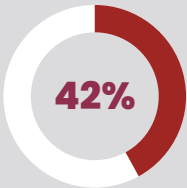


# Post COVID-19 Condition (PCC): A Quick Reference Guide for Clinicians

This clinician guide offers a concise summary of clinical resources for Post COVID-19 Condition.

3.5 million

Adults in Canada have experienced longer term symptoms after a confirmed or suspected COVID-19 infection (As of June 2023).<sup>[1]</sup>



Almost half of those have experienced symptoms for 1 year or longer.<sup>[1]</sup>

## What is Post COVID-19 Condition?

Post COVID-19 Condition, or Long COVID, usually appears within three months from the acute COVID-19 infection and lasts at least two months. Symptoms vary, and can change or worsen over time, and significantly impact daily life, according to the World Health Organization.<sup>[2]</sup>



How can I tell if my patient has Post COVID-19 Condition?

## Screening & Testing

Has the patient been tested for SARS-CoV-2 acute infection?

Yes

No

Was the test positive?

Yes

No

### COMMON SYMPTOMS

(that can't be explained by another condition)

The patient has had persistent symptoms within 3 months after acute infection, and these symptoms have lasted over 2 months.



Fatigue



Shortness of breath



Brain fog



Pain



Sleep problems



Post-exertional malaise<sup>[3]</sup>

For the full list of Common Symptoms, please refer to figure 2, 3 and 4.<sup>[4]</sup>

Yes

Your patient may have PCC.

The patient has suspected symptoms of SARS-CoV-2 acute infection.

Yes

No

It is unlikely that the patient has PCC. Consider alternative diagnosis for the symptoms.

What kind of care does my patient require?



Does my patient have any of the following factors?

- ☐ Other medical conditions (i.e. diabetes, respiratory, cardiac, cancer)
- ☐ Social determinants of health (i.e. house and food insecurity, lack of support, lack of healthcare access)
- ☐ Population group (i.e. Indigenous peoples, refugees and immigrants, 2SLGBTQIA+, persons involved in the justice system, people with disabilities, elderly people, pregnant women, children)
- ☐ Patients whose acute infection required hospitalization.

Yes

**Complex care:** requires a plan of care and **closer follow-up** by a primary care provider.

- May require consultation with other specialists and/or allied health care professionals or care team.
- Care navigators or self-care programmes or resources may be applicable to some patients.

No

**Uncomplicated:** requires care navigators or self-care programmes/resources.

- Primary care provider follow-up as needed.
- If indicated, based on patient presentation, may require consultation with a specialist or allied health care professional.

See symptoms and management for complex care and uncomplicated below.



How can I help my patients manage their symptoms?

For all patients:

- Take a symptom history, validate their lived experiences in an accessible, culturally responsive way.
- Determine the functional status of your patient.
- Complete a physical examination, performing special testing based on history and symptoms.

## See page 2 for specific symptom approach

The symptoms on page 2 are the most common symptoms and recommendations. For the full list of common symptoms, please refer to figure 2, 3 and 4.<sup>[4]</sup>

Scan to access the digital version of this Quick Reference Guide, complete with resource links.



Scan for more details about Post COVID-19 Condition and the CAN-PCC National Guidelines.



## Diagnostics

## Clinical Resources



**Post-exertional malaise**

- For Fatigue, rule out PEM.
- Use a validated questionnaire to assess:  
**PEM:** i.e. DePaul Symptom Questionnaire (DSQ)  
**Fatigue:** i.e. Post COVID-19 functional status scale, & EuroQoL-5D [EQ-5D].
- Order laboratory test based on assessment (i.e. Thyroid, glucose, CBC, iron studies)



**Fatigue**

- Use validated cognitive screening tools based on initial clinical presentation.
- Rule out neurological conditions and possible reversible causes of cognitive impairment.



**Brain fog**

- Perform a thorough clinical assessment to rule out acute cardiopulmonary etiology.
- Perform tests based on clinical assessment (i.e. chest x-ray, ECG, spirometry, CBC, etc.)



**Shortness of breath**

Use established tools for assessing insomnia severity.



**Sleep problems**

Screen for the following, using validated screening tools and established approaches (CAMH):

- Screen for depression for adults with post COVID-19 condition (*strong recommendation, moderate certainty of evidence*) with established tools such as PHQ 9/Geriatric Depression Scale etc.
- Screen for anxiety (*conditional recommendation, very low certainty of evidence*)
- Screen for other mental health conditions such as generalized anxiety disorder (GAD-7 tool), post-traumatic stress disorder and suicide risk as clinically indicated.



