

LIVING WELL

Beyond COVID-19

BY RESPIPLUS™

A plan of action for life
A learning tool for patients and their families

Treatment Options for COVID-19

This module will guide you through the treatment options for COVID-19 that can help you make the right decisions with your healthcare team.

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1st edition, March 2023

ISBN 978-1-989791-41-7 (PDF)

This guide is also available in PDF on our portal:

<https://chroniclungdiseases.com/en/resources/covid-19/>

Treatment Options for COVID-19



The World Health Organization (WHO) officially declared COVID-19 a pandemic on March 11, 2020. Since then, the virus has spread throughout the world and has affected every aspect of our everyday lives. It has caused millions of people to become very sick, needing to go to the hospital or even causing death. In some cases, it can cause long lasting symptoms that can impact a person's daily life for months and even years. This is also known as Long Covid (for more information you can refer to our module on Long Covid).

Since the start of the pandemic, COVID-19 vaccines are recommended to prevent you from becoming very ill or dying from the virus that causes COVID-19. Prevention remains the first line of defense against COVID-19. You should stay up to date with your COVID-19 vaccines including booster shots to lower your risk of becoming very sick from COVID-19.

Once you are infected with COVID-19, most people can be managed at home with just time and rest. Your doctor may have discussed with you the use of a machine to help measure the oxygen in your blood while recovering at home.

There are some people who are at high-risk of becoming very ill should they get COVID-19. If you belong to this group, there are treatments that can lower your risk of complications. Treatments depend on when your symptoms started, severity of infection, and your own risk of becoming severely ill and dying.

This module will not discuss treatment options for people who are hospitalized with COVID-19. It only covers potential treatments that can be prescribed to a patient while they are at home.

Welcome to the module "Treatment Options for COVID-19"

Identify the subjects for which you need additional information and which may be important for you at this time. Your resource person - a health care professional that supports you in your COVID-19 treatment journey - may help you.

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Who is at high-risk of complications from COVID-19

At the time this module was written, the Government of Canada has identified groups of people who are at high-risk of developing complications should they get COVID-19:

- People with a weakened immune system.
- People with some diseases or conditions such as those with obesity, diabetes, chronic lung disease, kidney disease, older adults and others.
- People who have not completed their initial vaccination series, or who have not received a booster dose in the past 6-months might also fall into this category. This may depend on whether or not other conditions exist

On the next page, you will find a list of various conditions that need to be evaluated to consider someone at high-risk of COVID-19.

The list of people who are considered at high-risk changes constantly as we learn more about the virus. Please check with your doctor or pharmacist to see if you could be a candidate for a treatment to reduce your chances to become very ill should you get COVID-19.

Are you at high-risk of complications if you get COVID-19?

Please check **YES** or **NO** for each of the following questions to find out if you are at risk of complications should you get COVID-19:

- Are you 60 years of age and older? **YES** **NO**
- Do you have a weakened immune system?
For example, have you had an organ transplant, are you taking active treatments for cancer, or taking medications that suppress your immune system such as those used for rheumatoid arthritis (disease causing joint inflammation), multiple sclerosis (autoimmune disease affecting the nerves), Crohn's and colitis (inflammatory bowel diseases). **YES** **NO**
- Do you have a chronic medical condition like the ones listed below?
Asthma (moderate to severe), COPD (chronic obstructive pulmonary disease, emphysema or chronic bronchitis), dementia, diabetes, heart disease, high blood pressure, kidney disease, liver disease, lung disease, stroke, and neurological conditions. **YES** **NO**
- Are you pregnant? **YES** **NO**
- Do you live with obesity? **YES** **NO**
- Is your first series of COVID-19 vaccines incomplete? **YES** **NO**
- Have you missed your COVID-19 vaccine booster in the past 6 months? **YES** **NO**

If you answer yes to any of these questions, read the next page

Are you at high-risk of complications if you get COVID-19?

If you have answered **YES** to any of the questions on the previous page, you may be at high-risk of developing complications of COVID-19. You need to have a plan and be prepared in case you get COVID-19.

It is very important to get a COVID-19 test as soon as possible.

Remember: Your doctor or pharmacist may need to prescribe you a treatment to reduce your chances of becoming very ill. Treatments must be started within 5 days of your symptoms starting. You should not wait for your symptoms to become severe to get tested and consult your doctor or pharmacist should your result be positive.

