



## Coronavirus in an Outbreak in China

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### Influenza avian and other zoonotic

The "mysterious disease" will spread uncontrollably? now is the worst timing. China faces an unprecedented challenge - an attempt to take over the new virus, while hundreds of millions of residents could spread it at the peak of the annual travel season. Experts warn: "The potential for expansion is greater than before." 6 people have already paid in their lives, 291 are infected.

Humans can be infected with avian influenza, pigs and other excess prostitutes, such as Avian influenza virus subtypes A (HSNt), A (H7N9) and A (H9N2) and swine flu virus Subtypes A (H1N1), A (H1N2), and A (H3N2). Human infections are mainly acquired through direct contact with infected animals or In contaminated environments, these viruses have not acquired the ability to persist Transfer between people. Infections of the avian influenza, swine and other zoonotic viruses in humans can cause disease Starting with mild upper respiratory infection (fever and cough), early sputum Rapid production and progression to severe pneumonia, sepsis with shock, acute breathing Distress syndrome and even death. Conjunctivitis, gastrointestinal symptoms, encephalitis And report encephalopathy to varying degrees depending on the subtype. Most human cases of influenza A (HSNt) and A (H7N9) virus infection were Associated with direct or indirect contact with live or dead infected birds. Control over the disease in the living animal is essential to reduce the risk to humans. It is impossible to eradicate influenza viruses, with its huge silent reservoir in aquatic birds.

Zoonotic influenza in humans will continue to occur. To minimize public health Risk, quality control among both animal and human populations, in-depth clarification of All human pollution and risk-based epidemic planning are essential [1].

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**Figure 1**

Fears of an epidemic similar to the SARS breakout that started in China and killed nearly 800 people in 2002 - 2003 have hit global markets, with inventory and luxury goods hit particularly hard and the Chinese yuan has fallen. SARS, or severe acute respiratory syndrome, is also a coronoid virus.

### General

Coronaviruses are zoonotic, meaning they are trafficking between animals and humans. Detailed investigations found that SARS-CoV was transmitted from human cyber cats and MERS-CoV rewards Southern humans to humans. Some are known to have coronavirus circulating in animals that have not yet been infected with humans. On December 31, 2019, the WHO China Rural Office became aware of WHO pneumonia cases of unknown etiology (unknown cause) discovered in Wuhan City, Novi Province of China. An innovative coronavirus (2019-nCoV) was identified as the causal virus by the Chinese authorities on January 7.

Coronavirinae subfamily in the Coronaviridae family, Invitation Nidovirales. Cin21 Coronaviruses Wrap Viruses with a positive sense genomic RNA genome And with a helical symmetry nucleo-

capsid. The genomic Coronaviruses range in size from 26 to 32 Kilobases, the largest for RNA virus. The name "Coronavirus" is derived from Corona La. tin, That is, a crown or aura, and refers to the feature The onset of viruses (the infectious form of the virus) In electron microscopy (E.M.) with large margins, Predictions of bulbous terrain and form a picture that is reminiscent Of a royal crown or of solar corona. This morphology is Created by stinging viruses (S) p eplomers, which are Proteins that inhabit the virus surface and Determine host tropism [2,3].

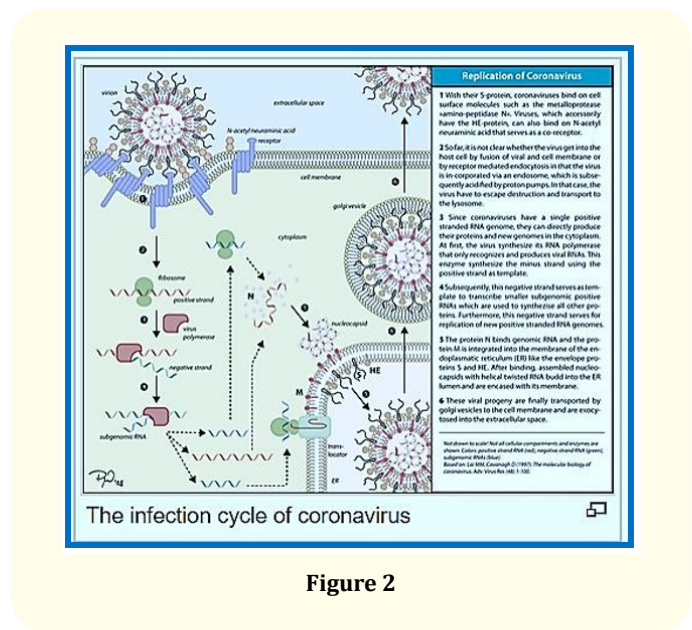
Common signs of infection are respiratory symptoms, fever, coughing, shortness of breath and difficulty breathing. In more severe cases, the infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death.

Standard recommendations for preventing the spread of infections include regular hand washing, mouth and nose coverage when coughing and sneezing, basic cooking of meat and eggs. Avoid any close contact with persons who has symptoms of respiratory illnesses such as cough and sneezing [4].

Evidence strongly suggests that the outbreak is linked to exposures in one seafood market in Wuhan. The market closed on January 1, 2020. At present, there is no infection among health care workers, and there is at present no clear evidence of human-to-human transmission. The Chinese authorities continue their work on intensive surveillance and monitoring, as well as on further epidemiological investigations.

