

# POST COVID-19 CONDITION

## OCSO BIWEEKLY SCAN OF EVIDENCE #16

January 29- February 11, 2022

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### SCOPE

This biweekly update presents an analysis of new evidence, guidance and issues related to post COVID-19 condition (commonly referred to as 'long COVID') and synthesizes the current state of knowledge. Comprehensive lists of details and resources on this issue are available at the Office of the Chief Science Officer.

### CURRENT STATE OF KNOWLEDGE

The typical duration of acute COVID-19 illness is two to four weeks. However, some patients have described debilitating symptoms persisting or recurring for weeks or months after acute illness. The range of symptoms reported is broad, and can vary from mild to more severe and debilitating effects that can affect both young and older individuals, regardless of the severity of their initial COVID-19 symptoms in the acute stage. These symptoms are often described as, Post COVID-19 condition (WHO terminology), post-acute sequelae of SARS-CoV-2 infection (PASC), and long COVID (used by patient groups). Affected individuals are commonly referred to as COVID-19 long-haulers. While scientific knowledge on these conditions is building, there is still much that is unknown about this condition. There have been reports of more than 100 symptoms or difficulties with everyday activities.

There is limited data suggesting that the condition may be more likely to develop in those:

- who were hospitalized during acute infection;
- had more than 5 COVID symptoms during the acute phase;
- have pre-existing respiratory disease;
- are older;
- are women; and
- have other co-morbidities or have higher BMI.

There are currently no preventative strategies or prognostic markers. Typical therapeutic itinerary involves consultations with multiple specialists and puts emphasis on self-management (rest & relaxation, self-pacing, etc). Emerging evidence points to the importance of multidisciplinary care given the heterogeneity of symptoms associated with Post COVID-19 condition. Multidisciplinary teams in "long COVID" clinics have been set to include professionals from the following fields: rehabilitation, respiratory and cardiac consultants, physiotherapists, occupational therapists, psychologists, etc.

It is anticipated that [Post COVID-19 condition](#) will have medium and long-term impact on public health in Canada. Further research with an equity lens on the predisposing conditions and risk factors is needed. Based on research to date, and reviewed by the Public Health Agency of Canada as part of a living [systematic review](#), 56% of individuals who have had COVID-19 reported the presence of one or more symptoms 12 weeks after diagnosis. About [58%](#) of children had 1 or more symptoms 4 weeks or more after their initial COVID-19 infection. Post COVID-19 condition will have implications for the economy, as well as federal programs including disability benefits, employment related measures and sick pay, among others. It is reported that 10% of adults are unable to return to work in the long term. The [WHO](#) has said that about one in 4 people infected with COVID-19 have experienced a post-COVID-19 condition for at least 1 month. One in 10 people experience symptoms lasting beyond 12 weeks.

This week's scan includes a proposed [definition](#) for long COVID in children published in *Archives of Disease in Childhood*, as well as a [study](#) in the *Lancet* examining long COVID symptoms in adolescents, and a [review](#) looking at long COVID in hematologic patients.