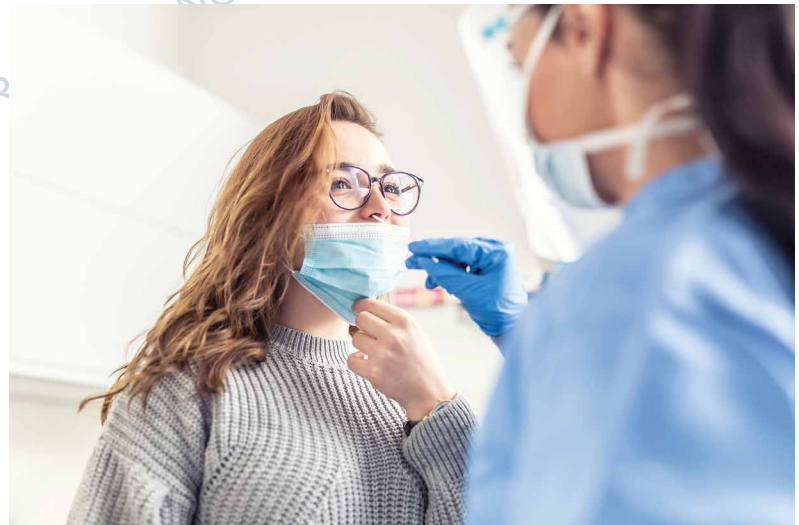


How to recognize if you have COVID-19

If you have symptoms that could be COVID-19, it is a good idea to get tested right away. Some of the COVID-19 treatments can only be given within a few days of you starting to feel sick, so it is **important to get a diagnosis as quickly as you can.**

What are the symptoms that you need to look for:

- sore throat (maybe more common with newer variants),
- runny nose, sneezing,
- new or worsening cough,
- shortness of breath or difficulty breathing,
- temperature equal to or more than 38°C (100.4°F), feeling feverish, chills,
- fatigue or weakness, muscle or body aches,
- new loss of smell or taste (maybe less common with newer variants),
- headache,
- stomach pain, diarrhea and vomiting.



How to recognize if you have COVID-19

If you have one or more of the following symptoms, you should immediately call 911 or go to the emergency department:

- Severe difficulty breathing (struggling for each breath, can only speak in single words)
- Severe chest pain (constant tightness or crushing sensation)
- Feeling confused or unsure of where you are

You should seek testing right away by:

- visiting a clinical assessment centre (where you can get tested, assessed, and provided treatment or a prescription)
- contacting your family doctor or your local clinic
- calling your local pharmacy
- if offered in your province, call 811 (a healthline for non-urgent issues where a nurse can help direct you to the right service)



What tests can be taken as soon as you recognize COVID-19 symptoms?

Currently there are 2 tests for COVID-19 in Canada. A **rapid antigen test** and a **polymerase chain reaction test (PCR)**.

Rapid Antigen Tests

An antigen is a kind of protein that triggers our immune systems to produce antibodies. COVID-19 has spike proteins on the surface of the virus. The rapid antigen test detects these proteins.

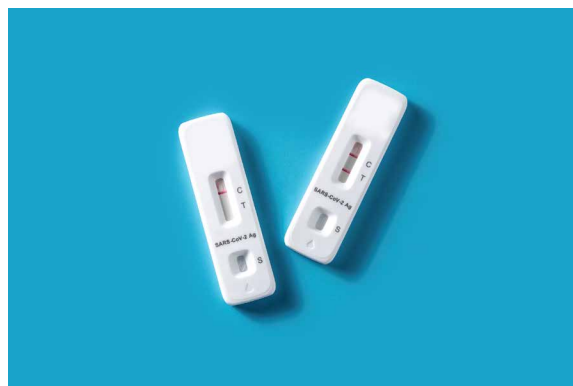
A rapid antigen test can be done at home anytime or at a pharmacy. A swab is used to swab the inside of the nose and then added into a liquid. A few drops of the liquid are dropped onto a test kit and you can read your results after about 15 minutes.

Where to get a home rapid antigen test kit

Rapid antigen tests may be available at your local pharmacy or can be ordered online. In some provinces, these tests are available free of charge from the pharmacy. In others, they can be bought in grocery stores and other retail stores.

How to get an antigen test done at a local pharmacy

Call your pharmacy in advance to make sure they offer this service; you might need to have an appointment while other pharmacies may offer drop-in services. In some provinces, you can access a website for setting up an appointment. See more in our section "Resources".



