Novel Coronavirus (COVID-19) and Children with Immune Suppression
June 15, 2020

This information from BC Children’s Hospital is for children with immune suppression, also called immunosuppression, immune compromise or immunocompromised. Immune suppression means that your child’s immune system is weakened by medications or a medical condition. A weakened immune system may not be able to protect as well from infection.

A child with immune suppression is at higher risk of getting infections.

Children with immune suppression are usually followed by a specialist. There are different types of situations where your child is considered to have immune suppression:

1. They have a medical condition that affects their immune system
2. They have side effects from medications that cause a very low white blood cell count
3. They are taking medication that suppresses their immune system. Children may be taking these medicines as treatment for:
   - autoimmune or rheumatologic disease
   - inflammatory bowel disease
   - immune-mediated kidney or liver disease
   - organ transplant
   - bone marrow or stem cell transplant
4. They are having chemotherapy, or they had chemotherapy recently.

What are some common medications that suppress the immune system?
Common immune suppressing medicines are:

- Actemra (Tocilizumab)
- Anakinra (Kineret)
- Arava (Leflunomide)
- CellCept (MMF)
- Cyclophosphamide
- Cyclosporine
- Enbrel or Erelzi (Etanercept)
- Entyvio (Vedolizumab)
- Humira (Adalimumab)
• Ilaris (Canakinumab)
• Imuran (azathioprine)
• Methotrexate
• Myfortic (MPS)
• Ocrenica (Abatacept)
• Prednisone
• Prograf or Advagraf (Tacrolimus)
• Remicade or Renflexis (Infliximab)
• Rituximab
• Sirolimus
• Stelara (Ustekinumab)
• Xeljanz (Tofacitinib)

If your child takes immune suppressing medicine, please read the information below. If you have questions, phone your specialist care team.

1: COVID-19 and your child with immune suppression

How could my child get COVID-19?
Most COVID-19 infections happen when a person comes into contact with the droplets of an infected person. These droplets may contain infectious particles and can infect another person if the virus comes in contact with their eyes, nose or mouth. They may also fall on surfaces and then be transferred onto someone’s hand who then rubs their eyes, nose or mouth.

We think that people are most contagious when they have symptoms. People can get the COVID-19 virus when they:
• Are in contact with an infected person, or,
• Touch their face or mouth after touching a surface with virus on it. Any surface like a door handle or tabletop, can be contaminated by virus after an infected person has touched it or coughed/sneezed nearby.

Learn how it spreads at: http://www.bccdc.ca/health-info/diseases-conditions/covid-19/common-questions

Is my child at greater risk from COVID-19 because of immune suppression?
Although, we do not know how COVID-19 will affect children with immune suppression, we know that they are more likely than non-immune suppressed children to get very sick from viral infections. Therefore, we predict that children with immune suppression are at higher risk to get very sick from COVID-19 infections. Your child’s risk will depend on how well their immune system works and also other chronic health conditions. Currently, there is no approved medicine to treat or prevent COVID-19.
Are all children with immune suppression at risk?
Children with immune suppression are more at risk of getting serious infections. Your child’s level of risk depends on their immune system. Other health conditions, like lung disease, can also increase your child’s risk. Your child’s specialist team will be able to tell you if your child’s level of risk for getting an infection is LOW, MEDIUM or HIGH:

- **Low**: In general, your child’s level of immune suppression does not increase their risk of serious infection.
- **Medium**: Your child’s level of immune suppression increases their risk of infection. This means, your child may get sick with an infection for longer or it may be more severe. Or, your child may get sick from an infection that does not affect people who do not have immune suppression. This can happen when your child takes immune suppression medicines for a long time. This treatment is often called **maintenance immune suppression**.
- **High**: Your child is at high risk of getting sick with an infection that is more severe, long or rare. This can happen when your child has a treatment that is more intensive, like the start of cancer treatment or a transplant.

The specialist team will explain how to keep your child safe. Some children may need to stay away from other people, also called **protective self-isolation**, for longer than others.