## GUIDELINES OR STANDARDS

- The **WHO** has developed a [clinical case definition](#) of post COVID-19 condition by Delphi methodology that includes 12 domains, available for use in all settings. This first version was developed by patients, researchers and others with the understanding that the definition may change as new evidence emerges and our understanding of the consequences of COVID-19 continues to evolve.
  - *“Post COVID-19 condition occurs in individuals with a history of probable or confirmed SARS CoV-2 infection, usually 3 months from the onset of COVID-19 with symptoms and that last for at least 2 months and cannot be explained by an alternative diagnosis. Common symptoms include fatigue, shortness of breath, cognitive dysfunction but also others and generally have an impact on everyday functioning. Symptoms may be new onset following initial recovery from an acute COVID-19 episode or persist from the initial illness. Symptoms may also fluctuate or relapse over time.”*
  - **WHO Q&A page** on Post-COVID-19 Condition (December 2021).
  - **(NEW)** On 1 March 2022 from 1:30 – 3:30PM CET WHO will host a **webinar** focused on **neurology and mental health in post COVID-19 condition**.
- The U.S. **CDC** describes [Post-COVID conditions](#) as a range of new, returning, or ongoing health problems people experience four or more weeks after first being infected with the virus that causes COVID-19. The CDC highlights the various types of post-COVID conditions such as: Multiorgan Effects of COVID-19, Effects of COVID-19 Illness or Hospitalization, and ‘New or Ongoing Symptoms’. The CDC posted [Interim Guidance](#) for healthcare providers on Evaluating and Caring for Patients with Post-COVID Conditions. Post-COVID conditions can be considered a disability under the [Americans with Disabilities Act \(ADA\)](#). The CDC also released information on [Caring for People with Post-COVID Conditions](#).
- Rapid [guidelines](#) for healthcare professionals by UK **NICE** (Updated November 2021).
- **Chartered Society of Physiotherapy** in UK published its COVID-19 [rehabilitation standards](#), which includes guidance about community-based rehab for people with COVID-19 and long COVID (July 2021).
- [Guidelines](#) to help doctors manage long COVID patients published in *British Journal of General Practice* (August 2021).
- UK **NHS** [guidance](#) for Post-COVID syndrome assessment clinics (April 2021).
- **CIHI** [guidance](#) for clinicians to ensure that data supports monitoring for Post-COVID conditions.
- [Guidance](#) for **Canadian Rehabilitation and Exercise Professionals** on Post COVID-19 condition and rehabilitation management strategies (August 2021).
- **Government of Canada:** [COVID-19 for health professionals - Post COVID-19 condition](#)
- **Center for Effective Practice** – [COVID-19: Clinical Guidance for Primary Care Providers - Long-term symptoms / Post-acute sequelae of COVID-19 \(PASC\)](#)
- [Guideline S1: Long COVID: Diagnostics and treatment strategies](#) (*Wiener klinische Wochenschrift*)
- American Academy of Physical Medicine and Rehabilitation (**AAPM&R**): [Cognitive Symptoms Guidance](#) and [Breathing Discomfort Guidance](#).
- Royal Australian College of General Practitioners (**RACGP**) [guidance](#) for GPs caring for ‘long COVID’ patients.
- **(NEW)** A paper by [Stephenson et al.](#) published in *BMJ’s Archives of Disease in Childhood* has produced a consensus on a definition of **long COVID in children**:
  - *“Post-COVID-19 condition occurs in young people with a history of confirmed SARS CoV2 infection, with one or more persisting physical symptom for a minimum duration of 12 weeks after initial testing that cannot be explained by an alternative diagnosis. The symptoms have an impact on everyday functioning, may continue or develop after COVID-19 infection, and may fluctuate or relapse over time.”*

## NATIONAL AND INTERNATIONAL DEVELOPMENTS (JAN 29-FEB 11, 2022)

### CANADA

- (NEW) Patients with a BC Care Card who have symptoms, persisting 3 or more months can be referred to the [BC Post-COVID-19 Interdisciplinary Clinical Care Network](#). Effective March 1, 2022, a patient does not need a positive COVID test for referral.
- (NEW) A [Toronto tech institute](#) is using artificial intelligence (AI) and social media to track and determine which long-COVID symptoms are most prevalent. The Vector Institute, an AI organization based at the MaRS tech hub in Toronto, has teamed up with telecommunications company Telus Corp., consulting firm Deloitte and diagnostics and pharmaceuticals business Roche Canada to help health care professionals learn more about the symptoms that people with a long-lasting form of COVID experience. They built an AI framework that used machine learning to locate and process 460,000 Twitter posts from people with long COVID. About 80% of adults surveyed by Viral Neuro Exploration, COVID Long Haulers Support Group Canada and Neurological Health Charities Canada reported one or more symptoms between 4 and 12 weeks after they were first infected.
- (NEW) A recent survey created by [VIDO-InterVac](#) (University of Saskatchewan) aims to gather more information about long COVID symptoms. The survey is open to anyone and is available through an app called Ethica. Dr. Alyson Kelvin with [VIDO-InterVac](#) said if health-care experts can understand what people are experiencing with long COVID, they may be able to start developing support services and treatments locally.