What tests can be taken as soon as you recognize COVID-19 symptoms?

Considerations for antigen tests

- Antigen tests have higher false negative rates when compared to a PCR test. This means you can actually have COVID-19 but the test says you don't have it.
- For the same reason, you may need to repeat the test (e.g. 24-48 hrs later). If two consecutive rapid antigen tests, separated by 24-48 hours, are both negative, it is unlikely that you have the virus that causes COVID-19.

Polymerase Chain Reaction Test (PCR)

In a PCR test, a healthcare professional will swab the inside of your nose. As compared to a rapid antigen test, this is a deeper nasal swab. Sometimes there can be swabbing of the throat. A PCR test has to be sent to the lab and it takes about 24 hours or longer to receive the results.

PCR results are more accurate than rapid antigen tests. However, PCR tests are not widely available and are not offered to everybody in Canada.

Testing positive: now what?

No risk factors for serious COVID-19 complications

If you test positive for COVID-19 and you are low-risk of becoming very sick from COVID-19, you should stay home, rest and you can take some over the counter fever or pain medications to help for your symptoms (such as Tylenol® or Advil®). If you have medical conditions, check with your doctor or pharmacist before taking any over the counter medications.

However, if you suddenly start feeling much worse, you should talk to your healthcare team, doctor, or go to the nearest hospital emergency room.

High-risk of becoming very sick from COVID-19

If you test positive and are at high-risk for becoming very ill from COVID-19, there are several treatments that can lower the risk.

Call your doctor or pharmacist **immediately** if you have symptoms and/or test positive for COVID-19, because these treatments work best if they are started right after you become sick. If you wait too long, you may not be able to get the prescribed treatments from your doctor or pharmacist.

Action Plan

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Being prepared to deal with COVID-19: the importance of an Action Plan

An important step that will allow you to act quickly should you develop symptoms of COVID-19 is to have an Action Plan in place. An Action Plan helps you identify who to contact when needed, what to do to remain well and avoid COVID-19, what to do if you recognize any COVID-19 symptoms and what actions to take - in case you are very sick.

Let us create your contact list

Contact List

Service	Name	Phone Number
Family Physician		
Pharmacist		
Others		

Being prepared to deal with COVID-19: the importance of an Action Plan

Your action plan when you feel well

To remain well, use your action plan to monitor your symptoms and implement prevention strategies on a regular basis.

I Feel Well

My Actions

- I get vaccinated and get booster shots when recommended for COVID-19, and other respiratory infections (flu, pneumonia)
- I wear a mask especially in crowded areas
- I wash my hands frequently
- I make sure I have at home a rapid antigen test kit to test for COVID-19 or, know if I am eligible and where to get a PCR test if I develop symptoms
- I know what symptoms could alert me of a potential COVID-19 infection
- I confirm with my doctor if I am considered at **high-risk** for developing serious complications of COVID-19. If so, I ask my doctor to verify my kidney function
- I continue to take any of my regular medications.
- I keep an updated medication list to allow my doctor/pharmacist to review interactions with potential therapies for COVID-19

Being prepared to deal with COVID-19: the importance of an Action Plan

Your plan of action when you feel sick

Let us identify the symptoms to look for that would warn you of a potential COVID-19 infection. You must be prepared to act quickly if you present with any of these symptoms:

I Feel Sick

My Symptoms (one or more)

- I have a sore throat, runny nose, and/or sneezing
- I have a new or worsening cough
- I have a temperature equal to or more than 38°C, feeling feverish, chills
- I have fatigue or weakness, muscle or body aches
- I have new loss of smell or taste
- I have a headache
- I have abdominal pain, diarrhea and vomiting

My Actions

- I take a rapid antigen test **right away** to confirm if I have COVID-19
- If I test positive, I contact my doctor or pharmacist **immediately** for them to assess if I need to start treatment as soon as possible. **Treatment must be started within 5 days of symptom onset.**
- I discuss with my doctor or pharmacist if any adjustments to my regular medications are required.

Being prepared to deal with COVID-19: the importance of an Action Plan

What should you do if you feel much worse or in danger?

I Feel Much Worse or at Danger

My Symptoms	My Actions
<ul style="list-style-type: none">• I have severe difficulty breathing (struggling for each breath, can only speak in single words)• I have severe chest pain (constant tightness or crushing sensation)• I am feeling confused or unsure of where I am	<ul style="list-style-type: none">• I call 911 or go to the nearest emergency room immediately

Available Treatments

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COVID-19 Treatments Available

In Canada the main type of prescribed drug treatment for COVID-19 is an antiviral. Whether you receive this treatment depends on your risk factors and needs.

