

The post-COVID-19 condition: From clinical evaluation to management.

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Q&A with BC and Québec experts on the clinical management of COVID-19
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COVID-19: a pandemic that has tested our resilience

3,335,678 Canadians got COVID-19*

37,094 Canadians died from
COVID-19

3,187,708 Canadians survived the
acute phase of COVID-19

At least 10%** of COVID-19 survivors will have long-term sequelae

That's at least 318,771 Canadians



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* [Health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html](https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html); data from March 9 2022

** Greenlaugh T. et al., (2020) *BMJ*; based on UK COVID-19 Symptom Study.

Post-COVID-19 condition: Terminology and Definition

- Post-COVID-19 condition
- Post-acute sequelae of COVID-19 (PASC)



WHO (October 6, 2021)

- Individuals with a history of probable or confirmed SARS-CoV-2 infection.
- 3 months from the onset of COVID-19.
- Symptoms that last for at least 2 months and not explained by an alternative diagnosis.
- Common symptoms include fatigue, shortness of breath, cognitive dysfunction but also others which generally have an impact on everyday functioning.
- Symptoms may be of new onset following initial recovery from acute COVID-19, or persist from the initial illness.
- Symptoms may fluctuate or relapse over time.

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Post-COVID-19 condition: Potential Risk factors

- Occurs irrespective of the initial severity of infection
- Having more than >5 symptoms during the acute infection
- Higher BMI
- Being female
- Having asthma
- Having poor pre-pandemic mental health
- Having poor general health
- Being older or middle aged (20-70 years)
- Type 2 diabetes
- SARS-CoV2 RNAemia
- EBV viremia
- Specific autoantibodies



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Su, Y., et al. (Jan 2022); Cell. *–used multi-omics approach*

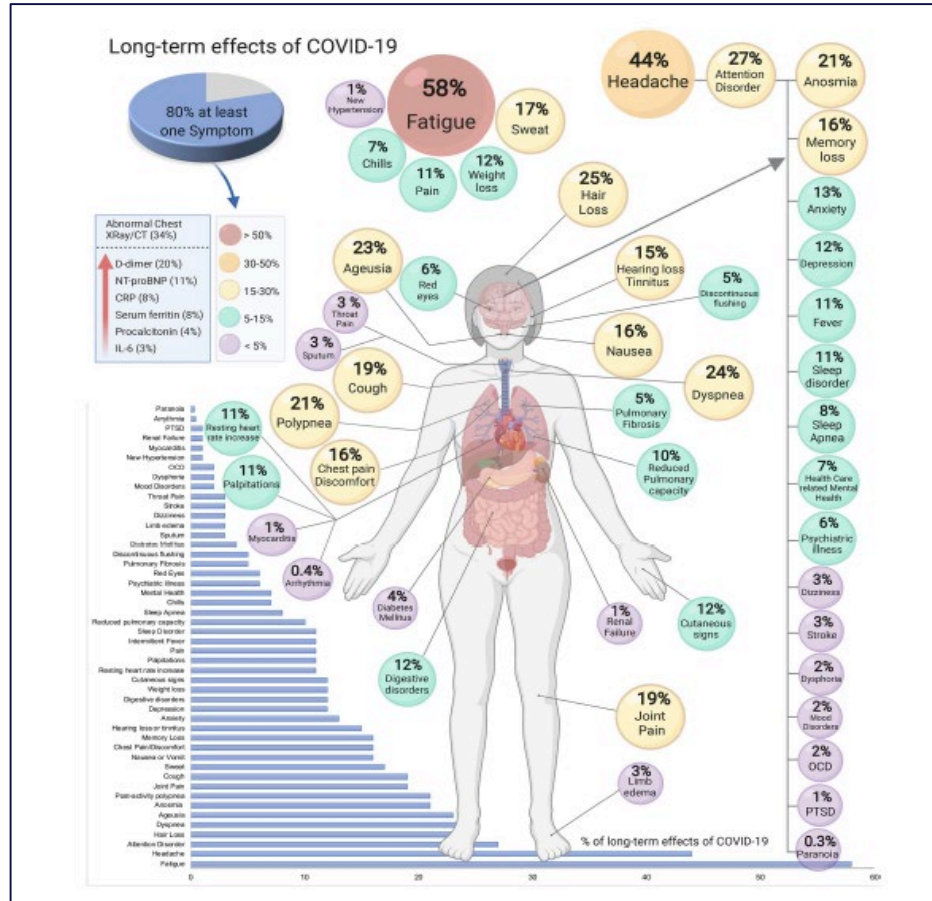
Sudre, C.H., et al. (April 2021); Nature Med. *–used COVID symptom study app*

Thompson E.J., et al. (July 2021); MedRxiv. *–used 10 longitudinal study samples and electronic health records (EHR)*

Crook, H., et al., (July 2021); BMJ.

Post-COVID-19 condition: common signs and symptoms

Most common symptoms	
Fatigue	58%
Headache	44%
Attention disorder	27%
Hair loss	25%
Dyspnea	24%



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Clinical Evaluation and Management

- Determine if current condition is due to:
 - Sequelae from acute COVID-19
 - An exacerbation of an existing comorbidity
- Eliminate all conditions unrelated to COVID-19
- Symptoms are often not associated with objective findings on initial evaluation
- Management:
 - May differ if patient had severe COVID-19
 - Should be symptom-based, personalized and ideally evidence-based
 - May include promoting a progressive return to activity when safe to do so
 - May include self-management of certain symptoms



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IRCM post-COVID-19 (IPCO) Research Clinic

OBJECTIVES:

1. Comprehensively evaluate the long-term complications of COVID-19.
2. Establish a biobank.
3. Elucidate the pathophysiological mechanisms underlying the post-COVID-19 condition.
4. Uncover novel therapeutic targets to treat the post-COVID-19 condition.