### UK

- (NEW) The latest data, published on [February 3](#) from the Office of National Statistics (ONS) in the UK shows that around 1.3 million people reported having long COVID between December 2021 and January 2022. The [figure](#) shows an increasing trend from previous months — 1.27 million at the beginning of December and 945,000 in early July. Previous estimates showed that between 10-30% of people with COVID-19 developed long COVID. Although the number of people with COVID-19 is rising due to Omicron, the number of people reporting long COVID symptoms is not, which could mean vaccines are conferring protection

### US

- (NEW) A [study](#) published in the *Journal of the American Medical Association Network Open* found that hospitalized patients who tested positive for COVID-19 were more likely to experience shortness of breath, fatigue and Type 2 diabetes months later. The research, [led by scientists from the CDC](#) and the Louisiana Public Health Institute, examined health record data from more than 2 million patients who were tested for COVID-19 between March and December 2020, and who had medical encounters between 31 and 150 days after testing. "Although new symptoms and conditions occurred infrequently, applying the proportions of these rare events to the millions of persons infected with SARS-CoV-2 means that a substantial number might experience new symptoms and conditions after their acute illness," observed the researchers in the study.

## EMERGING SCIENTIFIC EVIDENCE (JAN 29-FEB 11, 2022)

### EVIDENCE PRODUCTS

TITLE AND AUTHOR	EVIDENCE TYPE	SUMMARY
<a href="#">Challenges and Management of Long COVID in Individuals with Hematological Illnesses</a> (Yelin et al)	Review (Available in <i>Acta Haematol</i> )	COVID-19 has impacted hundreds of millions of people globally, a relatively large proportion of whom continue to suffer from ongoing, sometime debilitating symptoms. This phenomenon, termed "long COVID", is difficult to diagnose and manage because of a paucity of objective findings and despite the abundance of descriptive data published so far. In this review we aimed to describe the

		common manifestations of long COVID, diagnostic and management challenges, and address specific aspects in hematologic patients.
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### SELECT PRIMARY RESEARCH

