

LONG COVID

Long COVID is a wide range of new, returning, or ongoing health problems that people experience after being infected with the virus that causes COVID-19. Most people with COVID-19 get better within a few days to a few weeks after infection, so at least 4 weeks after infection is the start of when Long COVID could first be identified. Anyone who was infected can experience Long COVID. Most people with Long COVID experienced symptoms days after first learning they had COVID-19, but some people who later experienced Long COVID did not know when they got infected.

There is no test that determines if your symptoms or condition is due to COVID-19. Long COVID is not one illness. Your healthcare provider considers a diagnosis of Long COVID based on your health history, including if you had a diagnosis of COVID-19 either by a positive test or by symptoms or exposure, as well as based on a health examination.

What You Need to Know

- Long COVID can include a wide range of ongoing health problems; these conditions can last weeks, months, or years.
- Long COVID occurs more often in people who had severe COVID-19 illness, but anyone who has been infected with the virus COVID-19 can experience it.
- People can be reinfected with SARS-CoV-2, the virus that causes COVID-19, multiple times. Each time a person is infected or reinfected with SARS-CoV-2, they have a risk of developing Long COVID.
- While most people with Long COVID have evidence of infection or COVID-19 illness, in some cases, a person with Long COVID may not have tested positive for the virus or known they were infected.
- CDC and partners are working to understand more about who experiences Long COVID and why, including whether groups disproportionately impacted by COVID-19 are at higher risk.

SYMPTOMS

People with Long COVID may experience many symptoms.

People with Long COVID can have a wide range of symptoms that can last weeks, months, or even years after infection. Sometimes the symptoms can even go away and come back again. For some people, Long COVID can last weeks, months, or years after COVID-19 illness and can sometimes result in disability.

Long COVID may not affect everyone the same way. People with Long COVID may experience health problems from different types and combinations of symptoms that may emerge, persist, resolve, and reemerge over different lengths of time. Though most patients' symptoms slowly improve with time, speaking with your healthcare provider about the symptoms you are experiencing after having COVID-19 could help determine if you might have Long COVID.

People who experience Long COVID most commonly report:

General symptoms (Not a Comprehensive List)

- Tiredness or fatigue that interferes with daily life
- Symptoms that get worse after physical or mental effort (also known as "post-exertional malaise")
- Fever

Respiratory and heart symptoms

- · Difficulty breathing or shortness of breath
- Cough
- Chest pain
- Fast-beating or pounding heart (also known as heart palpitations)



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Neurological symptoms

- · Difficulty thinking or concentrating (sometimes referred to as "brain fog")
- Headache
- Sleep problems
- Dizziness when you stand up (lightheadedness)
- Pins-and-needles feelings
- · Change in smell or taste
- · Depression or anxiety

Digestive symptoms

- Diarrhea
- Stomach pain

Other symptoms

- · Joint or muscle pain
- Rach
- Changes in menstrual cycles

Symptoms that are hard to explain and manage

Some people with Long COVID have symptoms that are not explained by tests or easy to manage.

People with Long COVID may develop or continue to have symptoms that are hard to explain and manage. Clinical evaluations and results of routine blood tests, chest X-rays, and electrocardiograms may be normal. The symptoms are similar to those reported by people with myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS) and other poorly understood chronic illnesses that may occur after other infections. People with these unexplained symptoms may be misunderstood by their healthcare providers, which can result in a delay in diagnosis and receiving the appropriate care or treatment.

Treatment Options

Treatment is defined by the various symptoms that affect you specifically. To determine the best treatment pathway, one must define the nature of the symptoms with your provider. The hallmark of Long COVID is inflammation. We will treat the various inflammatory pathways and organ systems through a myriad of treatment modalities:

- General symptoms can be treated by symptomatic care with lifestyle modifications including exercise, meditation, weight loss, cognitive and behavioral therapy. Some people may need additional services to help facilitate these modalities.
- Respiratory symptoms can often be treated by the proper diagnosis of lung pathology with either inhaled medications and/or oral medications that include both over the counter and prescriptions.
- Cardiac symptoms often require cardiology input to determine proper treatment algorithms whether related to coronary arteries, cardiac musculature, and/or the conduction system (the electric circuitry that runs the heart).
- Neurologic symptoms may be localized or systemic. In your medical history, your provider will help you determine
 the nature of the injury and the best studies and treatment plans.
- Digestive symptoms can often be treated with proper nutrition and assisting the microbiome with pre- and pro-biotics. Sometimes we need more support and certain supplements can assist with gastrointestinal support.
- Joint and muscle pain as well as menstrual cramping (which is muscle contractions and inflammation) can be assisted with anti-inflammatory regimens tailored to an individuals needs.
- Finally, when one has poorly defined/vague symptoms not well explained by a particular diagnosis we need to winnow down these symptoms and define a regimen for them. This is where the art of medicine comes in to try to use a paradigm that helps mitigate your inflammation.