

H7N9 bird flu strain has worrying traits: experts

April 5 2013, by Mariette Le Roux

A mutated bird flu virus that has killed six people in China displays worrying traits that warrant high vigilance, experts say, though the true extent of the threat is unclear.

Most concerning is the virus' wide geographical spread, and the fact that it seems to be spreading unseen among its host animals, possibly chickens or ducks.

"I am cautiously worried," virologist John Oxford of the Queen Mary University of London told AFP.

"If there were four cases in Shanghai, I would be much less concerned, but because it is so geographically widespread I think it is trying to tell us something.

"It is not a [deadly virus](#) for chickens so it could spread in chickens without anyone knowing it. I suspect it's probably wider than we think."

Having made its jump from animals to humans, which required a series of [genetic mutations](#), the influenza A(H7N9) strain has now been diagnosed in four Chinese provinces: Jiangsu, Zhejiang, Anhui and the business capital Shanghai.

Of 14 people confirmed infected, six have died since February. Patients suffer from severe pneumonia with a fever, cough and shortness of breath.

The better-known H5N1 [bird flu](#), which has infected 622 people since 2003 of whom 371 died, is highly fatal in birds, making it easier to identify than the new strain.

According to the [World Health Organisation](#) (WHO), the animal source of the new infection and its mode of transmission was not yet clear.

"We do not yet know enough about these infections to determine whether there is a significant risk of community spread," the UN's health agency stated in an online H7N9 update.

No cases of human-to-[human transmission](#) have yet been found, and no infections beyond China.

"Any influenza that jumps from an [animal species](#) to a human has pandemic potential," Alan Hampson, chairman of the Australian Influenza Specialist Group, said in a statement issued by the Science Media Centre.

"If it learns to spread in humans, if it actually acquires that ability, then it's a high likelihood that it will become pandemic."

Chinese authorities are monitoring about 400 people who had been in contact with those taken ill, but have found no one with symptoms.

Since humans had not been exposed to this particular strain of flu until now, we have no immunity and would be highly susceptible.

There is no preventive vaccine.

Preliminary tests have shown the virus would react to existing antiviral drugs like Tamiflu, according to the WHO.

The UN agency has advised against airport screening and any Chinese travel or trade restrictions for now, recommending good hygiene as the best course of action —regular and thorough hand washing, avoiding diseased animals and properly cooking all meat.

It has started work on developing a vaccine, which must be strain specific, but observers fear it would be too late to deal with a potential H7N9 outbreak.

The experts and the WHO all point to the unpredictability of influenza viruses, saying this strain could fizzle out just as easily as it could kickstart an epidemic.

It is common for flu viruses to mutate, but only once in about five years do they cross the species barrier, and rarely with grave effects for humans.

"This one looks bigger because so many people have died," said Oxford.

"We just have to wait and see. We will know within the next couple of weeks whether anything serious is going to happen."

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