

# UNDERSTANDING DISEASE OUTBREAKS



CANADIAN GEOGRAPHIC EDUCATION'S

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Classroom

## What is it?

COVID-19 is a severe respiratory disease caused by a coronavirus. The outbreak began in China in December 2019 and quickly spread around the world, becoming a pandemic. COVID-19 is a coronavirus that was transmitted from animals and can have serious health consequences for humans.

## How does COVID-19 spread?

COVID-19 is spread through contact. An infected individual can transmit the disease by coughing or sneezing, releasing droplets into the air that could be inhaled by someone nearby. People who are infected but not showing symptoms can also spread the disease. A person could also be infected if they touch a surface with the virus on it and then put their hands near their mouth, nose or eyes.

## By the numbers

As of April 2020, there have been more than three million confirmed cases and 137,000 confirmed deaths related to COVID-19 worldwide. These numbers do not entirely reflect the spread or death toll of COVID-19 because of challenges related to testing for the virus (e.g., shortage of testing kits, not enough personnel, long wait times, different standards by country).

## Symptoms

Symptoms can take up to 14 days to develop. In mild cases, COVID-19 presents like a cold or flu, with symptoms that can include dry coughing, fever, difficulty breathing, muscle pains and fatigue. Severe cases can develop into pneumonia or lead to death. The majority of those infected have mild symptoms and may not even realize they are carriers of the virus, but about one-fifth of people become seriously ill and need hospital treatment. Older people and those with underlying health issues, such as asthma, diabetes and heart disease, are at higher risk of contracting the disease and of severe illness.

## Prevention

The main approach to avoid contracting COVID-19 is similar to any other respiratory disease, which includes avoiding close contact with sick individuals and washing hands. To prevent the spread of COVID-19, most countries have put in place measures that encourage physical distancing (e.g., businesses and schools have been shut down, people working from home). Quarantine and self-isolation are also being practised in cases where there is a high risk of exposure to COVID-19. Doctors and nurses use protective equipment (e.g., gloves, gown, face mask or respirators, eye protection) to prevent transmission when caring for the sick.

## Can COVID-19 kill?

The fatality rate of COVID-19 is not fully understood yet and the estimates based on current confirmed cases and deaths vary from region to region. As of April 2020, the fatality rate is thought to be about 4 to 6 per cent worldwide, but this number may be lower because not everyone is being tested for the virus and not all infected individuals are showing symptoms.



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