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**GLOBAL HEALTH** 

## China Identifies New Virus Causing Pneumonialike Illness

The new coronavirus doesn't appear to be readily spread by humans, but researchers caution that more study is needed.





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HONG KONG — Chinese researchers say they have identified a new virus behind an illness that has infected dozens of people across Asia, setting off fears in a region that was struck by a deadly epidemic 17 years ago.

There is no evidence that the new virus is readily spread by humans, which would make it particularly dangerous, and it has not been tied to any deaths. But health officials in China and elsewhere are watching it carefully to ensure that the outbreak does not develop into something more severe.

Researchers in China have "initially identified" the new virus, a coronavirus, as the pathogen behind a mysterious, pneumonialike illness that has sickened 59 people in the city of Wuhan and caused a panic in the central Chinese region, the state broadcaster, China Central Television, said on Thursday. They detected this virus in 15 of the people who fell ill, the report said.

The new coronavirus "is different from previous human coronaviruses that were previously discovered, and more scientific research is needed for further understanding," the report said.

Coronaviruses are a large family of viruses that infect animals and people. Some cause only the symptoms known as the common cold, although many other viruses also do that.

The announcement signals that researchers are making progress in containing the outbreak, but Asian officials are not likely to relax their vigilance until they learn more. The disease has evoked memories of the outbreak of SARS, or severe acute respiratory syndrome, in 2003. SARS, a respiratory disease and also a coronavirus, spread from southern China in 2003 and infected more than 3,000 people, killing 774.

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China initially covered up the extent of the SARS outbreak and was criticized by health officials around the world for doing so. On Thursday, the World Health Organization praised the Chinese response to the new outbreak and said it did not recommend any restrictions on trade or travel to China because of the virus.

"Preliminary identification of a novel virus in a short period of time is a notable achievement and demonstrates China's increased capacity to manage new outbreaks," Dr. Gauden Galea, the W.H.O.'s representative to China, said in a statement.

Many questions about the new virus remain. While it appears to be transmitted to humans via animals, the Chinese government has not said which animals, nor has it disclosed other details about the outbreak, like the transmission route, the incubation period or the ages and genders of the patients.

"So, there are still a lot of question marks," said David Hui, an expert in emerging infections at the Chinese University of Hong Kong.

The authorities in Wuhan are still closely monitoring 163 people who were in close contact with the patients, Dr. Hui said. He added that 15 days, the minimum incubation period for some viral infections, had not yet passed since the last reported instance of the disease, on Dec. 29.

"It's premature to say that there's no human-to-human transmission," Dr. Hui said.

The Wuhan government confirmed on Dec. 31 that the health authorities were treating dozens of cases of pneumonia of unknown cause. Symptoms of the new illness include high fever, difficulty breathing and lung lesions, according to the Wuhan health commission. Seven people have become critically ill, the Wuhan authorities have said. On Wednesday, the local health commission said eight people had been discharged.

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Researchers have been encouraged by the fact that patients' relatives and hospital workers have not been reported to have gotten sick, signaling that the virus may not spread easily among humans.

"We can assume that this virus transmissibility is not that high," said Guan Yi, a professor of infectious diseases at the University of Hong Kong, who was part of a team that successfully identified the coronavirus that caused SARS.

Dr. Guan said he was not surprised that the virus identified was a coronavirus, because coronaviruses can pass from animals to humans easily. But he said it would probably be a while before researchers came up with treatments for the illness.

So far, the cases in China have circulated only in Wuhan. The initial cases were linked to workers at a market that sold live fish, animals and birds. Workers disinfected and shut down the market after the city health department said many of the cases had been traced to it.

The new illness appeared just weeks before the Spring Festival, China's biggest holiday, when hundreds of millions of people travel. The authorities have urged the public to be on alert for pneumonialike symptoms like fevers, body aches and breathing difficulties.

Until Thursday's announcement, it was not clear what was causing the illnesses in Wuhan. The World Health Organization said Wednesday that it had concluded that it was most likely a coronavirus. "More comprehensive information is required to confirm the pathogen," the W.H.O. said in a statement.

Early reports on ProMED, a disease-alert service, said there was no evidence of human-to-human transmission.

Last weekend, laboratory tests in China ruled out SARS; the deadly Middle East Respiratory Syndrome, or MERS; the flu; bird flu; adenoviruses; and other common pathogens that cause pneumonia.

Health officials in Asia have stepped up screenings and isolated patients with flulike symptoms who had traveled to Wuhan. In Hong Kong, eight people with fever and respiratory symptoms who had recently been in Wuhan were hospitalized on Wednesday.

In South Korea, the authorities said on Wednesday that they had put a Chinese woman under isolated treatment after she was found to have pneumonia after trips to China, including Wuhan.

In Singapore, the authorities placed a Chinese girl with pneumonia in isolation because she had traveled to Wuhan. On Sunday, they said doctors had determined that the child had a common childhood viral illness.

Officials in Hong Kong have installed additional thermal imaging systems at its airport to monitor passengers coming from Wuhan, scanning for people with fevers.

SARS is believed to have jumped to humans from live-animal markets. It was eventually traced to civet cats, raccoon dogs and some other species that were raised and slaughtered for the exotic food trade. The virus normally circulates in bats, and the animals may have gotten it from them, possibly by eating food contaminated by bat droppings.

Most outbreaks of MERS, which appeared in 2012, have been traced to people who raise or sell camels, which in the Middle East are kept for meat, milk, racing, hauling cargo and as pets. Like SARS, MERS can jump from person to person, particularly in hospitals. Some MERS patients infected many others after they were put on machines to help them breathe — the mechanisms helped spew viral particles into the air as they exhaled.

Despite Thursday's announcement, many Chinese were still expressing fear that there could be a repeat of SARS.

"In fact, what people are more concerned about is the transmission route and whether it can be cured," wrote a user on Weibo, a popular social media tool in China.

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Sui-Lee Wee reported from Hong Kong and Donald G. McNeil Jr. from New York. Elsie Chen contributed research from Beijing.