**The current situation**

To date, China has approved over 200 infections in the new virus; Four people died and at least eight others remained in the human condition. "It's really a concern," Ralph Barry, a University of Coronus virus specialist From North Carolina, they said of the count, which jumped about 150 cases In the weekend. "It pretty much means it's human to a person The transmission is happening, and it may not be as difficult as it used to be Suggested. " The World Health Organization has for some time said that human transmission is very difficult to be controlled Out, though, the Chinese authorities are slow to acknowledge that possibility. But that changed on Monday, because of cases diagnosed with Guangdong Province. The majority of cases so far are in Wuhan, a major Chinese city of 11 million people. However, on Monday, authorities approved five cases in Beijing and 13 inside Guangdong. Most cases in Guangdong recently visited Wuhan. But two – family Case members - were not, and showed that the virus can transmit from person to person under certain circumstances. How easy it is and remains an unanswered question at this point.



**Figure 2**

Duplication of corona virus begins at the entrance to the cell. Upon entry into the cell, the virus particle is uncoated and the RNA genome is deposited in the cytoplasm.

The RNA genome of the virus has a 5 aden and 3-poladenadenylated methyl cap. This allows RNA to bind to ribosomes for translation.

Coronaviruses also have a protein known as a copy encoded in its genome and allows the viral genome of the RNA to be copied to new RNA copies using host cell machinery. The replicator is the first protein formed; Once the gene encoded for replication has been altered. The alteration is halted by a stop codon. This is known as a nested transcript. When the mRNA transcript encodes only one gene, it is monocytic. Coronavirus non-structural protein provides additional fidelity for replication because it confers the proofreading function, [5] which lacks RNA- dependent RNA enzymes only.

Replicates the RNA genome and creates a long polypeptide, where all proteins are attached. The viruses have a non-structural protein - a protease - capable of separating the proteins in the chain. It is a type of genetic economy for the virus, enabling it to encode the highest number of genes in a small number of nucleotides [6]. Virus infection in Hong Kong [7].

Scary headlines about a new viral outbreak. People glance nervously at their surgical masks during public transport. Colleagues and friends who refuse to shake hands. Ask anyone who stayed in Hong Kong in early 2003, and they may remember these as some of their most vivid memories of that time [8].

Chinese territory has suffered from an outbreak of what is known as severe respiratory syndrome (SARS). And with another deadly virus now emerging from China, many people in the Asian region have dried up at those worrying times.

Similar to the spread of SARS, Hong Kong authorities shifted to a "serious response" level as fears spread due to a mysterious infectious disease that may have been brought by visitors to a mainland Chinese city. Five possible cases of viral pneumonia have been reported that have also infected at least 44 people in Wuhan, an inland city west of Shanghai and some 900 km north of Hong Kong. The eruption, which occurred last month, rekindled memories of the SARS epidemic in 2002 - 2003 that began in southern China, killing more than 700 people on the mainland, Hong Kong and elsewhere.

The most common symptom was fever, with shortness of breath and pneumonia in a small number of cases. There were no clear indications of transmitting the disease between people.

The most recent cases in Hong Kong are two women, aged 12 and 41, who have been in Wuhan for the past 14 days but do not appear to have visited the food market, hospital authorities said. They were in stable condition and treated in isolation at Princess Margaret Hospital. Besides SARS, or severe acute respiratory syndrome, Hong Kong was also affected by avian influenza in 1997 and swine flu in 2009.



Medical staff in Wuhan, Hubei province, China, where the latest viral outbreak started [January 20: EPA]

**Figure 3**

The prognosis for Hong Kong's ill economy for the next few months - as it suffers from the perfect storm of tourist arrivals due to protests and now a viral outbreak, combined with the effects of the US and China trade war - may spell even more pain.

**China virus death number rises to 17 as a city of 11 million is shuttered**

Fears of an epidemic are similar to the SARS outbreak [9] that began in China, killing nearly 800 people in 2002 - 2003 World markets were turning, with inventories and luxury goods carrying little, and the Chinese yuan falling. SARS, or severe acute respiratory syndrome, is also a coronoid virus. Lee said there was still no evidence of "distributors" capable of distributing the W: it is more widespread, as happened during a SARS outbreak. Symptoms among patients infected with the new virus include fever, cough and difficulty breathing. The viral infection. Which can cause pneumonia, can be passed from person to person.

**Preparing for israel to deal with the deadly chinese virus [10]**

The Ministry of Health on Thursday sent hospital administrators guidance on how to deal with the corona virus that is terrorizing Asia. According to the Health Ministry, about 614 patients have been diagnosed so far, of which 17 have died from the disease. Due to New Year's celebrations in China, and much outbound tourism, there is concern about the spread of the disease in Europe and other countries around the world. The Ministry of Health does not rule out the possibility of the virus coming to Israel. All the instructions.

**Israel ministry of health guidelines for dealing with coronavirus. A "zoonotic disease"**

At present, no travel warning has been issued to China, but the guidelines for those who come to Wuhan province, where the disease is spreading, do not come in any contact with animals. If the passenger develops respiratory illness during the journey or for 14 days thereafter, seek immediate medical attention and avoid traveling by public transport.

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