

China bird flu mutates, might infect mammals

3 April 2013, by Gillian Wong



A woman and her daughter are frightened while ducks approach closely for food at an amusement park in Beijing, China, Wednesday, April 3, 2013. Scientists taking a first look at the genetics of the bird flu strain that recently killed two men in China said Wednesday the virus could be harder to track than its better-known cousin H5N1 because it might be able to spread silently among poultry without notice. The bird virus also seems to have adapted to be able to be able to sicken mammals like pigs. (AP Photo/Alexander F. Yuan)

In a worrisome sign, a bird flu in China appears to have mutated so that it can spread to other animals, raising the potential for a bigger threat to people, scientists said Wednesday.

So far the flu has sickened nine people in China and killed three. It's not clear how they became infected, but there's no evidence that the virus is spreading easily among people.

But the virus can evidently move through poultry without making them sick, experts said, making it difficult to track the germ in [flocks](#).

The findings are preliminary and need further testing.

In the wake of the illnesses, the Chinese [Center for Disease Control and Prevention](#) shared the [genetic sequence](#) of the H7N9 virus with other scientists to help study how the virus might behave in different animals and situations.

One scientist said the sequence raises concern about a potential [global epidemic](#), but that it's impossible to give a precise estimate of how likely that is.

"At this stage it's still unlikely to become a pandemic," said Richard Webby, director of a [World Health Organization](#) flu center at St. Jude Children's Research Hospital in Memphis, Tenn.

"We should be concerned (but) there's no alarm bells ringing yet," he said.



A woman feeds ducks while her boyfriend takes photos at an amusement park in Beijing, China, Wednesday, April 3, 2013. Scientists taking a first look at the genetics of the bird flu strain that recently killed two men in China said Wednesday the virus could be harder to track than its better-known cousin H5N1 because it might be able to spread silently among poultry without notice. The bird virus also seems to have adapted to be able to be able to sicken mammals like pigs. (AP Photo/Alexander F. Yuan)

The virus has [genetic markers](#) that would help it infect people, Webby said. That makes him worry about a [pandemic](#) a bit more than he does for other [bird flu](#) viruses, such as the [H5N1 virus](#) that emerged a decade ago, he said.

"The tentative assessment of this virus is that it may cause human infection or epidemic," said Dr. Masato Tashiro, director of the WHO's influenza research center in Tokyo and one of the specialists who studied the genetic data, "It is still not yet adapted to humans completely, but important factors have already changed."

Flu viruses evolve constantly, and scientists say such changes have made H7N9 more capable of infecting pigs.

Pigs are a particular concern because bird and human flu viruses can mingle there, potentially producing a bird virus with heightened ability to spread between humans, said Dr. William Schaffner, a flu expert at the Vanderbilt University School of Medicine. That's what happened in 2009 with swine flu.

The scientists who inspected the [genetic data](#) also said that based on information from the genes and Chinese lab testing, the H7N9 virus appears able to infect some birds without causing any noticeable symptoms. Without obvious outbreaks of dying chickens or birds, authorities could face a challenge in trying to trace the source of the infection and stop the spread.

If there are no obvious symptoms in birds or pigs "nobody recognizes the infection in animals around them. Then the transmission from animal to human may occur," Tashiro said. "In terms of this phenomenon, it's more problematic."

This behavior is unlike the virulent H5N1 strain, which set off warnings when it began ravaging poultry across Asia in 2003. H5N1 has since killed 360 people worldwide, mostly after close contact with infected birds.

If the latest virus continues to spread in China and beyond, "it would be an even bigger problem than with H5N1, in some sense, because with H5N1 you

can see evidence of poultry dying," said University of Hong Kong microbiologist Malik Peiris, who also examined the genetic information.

He urged China to widely test healthy birds for the virus in live animal markets in the parts of the country where the human infections have been reported.

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