**Mental Health**

- Perform a thorough clinical assessment to rule out acute cardiac etiology.
- CAN-PCC Recommendations:

>Troponin >BNP/NT-proBNP >ECG >POTS  
>Echo >Holter >D-dimer assessment



**Cardiac**

- Use tools (i.e., Post-COVID-19 functional status scale, and EuroQoL-5D) to evaluate adults with suspected post COVID-19 condition and dizziness and/or fatigue (*conditional recommendation, very low certainty of evidence*)
- Perform a thorough clinical assessment to rule out acute cardiac, neurological or vestibular etiology.
- Order laboratory tests based on assessment (i.e. Thyroid, glucose, CBC, iron studies).
- Consider assessment for POTS and other arrhythmia.



**Dizziness**

Approach according to symptom presentation and clinical assessment.

Common GI symptoms include:

- Abdominal pain
- Diarrhea & constipation
- Nausea & vomiting

Ensure screening for colorectal cancer accordingly.



**Gastro-intestinal**

Assess pain and impact on quality of life using validated tools:

- Chronic Non-Cancer Pain Assessment
- Brief Pain Inventory
- DN4 Questionnaire for Neuropathic Pain



**Pain**

- Perform a thorough clinical assessment to rule out acute cardiopulmonary etiology.
- Approach based on symptom presentation and clinical assessment and refer when appropriate.



**Children & Adolescents**

Patient education about the 4 Ps; Pacing, Prioritizing/postpone, Positioning/modify (i.e. while sitting), and Planning.

Treatment should prioritize comorbidities and symptoms based on severity.  
Fatigue in Adults: evaluation and management

- For medication-related recommendations, please refer to CAN-PCC Guidelines.
- Refer to OT or Specialist.
- Refer, as needed, based on diagnostics and symptoms.

Sample clinical resources:

- Mild Dyspnea | CMAJ
- Chronic Dyspnea

CAN-PCC suggests using melatonin in addition to sleep hygiene advice (*conditional recommendation, very low certainty of evidence*)

- Consider established treatments for symptoms of insomnia.

Consider using RxFiles handouts:

- Sedatives | RxFiles
- Insomnia Disorder in Older Adults | RxFiles

Sample clinical resources:

- Treat anxiety and post-traumatic stress disorder (PTSD) and other mental health conditions, if diagnosed, with established approaches (CAMH).
- Depression Among Older Adults | CCSMH
- Use local referrals, resources and guidelines, e.g. Major Depressive Disorder in Adults – Diagnosis and Management | BC Guidelines

Sample clinical resources:

- Cardiovascular practice updates | CCS
- Thrombosis practice updates | Thrombosis Canada
- Postural orthostatic tachycardia syndrome | CMAJ
- Postural Orthostatic Tachycardia Syndrome | Dysautonomia International

If cardiac, neurological, or other conditions requiring specialist assessment, refer accordingly. If these conditions have been ruled out, consider the following resources:

- Postural orthostatic tachycardia syndrome | CMAJ
- Postural Orthostatic Tachycardia Syndrome | Dysautonomia International
- Assess using the 10-minute standing test.
- Dizziness: Light-Headedness and Vertigo | SaskHealthAuthority

- Canadian Association of Gastroenterology

Sample clinical resources:

- Opioid therapy and chronic non-cancer pain | CMAJ
- PEER simplified chronic pain guideline
- Chronic Non-Cancer Pain Treatment

- Long COVID in children
- COVID-19 information and resources for paediatricians | Canadian Paediatric Society
- Postacute Sequelae of SARS-CoV-2 in Children | Pediatrics | American Academy of Pediatrics

[1] Government of Canada. "Fall 2023 Report" <https://health-infobase.canada.ca/covid-19/post-covid-condition/fall-2023-report.html#>

[2] World Health Organization. "Post COVID-19 Condition." <https://www.who.int/teams/health-care-readiness/post-covid-19-condition>

[3] Vellestad, Nina K., and Mengshoel, Anne Marit. "Post-Exertional Malaise in Daily Life and Experimental Exercise Models." *Frontiers in Physiology*, 2023. <https://pubmed.ncbi.nlm.nih.gov/38111900/>

[4] O'Mahoney LL, Routen A, Gillies C, Ekezie W, Welford A, Zhang A, et al. "The prevalence and long-term health effects of Long Covid among hospitalised and non-hospitalised populations: a systematic review and meta-analysis." 2023 Jan 1;55:101762. <https://pubmed.ncbi.nlm.nih.gov/36474804/>

**Scan to access the PCC Patients & Families site, offering a range of patient resources to support your clinical care and assist your patients.**