TITLE AND AUTHOR	SOURCE	SUMMARY
<a href="#">Neuropsychological, medical and psychiatric findings after recovery from acute COVID-19: A cross-sectional study</a> (Ferrando et al)	<i>J Acad Consult Liaison Psychiatry</i>	Study describes neuropsychological, medical, psychiatric and functional correlates of cognitive complaints experienced after recovery from acute COVID-19 infection. Sixty participants underwent neuropsychological (NP), psychiatric, medical, functional, and quality of life assessments 6-8 months after acute COVID-19. Results suggest the existence of extremely low neuropsychological test performance experienced by some individuals months after acute COVID-19 infection, affecting multiple neurocognitive domains. This extremely low neuropsychological test performance is associated with worse acute COVID-19 symptoms, depression, medical comorbidities, functional complaints, and subjective cognitive complaints. Exploratory correlations with pro-inflammatory cytokines support further research into inflammatory mechanisms and viable treatments.
<a href="#">Population-based study of multisystem inflammatory syndrome associated with COVID-19 found that 36% of children had persistent symptoms</a> (Kahn et al)	<i>Acta Paediatr</i>	Study aim was to describe the outcomes of multisystem inflammatory syndrome in children (MIS-C) associated with COVID-19. When followed up 2 weeks after MIS-C was diagnosed, 43% of the 119 patients had abnormal results, including complete blood cell counts, platelet counts, albumin levels, electrocardiograms and echocardiograms. After 8 weeks, 36% of 89 had an abnormal patient history, but clinical findings were uncommon. Echocardiogram results were abnormal in 5% of 67, and the most common complaint was fatigue. Older children and those who received intensive care were more likely to report symptoms and have abnormal cardiac results.
<a href="#">Post-acute COVID-19 syndrome in patients after 12 months from COVID-19 infection in Korea</a> (Kim et al)	<i>BMC Infect Dis</i>	Study aimed to assess the long-term course of symptoms, factors associated with persistent symptoms, and quality of life after 12 months since recovery from acute COVID-19. The median age of the responders was 37 (IQR 26.0-51.0) years, and 164 (68.0%) responders were women. Altogether, 11 (4.6%) responders were asymptomatic, and 194 (80.5%), 30 (12.4%), and 6 (2.5%) responders had mild, moderate, and severe illness, respectively. Overall, 127 (52.7%) responders still experienced COVID-19-related persistent symptoms and 12 (5.0%) were receiving outpatient treatment for such symptoms. The main symptoms were difficulty in concentration, cognitive dysfunction, amnesia, depression, fatigue, and anxiety. Considering the EQ5D index scores, only 59.3% of the responders did not have anxiety or depression. Older age, female sex, and disease severity were identified as risk factors for persistent neuropsychiatric symptoms.
<a href="#">The Effects of Persistent Olfactory and Gustatory Dysfunctions on Quality of Life in Long-COVID-19 Patients</a> (Vaira et al)	<i>Life</i>	An online survey was administered to individuals who reported to have had SARS-CoV-2 infection at least 6 months prior with persisting COVID-19 symptoms (using the COVID symptom index), including ratings of POD and PGD, and their physical (PCS) and mental (MCS) components of quality of life were assessed using the standardized short form 12 questionnaire (SF-12). POD and PGD are frequent symptoms of the long-COVID-19 syndrome and significantly reduce QoL, specifically in the mental health component.
<a href="#">Six-Month Post-Acute COVID-19: High Self-Reported Morbidity Among Adults Younger Than Sixty Years and Females</a> (Bhargava et al)	<i>J Clin Med</i>	Aimed to describe the self-reported occurrence of symptoms and their effect on patient's functioning 6 months after their acute hospitalization for COVID-19. The most common symptoms at the time of follow-up were fatigue (60.0%), dyspnea (57.1%), feeling irritable, sad or decreased pleasure (56.4%), and memory difficulty (56.4%). The mean (SD) GSQ-30 score for the cohort was 30.1. Females had a significantly higher mean (SD) GSQ-30 score than males versus 20.2.
<a href="#">Symptoms compatible with long-COVID in healthcare workers with and without SARS-CoV-2 infection - results</a>	<i>Clin Infect Dis</i>	Within a cohort of healthcare workers (HCW), frequency and risk factors for symptoms compatible with long-COVID are assessed using baseline (August/September 2020) and weekly questionnaires on SARS-CoV-2 nasopharyngeal swab (NPS) results and acute disease symptoms. Of 3334 HCW,