2: If your child with immune suppression has new symptoms

**What are COVID-19 symptoms?**
COVID-19 can cause many different symptoms that can range from mild to severe. The most common symptoms of COVID-19 are cough and fever, but there are many others. If your child is immune suppressed and they are experiencing a symptom that is new or different, please contact your child’s specialist team.


**My child is experiencing new or different symptoms. What should I do?**
- Phone your child’s specialist team. The team will tell you if your child needs a COVID-19 test. They may direct you to the nearest testing site or Emergency Department. The Emergency Department team will check your child’s breathing and may test your child for COVID-19 and other viruses.
- If your child is having difficulty breathing, or you cannot reach your child’s specialty team, call 9-1-1 or bring your child to the nearest Emergency Department.

If you need to bring your child to an Emergency Department be sure to:
- Clean your hands with alcohol-based hand rub (hand sanitizer) as soon as you enter.
- Put on a mask yourself and your child (if they are older than 2 years of age) when you arrive, to protect others.
- Tell the triage nurse that your child has symptoms that might be COVID-19
- Tell the triage nurse that your child has immune suppression
- Tell the triage nurse the name and contact details of your child’s specialist
Updates about COVID-19 and self-assessment tool are available in the B.C. COVI-19 app: https://bc.thrive.health/

**Does my child need a COVID-19 test?**
If your child with immune suppression has new symptoms related to COVID 19, they should be tested.

If your child does not have symptoms of COVID-19, they do NOT need to be tested.

Learn about testing for COVID-19 at: http://www.bccdc.ca/health-info/diseases-conditions/covid-19/common-questions

3: Your child with immune suppression’s medical care

**Should my child stop taking immune suppressing medicines?**
**Do not** stop or change your child’s medicines, unless your child’s specialist team tells you to. Always talk to the specialist team before making any changes to your child’s treatment.

It is dangerous to stop your child’s medicines without talking to your child’s specialist team. Stopping these medicines:

- Can make your child’s health condition worse, and
- Will not stop your child from getting COVID-19.

If your child becomes sick with COVID-19, your specialist may adjust your child’s medicines.

**My child has new symptoms that may be related to COVID-19. Should we come to the specialist clinic appointment?**
Call the clinic before coming to your appointment. Many clinics are offering virtual online appointments instead of in person.

- Children with new symptoms should get tested before coming to a routine appointment at the hospital or clinic.
- If the appointment is not urgent, the clinic may move it to when your child feels better.
- Many clinics are now able to offer virtual appointments over the telephone or video.
- The clinic may send you to your nearest Emergency Department, depending on your child’s symptoms.

**My child does not have new symptoms. Should we come to my child’s specialist clinic appointment at BC Children’s Hospital?**
The risk of getting COVID-19 in hospitals in Canada is still low.

Examples of how we keep patients safe:

- Wearing masks, eye protection, gloves and gowns when needed
- Performing hand hygiene
- Doing extra cleaning and disinfection
- Limiting the number of people that attend appointments or visit patients, and
- Doing some visits by telephone or video call.
Should we come to the hospital or lab for regular scheduled tests?
Yes, come to your child’s scheduled test appointment, unless your specialist team has told you otherwise.

If your child has symptoms that may be related to COVID-19, phone your specialist team before you come for the test. You will need to notify the lab before you arrive.

When you come to your child’s appointment:
- Check the time and come right at the time you are scheduled.
- When you arrive for the test, check in. Then, wait in an area where there are fewer people. Return when it is time for your child’s test.
- Clean your hands before and after you visit the hospital or lab.

My child is a patient at BC Children’s Hospital. What should we expect?
At BC Children’s Hospital, health care teams diagnose, isolate and treat infectious diseases.

To protect patients, families and staff from COVID-19, hospitals are decreasing the number of people on-site, and are limiting the number of people that can visit patients or come to appointments. You may notice more people wearing masks and other personal protective equipment. This is for everyone’s protection.


