What is Long COVID?
People infected with COVID-19 can continue to have symptoms and long-term effects following their infection called "long COVID" or "post-COVID Syndrome". Much is still unknown about long COVID. We continue to learn more as research on long COVID continues.

Symptoms of Long COVID
People with long COVID can have a variety of symptoms that can last for weeks, months or years after infection. Symptoms include but are not limited to:

- Feeling tired, especially after mental or physical effort
- Fever
- Difficulty breathing
- Coughing
- Chest pain
- Change in smell and/or taste
- Difficulty thinking or focusing or "brain fog"
- Headache
- Stomach pain
- Changes in menstrual cycles

Who can develop Long COVID?
Anyone infected with COVID-19 can develop long COVID. It is more common in people who had severe COVID-19 symptoms, especially those that required hospitalization. People who experienced multisystem inflammatory syndrome during or after their COVID-19 infection may be at increased risk for long COVID. Women, older adults, people with underlying health conditions and people who did not get vaccinated seem to be more likely to develop long COVID. People who get COVID-19 multiple times may also have more health risks including long COVID.

Preventing Long COVID
Preventing COVID-19 infection is the best way to prevent long COVID. Protect yourself and others from COVID-19 by washing your hands, wearing masks in crowds, staying home when sick, and getting recommended vaccines and booster doses.

Vaccinated individuals who still get COVID-19 may be less likely to develop long COVID than unvaccinated individuals.

Learn about getting vaccinated for COVID-19

Diagnosing Long COVID
It can be difficult to diagnose long COVID. Symptoms can be difficult for patients to explain. There is no lab test or imaging study to make the diagnosis. Medical tests can show normal results even if a patient has long COVID.

Some people who report long COVID symptoms did not show COVID-19 symptoms and did not get tested for COVID-19 when they were initially ill. This makes it difficult to confirm they had COVID-19 and can prevent or delay a diagnosis of long COVID. It is important that you get tested for COVID-19 when you first feel ill in order to assist in your long COVID diagnosis later.

Patient Tips: Healthcare Provider Appointments for Post-COVID Conditions

New and Preexisting Health Conditions
COVID-19 infection can affect multiple organ systems and can sometimes trigger autoimmune conditions that may play a role in long COVID. Autoimmune conditions can happen when the body's immune system causes inflammation or tissue damage in affected parts of the body. This means people who have had COVID-19 may be more likely to develop new health concerns, such as diabetes or heart conditions. Preexisting health conditions such as diabetes and heart disease can also become worse after COVID-19 infection.

Long COVID and Disability Rights
Long COVID can cause physical and mental impairments and is considered a disability under the Americans with Disabilities Act (ADA). People with long COVID are legally protected from disability discrimination. They may be entitled to reasonable modifications from businesses, state, and local governments to accommodate long COVID-related limitations.

Guidance on “Long COVID” as a Disability Under the ADA
Long COVID and Pregnancy

Pregnant or recently pregnant people are more likely to become severely ill from COVID-19. COVID-19 can cause complications that affect the pregnancy and the developing baby.

Much is still unknown about how long COVID may affect pregnancy. The National Institutes of Health (NIH) will be doing a 4-year study on the long-term effects of COVID-19 in women who had COVID-19 while pregnant, and their offspring.

Long COVID and Youth

Youth can also become ill from long COVID. Youth experiencing long COVID symptoms such as fatigue and difficulty concentrating might struggle to participate in school and other activities. Young children may have difficulty communicating their symptoms.

Children with long COVID may be eligible for special education, protections or related services under 2 Federal laws.

Getting youth vaccinated against COVID-19 is the best way to prevent long COVID in youth.

Learn more about vaccinating youth.

Information for Physicians

- RECOVER: Researching COVID to Enhance Recovery: created by the National Institutes of Health (NIH) to facilitate Long COVID research.
- Post-COVID Conditions: Information for Healthcare Providers: overview for healthcare providers created by CDC.
- Post-COVID Conditions: CDC Science summary of the science of long COVID and links to clinical webinars on post-COVID conditions.