

COVID-19: Spinal Cord Injury Specifics

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Key points

- Individuals with a spinal cord injury (SCI) may have reduced respiratory function and other factors that can predispose them to COVID-19 complications.
- Prevention is important given no COVID-19 treatment exists other than supportive care. Precautions such as physical distancing (6 feet), washing hands and cleaning, and maintaining respiratory health are essential to reducing risk.
- Seek medical attention should you believe that you have been exposed to the virus.

Are you at a higher risk for COVID-19 because of your SCI?

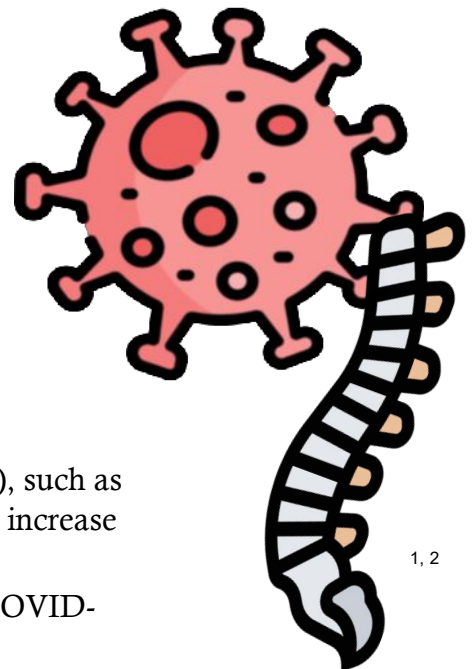
What we know about the risks for people with spinal cord injury (SCI) is based on how SCI and COVID-19 both affect the body.

Respiratory function

Everyone with SCI has some level of impairment in respiratory function given how SCI weakens breathing muscles, however people with cervical and upper thoracic levels of injury may have greater impairments than those with lower thoracic levels of injury. Still, all levels of SCI above T12 have a reduced ability to both inspire air maximally and to forcefully expel air through coughing. With an impaired cough, individuals are less able to manage respiratory secretions.

Other risk factors

- Some complications (common secondary health issues of SCI), such as cardiovascular disease or higher body mass index (BMI), may increase the risks of a more serious case of COVID-19.
- People with SCI may also have a greater risk of exposure to COVID-19, as those who require assistance cannot avoid contact with caregivers.

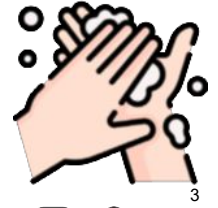


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What are the precautions you can take to prevent exposure?

Given that there is no current treatment for COVID-19 other than supportive care, it is best to take precautions to avoid exposure to the virus whenever possible.

- Practice physical distancing (6 feet), avoid large groups and stay home when possible.
- Clean all surfaces regularly with soap and warm water or antibacterial solution.
- Wash your face and hands after being in public or having in-person conversations.
- Wash clothes after each wear and if possible separate indoor and outdoor clothes.
- Learn about home delivery options from grocery stores, pharmacies, and other institutions providing essential services.
- Keep 30 days of medications and medical supplies on hand (i.e., catheters, wound dressings, disposable gloves).
- If you require the assistance of caregivers, ensure that they use PPE and follow protocols re: minimizing the transmission of COVID-19.
- Learn how you can connect with your local SCI organization (e.g., SCI-BC).



Maintaining a clear respiratory tract

- Stay hydrated to keep lung secretions thin.
- Change positions frequently, and use gravity to help clear your lungs.
- Practice deep breathing and coughing exercises to strengthen respiratory muscles.
- Eat healthy, well-balanced meals to boost your immune system.



How can you keep your equipment clean?

Wheelchair users

As a wheelchair user, it is especially important to keep at least 6 feet from another person. Because your head is lower than people who are standing you may be more vulnerable to respiratory droplets. You may consider wearing eye protection when you are not able to maintain physical distancing.

Manual wheelchairs

- If possible, avoid making contact between your hands and your tires when pushing (and launder your pushing gloves frequently).
- Remove your pushing gloves and/or put on disposable gloves before touching or cleaning your chair.
- Use antibacterial solution to clean wheels, brakes, and push rims.
- Wash your hands then avoid touching your tires if possible (use paper towels or cloth to cover when transferring).



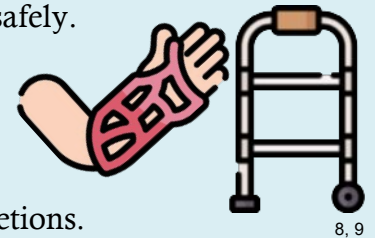
Power wheelchairs

- Use antibacterial solution on a cloth to clean the joystick (and any other controls), armrests, tray, and headrest (have someone help you if needed).
- Get assistance to help wash or sanitize your hands if unable to do so independently.



Things to note about assistive devices

- Regularly clean assistive devices with antibacterial products (i.e., splints, cuffs, braces, reachers, canes, crutches, handgrips and brakes, storage compartments).
- Refresh your memory about best practices for using your devices safely.
- Complete a maintenance check.



Ventilators and respirators

- Wash hands before and after working with the ventilator.
- Ensure caregivers wear a mask or eye shield when suctioning secretions.
- Clean and disinfect medical equipment according to manufacturing descriptions.
- Change filters according to manufacturing descriptions.

Avoid using your mouth: Ask for help, especially if others are in contact with the materials.

What can you do to ensure you are interacting safely?

On the following list, check off which guidelines you already practice. Determine where you can make improvements to ensure your own safety, and the safety of those around you.

- Ensure someone is available to address any of your urgent needs
- Wear a mask, and request that those around you also wear a mask
- Have others wash their hands when they arrive and each time interacting with you
- Avoid having others directly touch your face, or their own
- Ask others to stay home if they are unwell (temperature >38° or 100.4°F), if they are exhibiting any symptoms of COVID-19, or if they have possibly been exposed to an unwell person
- Plan backup caregivers, and prepare others who may be needed to support you in an emergency
- Let sick employees who are sent home know that there is an EI sickness benefit for those forced to quarantine due to COVID-19
- Read through the [SCIRE Project Caregiver Fact-sheet](#)

When should you be seeking medical attention, and what do your healthcare providers need to know?

Medical appointments

Confirm that your provider is still seeing patients, or if an online virtual health service is available. In deciding whether to attend regular medical appointments, discuss the urgency of appointments with your doctor/care provider. Some appointments if delayed can lead to serious health risks, but others can be safely postponed (especially given additional COVID exposure risks).

When to seek medical care if you think you have COVID-19:

- If you think you are infected with COVID-19, read what to do from a reputable diagnostic source (e.g., the [BC CDC website](#)).
- If you are at a greater risk of developing severe symptoms (i.e., upper thoracic and cervical levels of SCI), visit the hospital when experiencing any shortness of breath.
- If it becomes harder to breathe, you are unable to swallow, or you feel much worse than when you got tested, seek immediate medical care at an urgent care clinic or Emergency department.

When interacting with emergency services be sure to:

- Inform medical providers/emergency responders about your SCI and how it affects your respiratory system.
- Provide breathing equipment, assistive devices, and/or a personal directive.

Read Vancouver Coastal Health's [article](#) about what to do if you think you have COVID-19!



Related resources

[SCIRE Project: Guidance for Caregivers during COVID-19](#)

[SCIRE Project: COVID-19: Mental Health support](#)

[SCIRE Project: COVID-19: Social Isolation with SCI](#)

[Vancouver Coastal Health: COVID-19, \[if you are sick\] Resource](#)

Reference list

Evidence for "COVID and SCI Specifics" is based on:

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