

Here's What You Need to Know About the Bird Flu Case in Hong Kong

TIME / By Alice Park / December 2, 2013

Health officials say the situation is “serious” after a domestic worker was hospitalized in November.

H7N9, an influenza virus that normally infects birds such as chickens and wild geese, first jumped to human hosts in China in April. According to the Centers for Disease Control and Prevention (CDC), about 20% of those infected have died, but the virus does not spread easily from person to person – at least not yet. So far, the World Health Organization says 137 people have been sickened by H7N9 and 45 have died. Here's what you need to know about the latest bird flu and whether it poses a threat in the U.S.

How did the latest patient get infected?

The 36-year old woman had visited Shenzhen, China where she slaughtered and ate a chicken, according to Hong Kong health officials. She felt ill, with fever, chills and difficulty breathing and was hospitalized after returning to Hong Kong.

Has anyone in the U.S. been infected with H7N9?

So far, no cases of the infection have been reported in the U.S., and the CDC says the risk of H7N9 infection is “low.” All of the human cases so far have been reported in Asia. But it is possible that travelers to Asian countries where the virus has been found in chickens and other poultry could become infected and bring this bird flu to the U.S.

Will my flu shot protect me against H7N9?

No, there is no vaccine against H7N9 yet, although researchers are working on developing one. This year's flu shot protects against H1N1, H3N2, and either one or both of the B group influenza viruses currently circulating around the world.

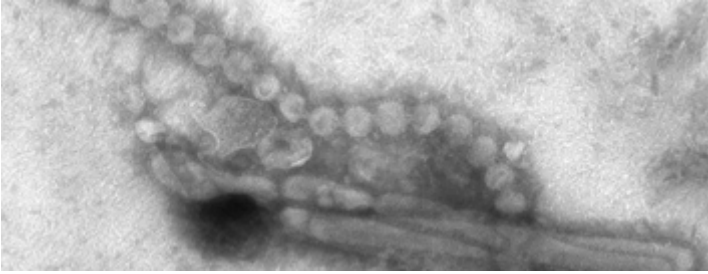
Is H7N9 more dangerous than the previous bird flu, H5N1?

That's hard to tell so far, since so few human cases have been reported. But flu experts are watching H7N9 closely since the virus seems to be making genetic changes that might help it to infect people more easily.

What are Hong Kong officials doing to contain H7N9?

The government halted imports of live poultry from three farms in Shenzhen, and alerted WHO and Chinese health officials.

H7N9: Is This Flu Something to Worry About?



A new bird flu virus, called H7N9 for short, is causing serious illness in people in China. Currently there is no ongoing person-to-person spread. Learn why and how CDC is being proactive about this virus.

A new bird flu virus, called H7N9 for short, is infecting people in China and causing serious illness. About 20 percent of the people who have been infected have died. Luckily, H7N9 is not spreading easily between people the way seasonal influenza (flu) viruses do. Available evidence indicates that most people are being infected after exposure to birds or to environments that might be contaminated with bird flu virus (like live bird markets, for example). There have been no cases of H7N9 in the United States or anywhere outside of China.

Some people might ask why CDC is concerned about a virus that is causing illness on the other side of the world. Should people in the United States be worried?

Risk in the United States



At this time, the risk of getting sick from H7N9 in the United States is low. CDC does not have any new or special recommendations for the U.S. public associated with H7N9, known scientifically as avian influenza A (H7N9). But the emergence of this new H7N9 bird flu virus as a cause of severe illness and death in people raises some serious public health concerns everywhere.

Wild water and shore birds are hosts to many avian influenza viruses. These viruses are very different from human influenza viruses. Mostly, they don't spread easily from birds to people, so human infections with bird flu are quite rare. But because these viruses are

so different from human flu viruses, most people have little to no immunity. For that reason, whenever there is a human infection with a new animal virus (a "novel" virus), scientists sit up and take notice. With the H7N9 situation in China, several things are worrisome:

- The H7N9 virus has genetic changes that have been associated with making bird flu viruses spread better and more easily to mammals, causing more severe disease and causing disease to progress more quickly.
- Human H7N9 virus infections so far have resulted mostly in very serious illness. Cases have started with flu-like symptoms including fever and cough and progressed quickly to severe pneumonia, acute respiratory distress syndrome (ARDS) and multi-organ failure.
- In the two months after H7N9 was first detected, more than 120 human cases were reported, including 24 deaths.

Spread of H7N9

It's reassuring that no evidence of ongoing human-to-human spread of this disease has been found. Chinese health officials have carefully followed up on more than 2,000 close contacts of confirmed cases and have not found any indication of community spread. Also, China's regular surveillance system for influenza-like illness has not shown any unusual increase in activity.

But influenza viruses are constantly changing, and a big concern is that this H7N9 virus might gain the ability to spread easily from person to person. This can happen when animal and flu viruses mix genetic information (reassort) and produce a new influenza virus that can spread easily between people but that is still very different from human viruses, and so people would have little or no immunity against it. Such "reassortment" events are believed to have happened before the influenza pandemics of 1918, 1957, 1968 and 2009. CDC doesn't know if this change will occur. But if this change happens with H7N9, the severity of illness associated with this virus is concerning. The world could face a pandemic with a high toll in illnesses, hospitalizations and deaths.

Travel to China

Many people travel between China and the United States. CDC issued a health alert for public health officials and clinicians in the United States to look for flu symptoms in travelers who are returning from countries with H7N9 bird flu. Since H7N9 is not spreading easily from person to person at this time, CDC does not recommend that people delay or cancel trips to China.

CDC advises travelers to China to take the following precautions:

- Do not touch birds, pigs or other animals.
- Only eat food that is fully cooked.
- Practice hygiene and cleanliness.

- See a doctor if you become sick during or after your trip to China.

The World Health Organization also is watching this situation closely and does not recommend any travel restrictions to China. Travelers should continue to visit [CDC Travelers' Health](#) for up-to-date information about CDC's travel recommendations.

This situation continues to evolve and CDC will provide updates as more information becomes available. To learn more about H7N9, visit CDC's [Avian Influenza A \(H7N9\) Virus](#) website.

What is CDC doing about H7N9?



CDC is following this situation closely and coordinating with domestic and international partners, including the Chinese Center for Disease Control (China CDC) and the World Health Organization (WHO), and taking aggressive proactive steps to be ready for the possibility that this virus may change to spread easily between people.

On April 11, 2013, the Influenza Division laboratory at CDC received one of the H7N9 viruses from China.

CDC has been using the virus for the following routine preparedness measures:

- Develop a test kit for detecting H7N9 infections in humans that is being shared with approved public health laboratories. The kits have already been distributed to most U.S. states and are being shared internationally, too.
- Test for the presence of antibodies against the H7N9 virus in human blood samples. This will allow CDC to see if some people already have immunity against this virus.

- Test to see if certain existing antiviral drugs (i.e. oseltamivir [Tamiflu®] and zanamivir [Relenza®]) will work to treat H7N9. (Visit [H7N9 Update; CDC Pandemic Preparedness Activities Progress](#) for more information.)
- Develop a candidate vaccine virus that could be used to make a vaccine if it is needed.