<a href="#">of a prospective multicenter cohort</a> (Strahm et al)		<p>556 (17%) had a positive NPS and 228 (7%) were only seropositive. HCW with positive NPS more frequently reported <math>\geq 1</math> symptom compared to controls (73% vs. 52%, p6 months ago). Acute viral symptoms in weekly questionnaires best predicted long-COVID symptoms. Physical activity at baseline was negatively associated with neurocognitive impairment and fatigue scores.</p>
<a href="#">Persistence of SARS CoV-2 S1 Protein in CD16+ Monocytes in Post-Acute Sequelae of COVID-19 (PASC) up to 15 Months Post-Infection</a> (Patterson et al)	<i>Front Immunol</i>	<p>Investigated the presence of SARS-CoV-2 S1 protein in 46 individuals. We analyzed T-cell, B-cell, and monocytic subsets in both severe COVID-19 patients and in patients with post-acute sequelae of COVID-19 (PASC). In contrast, the data reported here supports the hypothesis that an immune response to persistent viral antigens, specifically the S1 fragment of the spike protein eliciting an the PASC immune response and marked by elevated inflammatory markers including IFN-<math>\gamma</math>, IL-6, IL-10, and IL-2, among others.</p>
<a href="#">Development and Validation of the Long Coronavirus Disease (COVID) Symptom and Impact Tools: A Set of Patient-Reported Instruments Constructed From Patients' Lived Experience</a> (Tran et al)	<i>Clin Infect Dis</i>	<p>Study developed and validated patient-reported instruments, based on patients' lived experiences, for monitoring the symptoms and impact of long covid. The long covid Symptom and Impact Tools (ST and IT) were constructed from the answers to a survey with open-ended questions to 492 patients with long COVID. Validation of the tools involved 1022 adult patients with suspected or confirmed COVID-19 and symptoms extending over 3 weeks after onset. The long COVID ST and IT scores were strongly correlated with the EQ-5D-5L, the PCFS and the MYMOP2. Reproducibility was excellent with an interclass correlation coefficient of 0.83 for the ST score and 0.84 for the IT score. In total, 793 (77.5%) patients reported an unacceptable symptomatic state, thereby setting the PASS for the long covid IT score at 30.</p>
<a href="#">Investigation of Long-Term COVID-19 Patients' Quality of Life and Affecting Factors: Data from Single COVID-19 Follow-Up Center</a> (Uçan et al)	<i>Research Square prepub</i>	<p>Article explored relationship between quality of life change and long-term COVID-19 patient's stats in COVID-19 Follow-up Centre. Comparison of baseline characteristics showed that cough and chest pain have been increased in second admission. Thirty-six item of short form Health Status Questionnaire-36 (SF-36) measured quality of life and there was a significant difference between first and second admission in all parameters.</p>
<a href="#">Serum Level of Anti-Nucleocapsid, but Not Anti-Spike Antibody, Is Associated with Improvement of Long COVID Symptoms</a> (Varnai et al)	Vaccines	<p>Severity of long COVID symptoms and serum anti-SARS-CoV-2 spike (S-Ig) and nucleocapsid (NC-Ig) levels were assessed in 107 post-COVID subjects at baseline, and 17–24 weeks later. Vaccination status was also assessed. Serum level of S-Ig and NC-Ig at baseline were significantly higher in the patients with non-severe fatigue than those with severe fatigue, and this difference remained significant at follow-up in the case of NC-Ig. NC-Ig level above median was as an independent predictor for complete remission at follow-up. The difference in NC-Ig levels in subgroup analyses (severe fatigue vs. non-severe fatigue; complete remission vs. incomplete remission or progression) was found to be significant only in patients who received vaccination.</p>
<a href="#">Heart rate variability and cardiac autonomic functions in post-COVID period</a> (Asarcikli et al)	<i>J Interv Card Electrophysiol</i>	<p>Study aimed to analyze autonomic function using HRV indices in the post-COVID period that may have a potential to enlighten symptoms of COVID long-haulers. This study revealed parasympathetic overtone and increased HRV in patients with history of COVID-19. This may explain the unresolved orthostatic symptoms occurring in post-COVID period which may be associated with autonomic imbalance.</p>
<a href="#">Core Outcome Set for Research and Clinical Practice in Post COVID-19 Condition (Long COVID): An International Delphi Consensus Study 'PC-COS'</a> (Munblit et al)	<i>SSRN - Lancet prepublication</i>	<p>Aimed to identify core outcomes for Post COVID-19 Condition that stakeholders considered critical to assess in all research studies and clinical practice. 1535 participants from 71 countries, representing six continents, were involved in the online modified Delphi process, with 1148 participating in both rounds (75% completion rate). Eleven of 24 outcomes met consensus 'in' criteria after the two Delphi rounds and consensus meeting: fatigue or exhaustion; pain; post-exertion symptoms; work/occupational and study changes; survival; and "functioning, symptoms and conditions" for each of the following outcomes: cardiovascular, respiratory, nervous system, cognition, mental and physical. 'Recovery' outcome was added 'a-priori' as a part of previously published COS on COVID-19.</p>
<a href="#">Persistence, Magnitude, and Patterns of Postacute Symptoms and Quality of Life</a>	<i>Open Forum Infect Dis</i>	<p>Study aimed to examine the spectrum, magnitude, duration, and patterns of COVID-19 post-acute sequelae, as well as their influence on quality of life. From April 21, 2020, to January 4, 2021, researchers enrolled a cohort of adults (n=179)</p>

