

Human Coronavirus 2019 and the Global COVID-19 Pandemic



The Public Health Emergency That Became a Global Pandemic

On December 31, 2019, a respiratory illness outbreak caused by a coronavirus originated in the Chinese province of Wuhan and has since spread rapidly throughout the Chinese population and across the globe, reaching the level of a global pandemic in less than three months.

This illness continues to spread, infecting tens of thousands of people with more deaths reported every day. Multiple national and international health authorities are providing frequent updates on the spread and impact of this illness.

In addition to a human toll, the spread of this illness has put a halt to a number of global industries from tourism/hospitality to manufacturing. In a recent report, the Oxford Economics Company estimated that [the global economy could suffer up to \\$1 trillion in losses](#) associated with this disease.

In February, the World Health Organization named this illness COVID-19. The “CO” stands for the type of virus causing the illness, a coronavirus. “VI” stands for virus, and “D” stands for disease. “19” refers to the year when the illness was first identified, 2019.

On the same day, the International Committee on the Taxonomy of Viruses named the virus that causes the disease: SARS-CoV-2. This name refers to the Severe Acute Respiratory Syndrome (SARS) the virus causes and its coronavirus typing (CoV). The “2” refers to this virus being related to a previously identified SARS-CoV which led to a global pandemic in 2003.

WHO Incident Response for COVID-19

- In January 2020, WHO called this outbreak a “Public Health Emergency of International Concern” (PHEIC). At that time, multiple countries implemented restrictions on travel, large gatherings, and have even asked businesses to close to restrict the spread of this disease.
- On March 11, 2020, the WHO declared the outbreak of COVID-19 a global pandemic. A pandemic recognizes the “worldwide spread of a new disease.” This is the first WHO declaration of a pandemic since the 2009 outbreak of H1N1. The WHO has urged global leaders to continue their efforts to slow the spread of the disease despite their declaration.
- The WHO has reinforced proactive community programs to restrict disease spread, including active screening, safe travel practices, and safe behaviors to protect the public from spreading the disease.
- The WHO is also working to expand surveillance capabilities, as well as advancing R&D activities for development of vaccines and clinical guidelines for prevention and treatment.

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What is a coronavirus?

- A coronavirus is a type of virus that is typically found in animals. These small, enveloped viruses are rarely spread to humans, but have been known to spread rapidly once they do and are often the cause of outbreaks – including SARS-CoV (Severe Acute Respiratory Syndrome Coronavirus) in 2003 and MERS-CoV (Middle East Respiratory Syndrome Coronavirus).
- Coronaviruses are typically very easy to kill with low-level disinfectants; however, even a few viruses can make you sick. While frequent cleaning can rid surfaces of a coronavirus, it is very easy for these surfaces to reach infectious levels between cleanings.

What are the signs and symptoms of Coronavirus?

- According to the Centers for Disease Control (CDC), COVID-19 results in a mild to severe respiratory illness with the following symptoms:
 - Fever
 - Cough
 - Shortness of Breath
- Symptoms can appear as early as 2 days after infection or could be delayed up to two weeks
- Minor cases of COVID-19 can last about two weeks, but more serious cases, especially those that lead to lower respiratory infections like pneumonia can last up to 6 weeks
- Not much is known about the mortality rate of COVID-19 at this time, but where the disease is most concentrated, the mortality rate is 2% to 4%

How is this coronavirus spread?

Originally, coronavirus was thought to only spread from animals to humans. Now, there is increasing evidence that coronaviruses spread from human to human in a few key ways. These multiple transmission pathways underline the importance of environmental hygiene.

- Coronavirus is spread between people who are in close contact with one another through respiratory droplets from an infectious person who coughs or sneezes
- Coronavirus can also be spread by touching a dirty surface that is contaminated with the virus and then touching the mouth, nose, or eyes
- In rare occasions, it is possible that coronavirus could be spread through fecal contamination.

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What can you do to protect yourself?

The CDC has reported multiple cases of human-to-human transmission of SARS-CoV-2 in the United States, not connected to travelers from countries experiencing outbreaks. As a result, the following precautions are recommended to stop the spread of the virus, with special focus on enhanced environmental and personal hygiene.

- Wash your hands regularly and avoid touching your eyes, nose and mouth without washing your hands.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash
- Follow CDC guidelines when considering any personal protective equipment
- Clean and disinfect frequently touched surfaces with a disinfectant
- Avoid close contact with people who are sick
- Stay home when you are sick

Other Key Resources:

- [Coronavirus COVID-19 Global Cases by Johns Hopkins CSSE](#)
- [World Health Organization Coronavirus \(COVID-19\) Reference](#)
- [Centers for Disease Control and Prevention \(CDC\) Coronavirus Disease 2019 Resource Page](#)