Antivirals

COVID-19 is caused by the SARS-CoV-2 virus. Antivirals prescribed for COVID-19 can stop the virus from multiplying in your cells and overwhelming your body. They help your body fight off the infection, and help you get better faster.

The following is an approved antiviral prescribed for use in Canada:

Paxlovid® (Ritonavir and Nirmatrelvir)

Who is this medication for:

Adults (18 years of age or older), to treat mild to moderate COVID-19 in people who:

- Have a positive test result for COVID-19.
- Have a high-risk of getting severe COVID-19, including hospitalization or death.
- **Paxlovid must be taken within 5 days of becoming sick.**

How is it administered:

Paxlovid contains two types of pills:

- Nirmatrelvir (pink tablet): 150 mg in each tablet
- Ritonavir (white tablet): 100 mg in each tablet

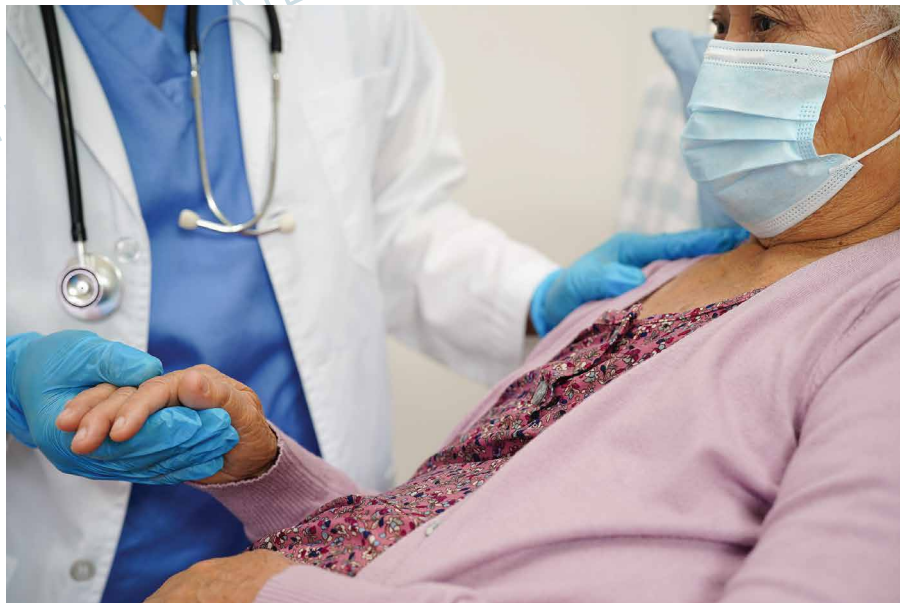
COVID-19 Treatments Available

Common Potential Side Effects:

- Altered sense of taste
- Diarrhea
- Muscle pain
- Nausea, Vomiting
- Headache

PAXLOVID is not recommended in patients with severe kidney disease. Patients with moderate kidney disease should talk to their healthcare professional, as they will require a reduced dose.

**If you do not qualify for Paxlovid, your doctor or pharmacist will explore other options with you. This includes other medications such as injected antivirals and monoclonal antibodies. Please see this module's appendices for additional information on other available therapies.



Information Resources on COVID-19

There are several reliable resources available to you to find the most up to date information on Health Canada approved treatments. See our list below:

- **Health Canada**

The Health Canada website has the most recent, reliable information and guidelines related to COVID-19 in Canada. There you can find information on COVID-19 that pertains to:

- Current statistics and situation in Canada
- Public health information (symptoms, **treatment**, spread, prevention and risk, personal protective equipment, medical supplies, government guidance, travel and borders, post COVID condition and Long COVID).
- Vaccines (safety, side effects, proof of vaccination, authorized vaccines, Canada's vaccine supply and donations).

- **Provincial Government Public Health Websites**

Every Province in Canada has a Public Health website with information on COVID-19 in that Province. Public health information in each Province can differ for things such as **treatments** and vaccines available.

- **World Health Organization (WHO)**

The WHO gives you weekly updates on the global, regional and country-level COVID-19 cases and deaths, highlighting key data and trends; as well as other pertinent pandemic information related to COVID-19.

