



## COVID-19

# Patient History and Physical Exam

Evaluating and Caring for Patients with Post-COVID Conditions: Interim Guidance

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PAGE 4 of 8

[< View Table of Contents](#)

## A Suggested Workup for Post-COVID Conditions

### Patient history

The history of present illness should include the patient's COVID-19 disease course, severity of illness, and treatments received. When possible, healthcare professionals should establish a timeline of when symptoms emerged during acute illness and afterwards. Commonly reported symptoms are included in **Table 1**.<sup>(1-4, 6-9, 12, 20, 39-46)</sup>

Table 1. Symptoms commonly reported among people with post-COVID conditions


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- Dyspnea or increased respiratory effort
- Fatigue
- Post-exertional malaise and/or poor endurance
- “Brain fog,” cognitive impairment
- Cough
- Chest pain
- Headache
- Palpitations and/or tachycardia
- Arthralgia
- Myalgia
- Paresthesia
- Abdominal pain
- Diarrhea
- Insomnia and other sleep difficulties
- Fever
- Lightheadedness
- Impaired daily function and mobility
- Pain
- Rash (e.g., urticaria)
- Mood changes
- Anosmia or dysgeusia
- Menstrual cycle irregularities

\* **Post-exertional malaise (PEM)** is the worsening of symptoms following even minor physical or mental exertion, with symptoms typically worsening 12 to 48 hours after activity and lasting for days or even weeks.

The broad spectrum of signs and symptoms reported thus far in persons with post-COVID conditions warrants a broad approach to the review of systems. Since information on post-COVID conditions in children and adolescents is limited, it is possible that other signs and symptoms than those listed in **Table 1** may be present or more common in younger age groups. Both for children and adults, healthcare providers should elicit the frequency, severity, and evolution of symptoms and their impact on quality of life and functional ability, including the degree to which symptoms interfere with their ability to return to school or work.

Past medical history should include assessment for prior conditions that could impact the severity of COVID-19 disease, including but not limited to asthma, allergies, chronic obstructive pulmonary disease, interstitial lung disease, chronic kidney disease, diabetes mellitus, obesity, sleep disorders, prior autoimmune disease, mood disorders (e.g., anxiety or depression), trauma and stressor-related disorders (e.g., adjustment disorder or PTSD), hypertension, migraines, fibromyalgia, or chronic fatigue.

Social history should include assessment of the level of material and social supports and resources available to the patient (e.g., finances, employment, housing, access to food) and their potential impact on the capacity of patients to access health and recuperation services. Healthcare professionals should establish the patient's current and pre-infection level of activity (e.g., nature of work or school activities, activities of daily living) as well as screen for potential or known substance use disorder. The Centers for Medicare and Medicaid Services provide a [useful tool](#)  for assessing these and other social needs and determinants of health.

For patients with clinical features warranting further evaluation, healthcare professionals might consider the broad range of possible post-COVID conditions. These could have been present prior to and unmasked by SARS-CoV-2 infection or they may have been caused more directly by SARS-CoV-2 infection. Additional system-based conditions that have been reported following SARS-CoV-2 infection can be found in **Table 2.** <sup>(1-3, 6, 39, 40, 46, 47)</sup>

Table 2. System-based conditions reported following SARS-CoV2 infection

Body System	Conditions (subject to change and not mutually exclusive)
<b>Cardiovascular</b>	Myocarditis, heart failure, pericarditis, orthostatic intolerance (e.g., postural orthostatic tachycardia syndrome (POTS))
<b>Pulmonary</b>	Interstitial lung disease, reactive airway disease
<b>Renal</b>	Chronic kidney disease
<b>Dermatologic</b>	Alopecia
<b>Rheumatologic</b>	Reactive arthritis, fibromyalgia, connective tissue disease
<b>Endocrine</b>	Diabetes mellitus, hypothyroidism
<b>Neurologic</b>	Transient ischemic attack/stroke, olfactory and gustatory dysfunction, sleep dysregulation, altered cognition, memory impairment, headache, weakness, and neuropathy
<b>Psychiatric</b>	Depression, anxiety, and post-traumatic stress disorder (PTSD), psychosis
<b>Hematologic</b>	Pulmonary embolism, arterial thrombosis, venous thromboembolism, or other hypercoagulability
<b>Urologic</b>	Incontinence, sexual dysfunction

**Other**

Weight loss, dysautonomia, vitamin D deficiency, allergies and mast cell activation syndrome, reactivation of other viruses, pain syndromes, and progression of comorbid conditions

As more is learned about the natural history of SARS-CoV-2 infection, this list of symptoms and conditions will likely change over time.

## Physical examination and vital signs

Post-COVID conditions involve multiple organ systems, thus a thorough physical examination should be completed. For patients who report previous infection with SARS-CoV-2, in addition to standard vital signs (i.e., blood pressure, heart rate, respiratory rate, pulse-oximetry, body temperature) and body mass index, healthcare professionals should evaluate ambulatory pulse-oximetry for individuals presenting with respiratory symptoms, fatigue, or malaise. [Orthostatic vital signs](#) should be evaluated for individuals reporting postural symptoms, dizziness, fatigue, cognitive impairment, or malaise.

## Table of Contents

[Key Points](#)[Background](#)[General Clinical Considerations](#)[› Patient History and Physical Exam](#)[Assessment and Testing](#)[Management of Post-COVID Conditions](#)[Public Health Recommendations](#)[Future Directions and Resources](#)

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[See All References](#)

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