<p><a href="#">Following Onset of SARS-CoV-2 Infection: Cohort Description and Approaches for Measurement</a> (Peluso et al)</p>		<p>in the USA with a documented history of SARS-CoV-2 RNA positivity at <math>\geq 2</math> weeks past onset of COVID-19 symptoms or, if asymptomatic, first positive test. At 4-month intervals, researchers queried physical and mental health symptoms and quality of life. Results showed that fatigue, shortness of breath, concentration problems, headaches, trouble sleeping, and anosmia/dysgeusia were most common through 8 months of observation. The median visual analogue scale rating of general health was lower at 4 and 8 months compared with pre-COVID-19.</p>
<p><a href="#">Long COVID symptoms in SARS-CoV-2-positive adolescents and matched controls (LongCOVIDKidsDK): a national, cross-sectional study</a> (Berg et al)</p>	<p><i>Lancet Child Adolesc Health</i></p>	<p>Aimed to investigate health, including symptoms of long COVID, in adolescents (aged 15–18 years) who tested positive for SARS-CoV-2 compared with a control group. Participants with SARS-CoV-2-positive tests had more long-lasting symptoms and sick leave, whereas participants in the control group had more short-lasting symptoms and worse quality of life. Knowledge of long COVID in adolescents is important to guide clinical recognition and management of this condition.</p>
<p><a href="#">Physical and mental health 3 months after SARS-CoV-2 infection (long COVID) among adolescents in England (CLoCK): a national matched cohort study</a> (Stephenson et al)</p>	<p><i>Lancet Child Adolesc Health</i></p>	<p>Study describes post-COVID symptomatology in a non-hospitalised, national sample of adolescents aged 11-17 years with PCR-confirmed SARS-CoV-2 infection compared with matched adolescents with negative PCR status. Adolescents who tested positive for SARS-CoV-2 had similar symptoms to those who tested negative, but had a higher prevalence of single and, particularly, multiple symptoms at the time of PCR testing and 3 months later.</p>
<p><a href="#">Outcomes in post-acute sequelae of COVID-19 (PASC) at 6 months post-infection Part 1: Cognitive functioning</a> (Whiteside et al)</p>	<p><i>Clin Neuropsychol</i></p>	<p>Study provides initial results on cognitive outcomes in Post-Acute Sequelae of COVID-19 (PASC) in 53 consecutive outpatients diagnosed with COVID-19. Four participants were excluded due to performance validity test failure. The sample was mostly white (89.8%), female (83.7%), and never hospitalized (69.4%) for COVID-19. Analyses indicated no mean scores in the Impaired range (<math>&gt;2</math> SD below normative mean) on objective cognitive testing and a low base rate of Impaired test scores. Higher (<math>&gt;20\%</math>) base rates of Borderline performance (1-2 SDs below normative mean) were found on some measures. There was also evidence for frequently elevated mean scores on mood measures which correlated with some cognitive measures and the number of Borderline scores per participants.</p>
<p><a href="#">Evaluation of post-COVID health status using the EuroQol-5D-5L scale</a> (Hegde et al)</p>	<p><i>Pathog Glob Health</i></p>	<p>There is a lack of a validated standard questionnaire to assess post-COVID health status. A retrospective observational study involving the recovered COVID patients admitted to a secondary care hospital in India. Our study found time to have a statistically significant impact on the mean index scores, level sum scores and dimension scores. Smoking was found to be significantly associated with usual activity scores at 4 weeks. The most remarkable changes occurred in the anxiety/depression dimension. Overall, there was a general trend of health improvement.</p>
<p><a href="#">Prevalence of Post COVID-19 Condition in Primary Care: A Cross Sectional Study</a> (Montenegro et al)</p>	<p><i>Int J Environ</i></p>	<p>Cross-sectional study to estimate the prevalence of post COVID-19 conditions in a community setting. Our main study finding was an overall population prevalence of 14.34% of post COVID-19. Only 9% of patients were hospitalized in our study. Prevalence was higher in women than men (15.63% versus 13.06%) and the most frequent persistent symptoms were fatigue (44.6%), smell impairment (27.7%) and dyspnea (24.09%).</p>
<p><a href="#">Persistent, new-onset symptoms and mental health complaints in Long COVID in a Brazilian cohort of non-hospitalized patients</a> (Titze-de-Almeida et al)</p>	<p><i>BMC Infect Dis</i></p>	<p>Study was aimed to examine if acute symptoms of coronavirus disease 2019 (COVID-19) would persist during LC, and if memory problems would be correlated with sleep, depressive mood, or anxious complaints. The SARS-CoV-2 infection leads to persistent symptoms during LC, in which memory problems may be associated with sleep and depressive complaints.</p>