<https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19.html>

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

Information Resources on COVID-19

- **Pharmacists**

Your local Pharmacist is an easily accessible, approachable source of information regarding COVID-19 **treatments** available to you. Select Pharmacies even offer COVID-19 vaccines and antigen test kits are available in pharmacy.

- **Your Health Care Team and Treating Physician**

Talk to your healthcare professional/doctor if you want more information on COVID-19 **treatments**. They will help identify if you are at risk of serious complications from a COVID-19 infection and what **treatments** may be right for you.

- **Family and Community Medicine, University of Toronto: Confused about COVID?**

This website is recommended by family physicians as a trusted source of information regarding COVID-19. Again, talk to your healthcare professional/doctor if you want more information on COVID-19 and ask for recommended sources of accurate information online.

To access the website, [click here](https://dfcm.utoronto.ca/confused-about-covid).

<https://dfcm.utoronto.ca/confused-about-covid>

Are you prepared to deal with COVID-19?

Now, let's see how confident you feel about your plan for dealing with COVID-19

1. I feel confident discussing with my doctor whether I am part of a high-risk group

1 2 3 4 5 6 7 8 9 10
not at all confident very confident

2. I feel confident in recognizing COVID-19 symptoms early.

1 2 3 4 5 6 7 8 9 10
not at all confident very confident

3. I have developed an action plan with my doctor to act quickly in case I develop COVID-19 symptoms.

1 2 3 4 5 6 7 8 9 10
not at all confident very confident

4. I know where to get tested if needed

1 2 3 4 5 6 7 8 9 10
not at all confident very confident

5. I feel confident in speaking with my doctor about treatment options

1 2 3 4 5 6 7 8 9 10
not at all confident very confident

In Summary

The good news is that we have different vaccines and COVID-19 treatments that can help us prevent this disease and protect the people who can become really sick from the virus. There many new treatments under study in Canada and around the world.

One of the best ways to protect yourself from COVID-19 is to get a COVID-19 vaccine and the recommended booster shots (unless you have a medical condition that prevents you from doing so). This also applies to getting the necessary vaccines for other respiratory infections (flu, pneumonia).

Other ways to protect yourself include:

- washing your hands frequently and wearing a mask, especially at indoor gatherings,
- make sure to have at home a rapid antigen test kit to test for COVID-19 or, know if you are eligible and where to get a PCR test if you develop symptoms,
- continue to take your regular medications as prescribed by your doctor,
- stay home when you are sick.

Please refer to the “Prevention options for COVID-19” module of the series “Living Well Beyond COVID-19” for more information on the ways you can protect yourself.

An important step that will allow you to act quickly should you develop symptoms of COVID-19 is to have an Action Plan in place. Don't skip this step! It is essential. You can use the Action Plan section in this module to help you develop your own. Even better, working in collaboration with your doctor and pharmacist will allow you to learn more about your local resources and where you can get rapid access to tests and treatments when you need them.

Appendix

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Appendix 1 - Antivirals

Types of Prescribed COVID-19 Treatments Available

In Canada the main type of prescribed drug treatment for COVID-19 is an antiviral. Whether you receive this treatment depends on your risk factors and needs.

Antivirals

COVID-19 is caused by the SARS-CoV-2 virus. Antivirals prescribed for COVID-19 can stop the virus from multiplying in your cells and overwhelming your body. They help your body fight off the infection, and help you get better faster.

The following are some approved antivirals prescribed for use in Canada:

- Paxlovid® (Ritonavir and Nirmatrelvir)

Appendix 1 - Antivirals

Paxlovid[®] (Ritonavir and Nirmatrelvir)

Who is this medication for:

Adults (18 years of age or older), to treat mild to moderate COVID-19 in people who:

- Have a positive test result for COVID-19.
- Have a high-risk of getting severe COVID-19, including hospitalization or death.
- **Paxlovid must be taken within 5 days of becoming sick to work.**

How is it administered:

Paxlovid contains two types of pills:

- Nirmatrelvir (pink tablet): 150 mg in each tablet
- Ritonavir (white tablet): 100 mg in each tablet

Common Potential Side Effects:

- Altered sense of taste
- Diarrhea
- Muscle pain
- Nausea, Vomiting
- Headache

PAXLOVID is not recommended in patients with severe kidney disease. Patients with moderate kidney disease should talk to their healthcare professional, as they will require a reduced dose.

