

Explainer: The virus behind China's pneumonia outbreak

January 9 2020, by Yanan Wang



In this Jan. 4, 2020, file photo, a health surveillance officer monitors passengers arriving at the Hong Kong International airport in Hong Kong. A preliminary investigation into viral pneumonia illnesses sickening dozens of people in and around China has identified the possible cause as a new type of coronavirus, state media said Thursday, Jan. 9, 2020. In Hong Kong, 15 patients with symptoms of respiratory illness were being treated as of Sunday. (AP Photo/Andy Wong, File)

Since late last year, people in the central Chinese city of Wuhan have been infected with a viral pneumonia whose cause was unknown. The outbreak raised the specter of another SARS epidemic, which killed hundreds in 2002 and 2003.

A preliminary investigation has now identified the respiratory disease as a new type of coronavirus, Chinese state media reported Thursday, citing scientists handling the investigation.

As of Sunday, local authorities reported 59 people with the illness. Seven were in critical condition, while the rest were stable. Eight were discharged Wednesday night after they didn't exhibit any more symptoms for several days.

WHAT ARE CORONAVIRUSES?

Coronaviruses are a large family of viruses first identified in humans in the mid-1960s. Some cause the common cold, while others found in bats, camels and other animals have evolved into more severe illnesses.

The name comes from the Latin word "corona," meaning a halo or crown, which the viruses resemble when viewed under a microscope.

WHAT ARE THE SYMPTOMS?

Common symptoms include a runny nose, headache, cough and fever. Shortness of breath, chills and body aches are associated with more dangerous kinds of coronavirus, according to the U.S. Centers for Disease Control and Prevention.

HOW ARE CORONAVIRUSES SPREAD?

Many coronaviruses can spread through coughing or sneezing, or by

touching an infected person, but officials said the present illness does not not transmit readily between people

The Wuhan Municipal Health Commission said some of the infected patients ran businesses in a seafood market, meaning it's possible they were infected by animals there. The market is being suspended and investigated.

IS IT ANYTHING LIKE SARS?

SARS, or severe acute respiratory syndrome, belongs to the coronavirus family, but Chinese state media say the illness in Wuhan is different from coronaviruses that have been identified in the past. Earlier laboratory tests ruled out SARS and MERS (Middle East respiratory syndrome), as well as influenza, bird flu, adenovirus and other common lung-infecting germs.

SARS emerged as a novel coronavirus in 2002, first infecting people in southern China, then spreading to more than two dozen countries. More than 8,000 people were sickened and more than 700 died. No new cases have been reported since 2004.

Another form of coronavirus causes MERS, an illness that began in Jordan and Saudi Arabia in 2012 before spreading to about two dozen other countries. It has resulted in more than 800 deaths, with the majority reported from Saudi Arabia.

WHAT HAPPENS NOW?

Chinese researchers made their preliminary determination through gene sequencing of the virus from one patient, according to a statement from Gauden Galea, a World Health Organization representative to China.

"Preliminary identification of a novel virus in a short period of time is a notable achievement," Galea said.

But more must be done before scientists can reach a definitive conclusion. Xu Jianguo, the leader of the group that made the preliminary assessment, told Xinhua state news agency that they will conduct more research over the next several weeks to confirm that it is indeed a new coronavirus.

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