## COMMENTARIES, LETTERS AND OPINION PIECES (JAN 29-FEB 11, 2022)

- [Long COVID and kids: more research is urgently needed \(Nature\)](#): What little is known about long COVID in children and teenagers suggests that it can be just as disabling as it is in adults. However, there are many fewer studies in teens than in

adults — and even fewer in children under the age of 11. This latter group is seeing a surge of COVID-19 infections: in many countries, children are not being vaccinated. More COVID-19 in kids will lead both to more long-COVID cases and to the spread of disease among vulnerable populations. It's time for younger people to be included in more studies of the condition, including trials of potential treatments. The UK support group Long Covid Kids says that reports of long COVID in children and teenagers are disbelieved by medical professionals. That, too, needs to change.

- [A research agenda for post-COVID-19 fatigue \(J Psychosom Res\)](#): Post-COVID-19 fatigue is expected to have a profound impact on daily functioning, including work ability and quality of life. It is also expected to have economic implications due to increased absenteeism and health care consumption, as was previously shown among patients with infectious diseases other than COVID-19. Given the global scale of this pandemic and the large group of potential patients, special attention needs to be given to how society as a whole will be affected.

## MEDIA HIGHLIGHTS

- [Long covid: “Holistic” approach is best, given range of symptoms, say researchers \(BMJ\)](#): New research on long covid in adults and children supports the multidisciplinary approach to clinical care that is being provided at long covid clinics in England, experts have said. There are currently around 80 long covid clinics in England that take referrals from primary care for adults or children who are experiencing a range of symptoms that might include brain fog, anxiety, depression, breathlessness, and fatigue.
- [What Experts Know About ‘Long Covid’ and Who Gets It \(Bloomberg\)](#): There is not enough data collected and analyzed yet to know whether variants carry different long COVID risks, especially since reinfections and infections in vaccinated individuals may carry different risks of long Covid.
- [Can You Get Long COVID After an Infection With Omicron? \(US News\)](#): Experts say it's too early to know whether people infected with the omicron variant will develop long COVID. Long COVID is usually diagnosed many weeks after a bout with COVID-19. Any long-lasting effects typically appear about 90 days after symptoms of the initial infection go away, Maria Van Kerkhove of the World Health Organization said this week. Van Kerkhove said she hasn't seen any research indicating that the portion of COVID-19 survivors who get long COVID will change with the Omicron variant.