**If you do not qualify for Paxlovid speak to your doctor or pharmacist about other options for you.

Appendix 2 – Monoclonal antibodies

Monoclonal antibodies are antibodies that can attach themselves to the spike protein on the SARS-CoV-2 virus. The spike protein is what allows COVID-19 to enter your healthy cells and infect them. By attaching themselves to the spike protein, they prevent the virus from entering and infecting your cells. This can stop the COVID-19 infection from getting worse and keep you out of the hospital.

Bamlanivimab[®]

Who is this medication for:

- Adults and children 12 years of age or older and weigh at least 40 kg (kilograms)
- Not already in the hospital with COVID-19
- Patients at high-risk of complications of COVID-19

How is it administered:

- Bamlanivimab 700 mg is administered once by a healthcare professional through intravenous infusion (IV) over the course of 1 hour.

Possible side effects:

- Allergic reactions: fever, chills, nausea, headache, shortness of breath, low blood pressure, wheezing, swelling of your lips, face, or throat, rash including hives, itching, muscle aches, and dizziness.
- Worsening symptoms after treatment: including fever, difficulty breathing, rapid or slow heart rate, tiredness, weakness, or confusion.
- Bamlanivimab could interfere with the body's own ability to fight off a future infection of COVID-19 and may reduce the body's immune response to a COVID-19 vaccine.

Appendix 2 – Monoclonal antibodies

Casirivimab (casirivimab) and imdevimab (imdevimab)[®]

Who is this Medication for:

- Adults and children 12 years of age or older and weigh at least 40 kg (kilograms)
- Not already in the hospital
- Patients at high-risk of being hospitalized or dying due to COVID-19

How is it administered:

- Casirivimab 1200 mg and imdevimab 1200 mg must be administered together, one time only by a healthcare professional through intravenous infusion (IV) over the course of 1 hour.

Possible side effects:

- Allergic reactions or reactions following the infusion: fever, chills, stomach pain feeling sick (nausea and vomiting), headache, altered mental status, difficulty breathing, chest tightness, abdominal pain, fall or increase in blood pressure, red face or swelling of the face, throat irritation, rash with hives, itching or an itchy rash, muscle pain, light-headedness, uneven heartbeat, low oxygen in blood, increased sweating.
- Worsening symptoms after treatment: including fever, difficulty breathing, rapid or slow heart rate, tiredness, weakness or confusion.
- Casirivimab and imdevimab could interfere with the body's own ability to fight off a future infection of COVID-19 and may reduce the body's immune response to a COVID-19 vaccine.

Appendix 2 – Monoclonal antibodies

Sotrovimab[®]

Who is this Medication for:

- Adults and children 12 years of age or older and weigh at least 40 kg (kilograms)
- Not already in the hospital for COVID-19
- Patients at high-risk of being hospitalized or dying due to COVID-19, because of their age or medical conditions

How is it administered:

- Sotrovimab 500 mg is administered once by a healthcare professional through intravenous infusion (IV) over the course of 1 hour.

Possible side effects:

- Diarrhea

Rare serious side effects:

- Infusion Reaction: fever, chills, nausea or feeling sick, headache, difficulty breathing, chest tightness, fall or increase in blood pressure, swelling of the face, throat irritation, rash with hives, itching or an itchy rash, muscle pain, uneven heartbeat, low oxygen in blood, increased sweating, dizziness or light headedness.
- Sotrovimab could interfere with the body's own ability to fight off a future infection of COVID-19 and may reduce the body's immune response to a COVID-19 vaccine.

Acknowledgements

Living Well Beyond COVID-19 developed in consultation with groups of healthcare professionals, educators and COVID-19 patients across Canada.

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Michael Boivin, BSc Phm, RPh, CDE, CTE - Alan Kaplan, MD, CCFP(EM), FCFP, CPC(HC) - Peter Lin, MD, CCFP - Emily Horvat, BSc Kin - Katrina Metz, RRT - Maria Sedenov, MM, BEng

Collaborating Organizations

- RESPTREC
- Réseau québécois d'éducation en santé respiratoire (RQESR)

An initiative of



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Sponsors and collaborators



"I was especially worried about COVID-19 and its potential consequences since I also suffer from severe asthma. But after reading this module, I feel more at ease, specially with the action plan prepared with my doctor. I know how to protect myself and who to call when in need. I highly recommend this module to anyone who wants to learn more about COVID-19 treatment and how to stay healthy."

Diane, 57, living with severe Asthma

ISBN 978-1-989791-41-7



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