



COVID-19

Evaluating Patients with Post-COVID Conditions: From CDC Interim Guidance on Laboratory Testing

As of August 2021 more than 37 million Americans have been infected with COVID-19. A significant number of these patients either continue to experience clinical symptoms or develop new symptoms 4 weeks and later after a COVID-19 infection, including patients with initial mild or asymptomatic infections. Post-COVID conditions present with a wide range of physical and mental health consequences and may be referred to as long COVID, post-acute COVID-19, or chronic COVID, among other names.

The most commonly reported symptoms include:

Dyspnea	Diarrhea
Fatigue or post-exertional malaise	Sleep difficulties
Cognitive impairment ("Brain Fog")	Fever
Cough	Lightheadedness
Chest pain	Impaired daily function and mobility
Headache	Pain
Palpitations	Skin rash
Musculoskeletal pain	Mood changes
Paresthesia	Anosmia or dysgeusia
Abdominal pain	Menstrual cycle irregularities

A recent study conducted by the CDC reported patients experiencing ongoing or "long-haul" symptoms after COVID-19 illness were more likely to report pain, challenges with physical activities, and "substantially worse health" compared with people needing rehabilitation because of cancer¹.

It should be noted that currently there is no clearly delineated consensus case-definition for long COVID. The criteria adopted are based on literature and case-reports, so estimates of the scope of the problem among different studies vary. However, based on conservative estimates it is likely that millions of patients may experience post-acute sequela of COVID, which will require proper evaluation and management². Because of test constraints early in the pandemic, some COVID patients do not have molecular, antigen or serologic confirmation of infection. As a consequence, prior positive COVID test results are not absolutely required to establish a conclusion of long COVID.

Post-COVID conditions may include cardiovascular, pulmonary, renal, dermatologic, rheumatologic, endocrine, neurologic, hematologic, urologic, or psychiatric manifestations or signs. Patients with ongoing or new symptoms might be considered for basic panels of laboratory tests (including testing for non-COVID conditions that may be contributing to illness) to assess for conditions that may respond to treatment, until more information and evidence is available for specific laboratory tests for post-COVID conditions. However, it should be noted that according to current CDC interim guidance there is no laboratory test that can definitively distinguish post-COVID conditions from other etiologies, in part due to the heterogeneity of post-COVID conditions. Before ordering laboratory tests for post-COVID conditions, the goals of these tests should be clear to the healthcare professional and to the patient. Laboratory testing should be guided by patient history, physical examination, and clinical findings.



Panel Name	Unit Code	Components
Post-COVID Basic Panel	3596	CBC, CMP, Urinalysis, C-Reactive Protein, ESR, Ferritin, TSH with non-reflex, Free T4, Vitamin D, 25 OH, Vitamin B12
Post-COVID Rheumatologic Panel	3597	ANA with Reflex Pattern and Titer, RA, CCP IgG, Cardiolipin Ab's, CPK
Post-COVID Coagulation Panel	3598	D-Dimer, Fibrinogen
Post-COVID Cardiopulmonary Panel	3599	Cardiac TnT, NT-proBNP

Key Points

- No laboratory test can definitively distinguish post-COVID conditions from other etiologies
- Consider testing symptomatic patients with a basic panel of laboratory tests to assess for treatable conditions
- COVID PCR, Antigen, or Antibody laboratory tests are not required to establish a diagnosis of post-COVID conditions but can help assess for current or previous COVID-19 infection
- Consider the possibility of SARS-CoV-2 reinfection, especially in persons with new or worsening post-COVID conditions

References:

¹Rogers-Brown JS, Wanga V, Okoro C, et al. Outcomes Among Patients Referred to Outpatient Rehabilitation Clinics After COVID-19 diagnosis — United States, January 2020–March 2021. *MMWR Morb Mortal Wkly Rep* 2021;70. DOI: <http://dx.doi.org/10.15585/mmwr.mm7027a2>

²Nalbandian, A., Sehgal, K., Gupta, A. *et al.* Post-acute COVID-19 syndrome. *Nat Med* 27, 601–615 (2021). <https://doi.org/10.1038/s41591-021-01283-z>
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-care/post-covid-index.html>

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-care/post-covid-conditions.html>

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-care/post-covid-assessment-testing.html>