## POST-COVID-19 CONDITION RESOURCES

- **(NEW)** [PAHO](#) Webinar Series on Post COVID-19 Condition launches 17 February, 2022, from 10:30 am to 12:30 pm (EST).
- **(NEW)** [Body Politic COVID-19 Support Group \(Global\)](#): Housed on the Slack app, group members have access to dozens of different channels, which give space for more personal discussion. Some of the channels include those specifically for medical professionals, parents of children with Covid-19, LGBTQ+ individuals, BIPOC+, and different regions around the world.
- **(NEW)** [Patient-Led Research Collaborative \(Global\)](#): Self-organized group of Long COVID patients working on patient-led research around the Long COVID experience.
- Pre-populated literature searches: [Long COVID search](#) (LitCovid) and [Long COVID search](#) (NIH)
- [British Heart Foundation \(UK\)](#): UK-based foundation with resources on long COVID.
- [COVID Long Haul \(Canada\)](#): Canada's largest online platform for COVID survivors, their family members and anyone searching for the most up-to-date information about the pandemic. There is a COVID long-haulers [support group](#) and a [Report on Pan-Canadian Long COVID Impact Survey \(PDF\) \(June 2021\)](#)
- [BC ECHO for Post-COVID-19 Recovery \(Canada\)](#): BC ECHO for Post-COVID-19 Recovery is a learning community of specialists and community health-care providers who use case-based learning to improve care for those recovering from [symptoms post-COVID-19](#).
- [Long Covid Support \(UK\)](#): Peer support and advocacy group aiming to facilitate international peer support and campaigning in the UK for recognition, rehabilitation and research into treatments.

- [Long COVID SOS \(UK\)](#): Long-term sufferers formed the LongCovidSOS campaign to put pressure on the UK government to recognise the needs of those with Long Covid, and to raise awareness among the general public and employers.
- [Survivor Corps \(US\)](#): One of the largest and fastest growing grassroots movements connecting, supporting, and mobilizing COVID-19 Survivors to support research. They have a [list](#) of Post-COVID Care Centers (PCC) and a PCCC Best Practices [Guide](#).
- [The Center for Chronic Illness \(US\)](#): Aims to promote well-being and decrease isolation for those impacted by chronic illness through support and education. Their online support groups are professionally-facilitated and offer psychoeducational tools for coping.
- [Blooming Magnolia \(US\)](#): Mission is to empower others by providing a platform to strengthen & protect mental health and support those afflicted with Long-Covid through education and funding of therapeutic research. They have a list of support groups and resources on their website.
- [Long COVID Alliance \(US\)](#): US-based network of patient-advocates, scientists, disease experts, and drug developers who have joined together to leverage their collective knowledge and resources to educate policy makers and accelerate research to transform our understanding of post-viral illness.
- [Long COVID Kids \(UK/US/Canada\)](#): Parent & patient led advocacy & support group based in the UK.
- [Long COVID Physio \(US & UK\)](#): International peer support, education and advocacy group of Physiotherapists living with Long COVID, founded in November 2020 by Physiotherapists living with Long COVID from the UK and US.
- [Patient-Led Research Collaborative \(Global\)](#): Group of Long COVID patients working on patient-led research around the Long COVID experience.
- [CANCOV- Patient resources \(Canada\)](#): CANCOV is a research platform grounded in a prospective longitudinal 1-year cohort study of patients infected with COVID-19.
- [COVID Patient Recovery Alliance \(CPRA\) \(US\)](#): CPRA aims to bring together leaders in business, health care, research, academia, data and analytics, and patient advocacy to develop solutions that coordinate diverse data sources, inform models of care, and ensure adequate payment for long-COVID patients. Their [report](#) outlines recommendations for federal policymakers to promote recovery.
- [British Lung Foundation \(UK\)](#): UK-based charity sharing resources on navigating the NHS, breathlessness support, movement and energy support for long COVID patients.
- [Webinar - Implications of Long COVID \(Canada\)](#): October 2021 CADTH webinar with expert panel discussing what is known know about long COVID, long COVID clinics, and what needs to be done to ensure quality of care.
- [Living with Long COVID \(US\)](#): COVID-19 Long-Haulers and Post-COVID Support Community.
- [ECDC](#): Webinar on post-COVID-19 condition in children (December 7).

**Note:** Previous OCSO Post COVID-19 Condition Scans can be found [here](#).