4: Keeping your child with immune suppression safe

How can I protect my child with immune suppression?
Children with immune suppression should practice protective self-isolation. This means that every person in your home should:

- Wash their hands often with soap and water for at least 20 seconds
- If a sink is not available, alcohol-based hand rubs (ABHR) can be used to clean hands as long as they are not visibly soiled
- Avoid touching their face
- Regularly clean and disinfect frequently touched surfaces
- Do not share food, drinks, utensils, etc.
- Cough and sneeze into their elbow, instead of their hand
- Self-isolate if they are sick

Children with immune suppression should stay away from other people as much as possible. Ideally, your child should stay at home. It is OK to go outside for a walk or to get exercise, as long as your child can maintain physical distance (at least 2 metres) from other people.

Protective self-isolation also means that your family and your child should avoid:
• People who have a cough, cold or flu symptoms
• People who have been in contact with someone in the last 14 days who may have had COVID-19
• People that traveled outside of the Province in the last 14 days
• Crowds and places that many people pass through
• Groups of people, including groups of children

If your child must leave your home and be indoors or in another closed space, they should stay at least 2 meters from other people.

If anyone who is not part of your household must come into your home, they must clean their hands when they enter, and wear a mask.

Learn more about protective measures against COVID-19 at: http://www.bccdc.ca/health-info/diseases-conditions/covid-19/common-questions

**Should my child attend their normal group activities like clubs, sports teams, and parties?**
No. Your child should avoid all non-essential group activities. Children with immune suppression should avoid places with many people. This is very important if people in your community have COVID-19. We do not know how long COVID-19 will stay in communities.

**Can we use transit, ferries and airports?**
To avoid COVID-19, it is safest to travel in a private vehicle. Public health experts say that people with immune suppression and caregivers should avoid public transit or transport hubs like buses, SkyTrain, airports and ferries. However, this is not always possible.

If you cannot take a private vehicle:
• Avoid traveling during busy times
• Stay at least 2 meters from other travellers
• Stay away from travellers that cough or look unwell
• Clean your hands often with soap and water, or alcohol-based hand rub
• Avoid touching your face.

**Is it safe for my child to travel?**
B.C. residents should stay at home, unless travel is necessary. Any person who has travelled outside B.C. may need to self-isolate for 14 days when they return. This includes people that have travelled to the United States or some Canadian provinces with higher rates of COVID infection.

Get up to date travel information on the Canadian government travel website.
If you or your child must travel, make sure you have enough extra medicine for at least 2 weeks after you plan to return home. You may not be able to return home as planned, so you should have extra medications in case your return is delayed. You will need to self-isolate when you return home.

My family member just returned from an area with many COVID-19 infections. What should I do?
The traveller should self-isolate for 14 days. If the traveller stays healthy for 14 days, you can resume contact.

If you cannot avoid contact, the traveler should:
- Stay away from people at greater risk, like your child
- Clean their hands often with soap and water, or alcohol-based hand rub
- Wear a mask when they are in shared areas of your home.
- If the traveller starts to develop any symptoms, they should get checked and tested right away.

Learn more about travellers and COVID-19 at: [http://www.bccdc.ca/health-info/diseases-conditions/covid-19/common-questions](http://www.bccdc.ca/health-info/diseases-conditions/covid-19/common-questions)

Someone in my household is sick. What should I do?
We know now that COVID-19 causes many different symptoms, not just cough and fever. If someone in your household has new symptoms, they should get tested right away for COVID-19. Let your specialist team know right away if this happens.

The sick person should isolate themselves from other household members, if possible. They should stay apart until they get a negative COVID-19 test result. Consult with your specialist team to see if any other safety measures are needed.

For information about how to self-isolate and reduce the risk of infecting others, see the [BCCDC guidelines](http://www.bccdc.ca/health-info/diseases-conditions/covid-19/about-covid-19/symptoms).


I have COVID-19. How do I protect others?
Anyone who has COVID-19 infection or has been in contact with an infected person should self-isolate.

Learn how to self-isolate, and reduce the risk of infecting others, from the [BCCDC guidelines](http://www.bccdc.ca/health-info/diseases-conditions/covid-19/about-covid-19/symptoms).

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