

# Here's What Happens to the Body After Getting the Coronavirus



There's a variety of symptoms of COVID-19. Getty Images

- **Coronaviruses cause respiratory illnesses, so the lungs are usually affected first.**
- **Early symptoms include fever, cough, and shortness of breath. These appear between 2 and 14 days after exposure to the virus.**

There's still a lot we don't know about the novel coronavirus that's already sickened more than 75,000 people worldwide, with more than 2,000 deaths reported.

But one thing that's clear is that in serious cases, the virus can have a terrible effect on the body. Here's what we know so far about how the new coronavirus — now called COVID-19 — affects the different systems in the body.

## COVID-19 affects lungs

COVID-19 is a respiratory disease like other coronavirus illnesses including the common cold, so the lungs are usually affected first. Early symptoms include fever, cough, and shortness of breath. These appear between 2 and 14 days after exposure to the virus.

The severity of COVID-19 varies from mild or no symptoms to severe or sometimes deadly illness. Data on more than 17,000 reported cases in China found that almost 81 percent of cases were mild. The rest were severe or critical.

Older people and those with chronic medical conditions appear to have a higher risk for developing severe illness.

COVID-19 also affects the lungs in very different ways. Some people may only have minor respiratory symptoms, while others develop non-life-threatening pneumonia. But a small percentage of people develop severe lung damage.

“What we’re frequently seeing in patients who are severely ill with [COVID-19] is a condition that we call acute respiratory distress syndrome, or ARDS,” said Dr. Laura E. Evans, a member of the Society of Critical Care Medicine Leadership Council and an associate professor of pulmonary, critical care, and sleep medicine at the University of Washington Medical Center in Seattle.

ARDS doesn’t happen just with COVID-19. A number of events can trigger it, including infection, trauma, and sepsis.

These cause damage to the lungs, which leads to fluid leaking from small blood vessels in the lungs. The fluid collects in the lungs’ air sacs, or alveoli. This makes it difficult for the lungs to transfer oxygen from the air to the blood.

One recent study of 138 people hospitalized for COVID-19 found that on average, people started having difficulty breathing 5 days after showing symptoms. ARDS developed on average 8 days after symptoms.

Treatment for ARDS involves supplemental oxygen and mechanical ventilation, with the goal of getting more oxygen into the blood.

“There isn’t a specific treatment for ARDS,” Evans said. “We just support the person through this process as best we can, allowing their bodies to heal and their immune system to address the underlying events.”