

Wuhan Coronavirus Outbreak (2019-nCoV): 10 Things You Need to Know

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What Is a Coronavirus?

The coronavirus is a big family of pathogens. Some of them cause mild illnesses like the common cold. Others can cause fatal infections. A coronavirus gets its name from how it looks. Under an electron microscope, these pathogens exhibit spikes that resemble the angles of a crown. There are many coronaviruses that only infect animals. Some evolve in their animal hosts to infect humans. The type that infects humans was first identified in the 1960s. Since then, seven human-infecting types of coronavirus have been identified, including 2019-nCoV, also known as Wuhan Coronavirus.

What Is Wuhan Coronavirus?

On Jan. 7, 2020, Chinese health authorities announced that they had isolated the virus spreading in Wuhan. This novel coronavirus was named 2019-nCoV, and was also called Wuhan coronavirus because the first infected people came from Wuhan City, Hubei Province in China, a city of more than 11 million people and a major transportation hub. This virus resembles other serious human coronavirus types MERS and SARS in that all belong to the “beta” subgrouping of virus. The CDC notes that MERS and SARS both began as infections in bats before mutating to infect humans.

What Are the Symptoms of Wuhan Coronavirus?

The symptoms of Wuhan virus illness resemble other respiratory infections. Infected people may experience coughing and fever, as well as shortness of breath. Some patients have had vomiting, diarrhea, and similar stomach symptoms. The most severe cases have caused pneumonia, severe acute respiratory syndrome, kidney failure, and death. According to the CDC, some infected people have few or no symptoms, whereas others may be severely ill



or die from the disease. Initial estimates suggest symptoms last between two and 14 days.

How Wuhan Coronavirus Spreads

Health experts widely agree that many infected patients had some association with a large live animal/seafood market in Wuhan City, suggesting the disease was first spread from animal-to-human contact. Human-to-human transfer was soon confirmed in China, Germany, and the United States. The first person to be infected within the United States was an Illinois man in his 60s. His wife became infected while traveling in Wuhan, China. The CDC says the full picture of how easily this virus can spread remains unclear.

How Is Wuhan Coronavirus Treated?

As a newly identified virus, 2019-nCoV has no specified treatment. Supportive care is the treatment; a large number of patients need hospitalization to obtain appropriate care. Work is underway to develop antiviral medications to combat the illness. Meanwhile the CDC says that health care workers should strive to treat the symptoms of an infection through supportive care. Researchers are also

trying to develop a vaccine against the virus.

Is There a Vaccine for Wuhan Virus?

So far, no vaccine has been developed for this newly discovered virus. On Jan. 28, the US Department of Health and Human Services announced that the National Institute of Health has begun to collaborate on the development of a Wuhan coronavirus vaccine. Early trials could begin in three months, but it will likely take a year or longer before a safe, proven vaccine can be released to the public, according to HHS officials. The National Health Commission in China is collaborating with various health organizations, including the World Health Organization (WHO), to further study how severe and how contagious this virus may be. By sharing data and continuing to study the illness, health researchers worldwide hope to contribute to the development of a vaccine.

Is the Virus Likely to Mutate?

This is a class of virus that is known to mutate easily. Prior mutations led to the 2002-2003 SARS outbreak, in which a virus native to civet cats mutated to spread the illness to humans. In Saudi Arabia in 2012, a coronavirus that infected camels mutated to become infectious in humans, leading to the MERS outbreak. Currently, researchers have not discovered the original source of the Wuhan coronavirus, but they suspect it came from wild animals



killed and sold for food.

What Can You Do to Protect Yourself?

Based on advice gathered from previous coronavirus outbreaks, the WHO offers general guidance about how to prevent Wuhan virus infection:

- Keep your hands clean frequently with either soap and water or an alcohol-based rub
- Cover your mouth anytime you cough or sneeze. Throw away used tissues.
- Avoid spending time around people who have a fever or cough.
- If you show symptoms of Wuhan virus (cough, fever, shortness of breath), tell your doctor right away, and fill your doctor in on your recent travel history.
- If you visit an animal market where a coronavirus outbreak is suspected, avoid animals and any surfaces they may have touched.
- Make sure any animal product you use in meals is fully cooked. Handle raw meat carefully.

In addition, the CDC recommends you avoid visiting areas where there is an outbreak of this infection and to avoid any close contact with anyone who has visited the outbreak area or shows signs of the infection in the last 14 days.

How Have Chinese Authorities Responded?

Authorities from China confirmed the identity of the new virus on Jan. 7, 2020, and began working with the WHO on the same day to learn more about the virus. Chinese authorities have reacted to the Wuhan virus outbreak with an unprecedented lockdown of Hubei province. The travel restrictions affect millions of people in cities, and airports, public transportation, workplaces and schools have been shut down to prevent further contagion.

How Has the World Responded?

Some other countries have taken steps to prevent the further spread of Wuhan virus. Screening has expanded to US airports of returning passengers and other countries such as the UK, Hong Kong, Singapore, and more have taken similar measures. US authorities at the CDC say the screenings help find infected travellers, but are also an attempt to educate the public about this emerging disease.