

Dear families of transplant recipients;

We are currently seeing more infections with measles worldwide, including Canada and the United States. Many of you may have questions about measles specific to your child with a transplant, especially as we approach the summer travel season.

HOW DOES MEASLES SPREAD?

Measles is very contagious and spreads easily. The virus spreads through the air when an infected person breathes, coughs, or sneezes. The measles virus can survive in small droplets in the air for several hours. You can become infected when you breathe in these droplets or touch objects contaminated with the virus. The airborne spread of the measles virus makes the disease very contagious. Sharing food, drinks or cigarettes, or kissing someone who has the virus can also put you at risk.

WHAT ARE SYMPTOMS OF MEASLES?

Symptoms of measles include fever, cough, runny nose, and red and inflamed eyes that are often sensitive to light. These symptoms are followed by a rash, which starts first on the face and neck and spreads to the chest, arms and legs. The rash lasts about 4 to 7 days. There may also be small white spots inside the mouth early in the infection. Symptoms can start as soon as 7 days after a person is infected with the measles virus. Most people recover from measles within several weeks. In some cases, people can develop severe complications.

Please note that people who are immunocompromised, such as organ transplant recipients, do not always have typical symptoms of measles infection. For example, some people who are immunocompromised do not get a rash that is usually seen with measles. People who are immunocompromised are at higher risk of complications, including pneumonia and very rarely a brain infection

IS THERE TREATMENT FOR MEASLES?

There is no antiviral medication to treat measles once someone becomes sick. People who become sick with measles may have to be hospitalized to treat complications related to measles.

People with an organ transplant including children of all ages who are not protected/immune to measles may receive immunoglobulin/antibody prophylaxis to help prevent infection after they have been exposed to measles. Immunoglobulins are usually given by IV (IVIG) but can be given as an injection (IMIG) in smaller children. They have to be given within 6 days from exposure. Immunoglobulins prevent approximately 75% of infections. Receiving immunoglobulins in most cases requires a brief hospital admission, but not an overnight stay.

IS THERE VACCINE AGAINST MEASLES?

Children in Canada who are otherwise healthy receive measles-mumps-rubella (MMR) vaccine when they are a year old and then a second dose at 4-6 years of age. Some children with an organ transplant are too young or too unwell to receive measles vaccines before transplant.

MY CHILD HAS RECEIVED MEASLES VACCINE(S) BEFORE TRANSPLANT. ARE THEY STILL PROTECTED?

Some children with an organ transplant remain protected, while others lose protection overtime. Children who remain protected will have antibodies against measles in their blood.

We can check for measles vaccine immunity/protection through a blood test. You will receive a blood test requisition for your child in a separate email. You can do this test with your next regular bloodwork appointment. You can also do the measles test sooner – please let the transplant nurses know if you are doing the test before your regular bloodwork so we can look out for results.

If your child has never received measles vaccine, you do not have to do the blood test. All children who have not been vaccinated should be considered at risk for measles infection.

If you do not have your child's vaccine records / are not sure whether your child has received a measles vaccine before transplant, please contact your transplant team.

CAN CHILDREN WITH AN ORGAN TRANSPLANT RECEIVE MEASLES VACCINE? WE WERE TOLD OUR CHILD CAN'T GET A MEASLES VACCINE AFTER TRANSPLANT.

Measles vaccine contains a live virus. We know many of you were given information that live vaccines were not recommended for your child after transplant. Over time, research has shown live vaccines can be safely given to some children with a transplant. The varicella (chickenpox) vaccine has been studied more widely. We have recently updated our clinical practice to include assessment for varicella vaccine for each transplant recipient.

For the measles vaccine, several recent studies have shown that it can be given safely and effectively to some children with a liver transplant. We do not have as much study information about children with other types of organ transplants. Please contact the transplant team if you would like to know whether measles vaccine may be an option for your child.

WILL I GET NOTIFIED IF MY CHILD HAS BEEN EXPOSED TO MEASLES?

Public Health will notify you if your child was exposed to measles in Canada. If you are/were travelling abroad, please follow the information and guidance provided by local public health officials.

WHAT DO I DO IF MY CHILD HAS BEEN EXPOSED TO MEASLES?

If your child has been exposed to measles, please contact your transplant team or your community healthcare provider BEFORE going to a healthcare facility. Your healthcare provider will determine whether your child needs immunoglobulins or not. People who are exposed to measles may be contagious and spread infection even though they are not feeling sick. Healthcare providers, therefore, need to make sure appropriate infection control measures are put into place before you arrive at the clinic/hospital to prevent the infection from spreading to others.

WHAT DO I DO IF MY CHILD HAS SYMPTOMS OF MEASLES?

Symptoms of measles include fever, cough, runny nose, and red and inflamed eyes that are often sensitive to light. These symptoms are followed by a rash, which starts first on the face and neck and spreads to the chest, arms and legs. More information and pictures can be found [here](#).

Please note that people who are immunocompromised, such as organ transplant recipients, do not always have typical symptoms of measles infection. For example, some people who are immunocompromised do not get a rash that is usually seen with measles. People who are immunocompromised are at higher risk of complications, including pneumonia and very rarely a brain infection.

If you think your child has symptoms of measles, please contact your transplant team or your community healthcare provider BEFORE going to a healthcare facility. Please let your healthcare provider know if your child has travelled anywhere in the last month. Your healthcare provider will determine what additional testing is needed for your child. People with measles are very contagious. Healthcare providers, therefore, need to make sure appropriate infection control measures are put into place before you arrive to clinic/hospital to prevent the infection from spreading to others

If you have more questions about measles, additional information can be found on the [BCCDC website](#) and [here](#). You can also reach out to your transplant team.

Sincerely,

The Multi-Organ Transplant team