaminated objects. Small infectious particles can also linger in the air for minutes to hours after someone has left a room. It can also spread through direct contact with the fluid from chickenpox or shingles blisters.	Given as 2 doses, 3 months apart.	Yes