

COVID-19 & Your Lungs

COVID-19 is a respiratory virus and disease. It is spread by droplets from coughs and sneezes and from touching infected surfaces. As of posting date, we know that at least 80 percent of people who are infected with the virus will have mild to moderate flu-like symptoms, including a fever and cough. The remaining 20 percent may develop more severe cases of COVID-19 may develop pneumonia or severe acute respiratory syndrome.



How Does COVID-19 Affect the Lungs?

COVID-19 can affect the upper respiratory system (nose, sinuses and throat) with flu-like symptoms, the lower respiratory system (airways and lungs) by causing cough with or without mucous and difficulty breathing. When COVID-19 is severe it can bring on pneumonia or acute respiratory distress syndrome (ARDS).

Upper Respiratory Infection

Common symptoms of respiratory infections in the nose, sinuses and throat include nasal congestion, runny nose, sore throat, sneezing, achy muscles and headache. COVID-19 upper respiratory infection symptoms also may include cough, diarrhea, fever, shortness of breath and tiredness.

Lower Respiratory Infection

Common symptoms of COVID-19 respiratory infections in the airways and lungs may include severe cough that produces mucous, shortness of breath, chest tightness and wheezing when you exhale.

When COVID-19 is Severe

If COVID-19 goes deep into the lungs, it can cause pneumonia. Pneumonia is a concern for older people because they have reduced lung capacity, require longer recover time and have age-weakened immune systems.

Pneumonia that is caused by COVID-19 may be more severe, affect many parts of the lungs, and cause shock, organ damage, abnormal blood clotting, acute respiratory distress syndrome and deteriorating health.

How Pneumonia Affects the Lungs

When healthy lungs inhale, the lungs and their 480 million tiny air sacs (alveoli) fill with oxygen. These little air sacs get rid of carbon dioxide when you exhale and pass oxygen into the blood vessels.

Pneumonia causes the air sacs to become infected and inflamed. This causes fluid and inflammatory cells to build up in the lungs and prevents oxygen from getting through, causing severe breathing difficulties and lack

of oxygen in the blood.

Severe cases of COVID-19-related pneumonia are treated in the hospital.

Risk Factors for Developing Pneumonia from COVID-19

- Diabetes
- Chronic heart
- Chronic lung disease
- Immune suppressed conditions
- Being elderly
- People suffering from alcoholism

Symptoms of Severe Pneumonia Caused by COVID-19

- Fever
- Fatigue
- Cough (with and without mucous)
- Loss of appetite
- Muscle aches
- Significant shortness of breath
- Chest pain (especially under the breastbone)
- Rapid breathing
- Sweats
- Headache
- Weakness

COVID-19 Pneumonia & Acute Respiratory Distress Syndrome

Acute respiratory distress syndrome (ARDS) is life threatening. It is an injury to the lungs caused by infection or trauma. ARDS causes fluid to leak into the lungs. This makes it extremely difficult to breathe and causes a significant lack of oxygen getting into the bloodstream. The lack of oxygen harms the brain, organs and body tissues.

Most people who develop ARDS are already inpatients in the hospital. Treatment includes oxygen therapy to ensure the blood and body have enough oxygen to function properly. Sedation is often used to prevent agitation and shortness of breath. Fluids are managed to prevent build up in the lungs. If necessary, an extracorporeal membrane oxygenation (ECMO) machine may be used to oxygenate the blood outside the body while the body fights the infection and repairs itself. Pulmonary rehabilitation is used to help ARDS patients recover strength.

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