What Is COVID-19?

Coronavirus disease 2019 (COVID-19) is a disease caused by a new coronavirus, severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

Coronaviruses are a cause of the common cold, but SARS-CoV-2, which likely came from bats, causes more severe disease in many patients.[1]

Symptoms and Diagnosis

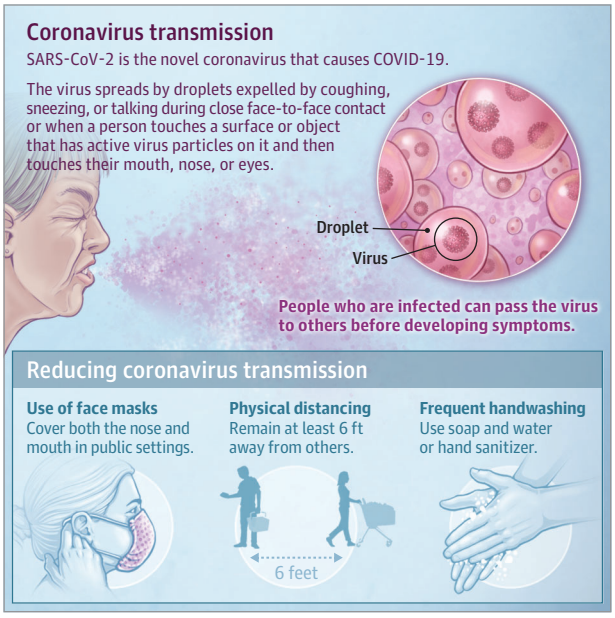
Symptoms occur on average about 5 days after exposure to the virus. Almost all patients develop symptoms within 12 days. Therefore, a 14-day self-isolation is recommended for people who were likely exposed to the virus. The most common symptoms are cough, fever, and shortness of breath; most patients with COVID-19 have at least 1 of these. Other common symptoms include muscle aches, fatigue, nausea, vomiting, and diarrhea. People may also have loss or change in sense of taste and smell.[2]

COVID-19 is typically diagnosed by a swab of the nose that measures the coronavirus. There are also blood tests that can measure recent exposure to the virus, but these do not show positive results until 1 to 3 weeks after infection starts.

COVID-19 Disease Progression and Treatment

The virus typically enters through the eyes, mouth, or nose then travels down the throat, where it may cause a cough. In some patients, the virus enters the lungs and may cause pneumonia. Pneumonia leads to fluid filling the air sacs in the lungs, which makes breathing difficult. Most patients with pneumonia must be hospitalized and treated with oxygen. Some patients become very ill and need life support such as mechanical ventilation. About 1 in 20 patients with COVID-19 dies. However, death rates vary substantially by age, ranging from 1 in 900 patients aged 18 to 29 years to 1 in 34 aged 50 to 64 years and 1 in 3 aged 85 years or older.

There is currently no vaccine to reduce risk of COVID-19. Several potential vaccines are in development, which may help prevent COVID-19 in the future. For most patients, treatment is supportive. Antibiotics do not work for this viral disease. Studies are testing many antiviral medications, as well as medications to modify the body's response to the virus. For certain hospitalized patients, antiviral drugs and steroids may help.



Patients with COVID-19 are likely to have fatigue and decreased energy for 6 to 8 weeks. It may be difficult to resume the same activity and exercise as before COVID-19, but it is important to remain active and increase exercise gradually. For most patients, lung function returns to normal after pneumonia.

Scientists do not know if people can have COVID-19 more than once, but repeat infection may be possible, particularly for people with mild symptoms during their initial infection.

FOR MORE INFORMATION

JAMA COVID-19 Information Page
jamanetwork.com/journals/jama/pages/coronavirus-alert

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