

Real threat of avian flu spreading to humans

Written by Wong Ruey-hong 吳榮宏

Friday, 16 January 2015 07:23

Avian influenza continues to spread. Following an outbreak of the H5N2 strain in Pingtung County, a new strain of H5N2 and an H5N8 strain that had never before been seen domestically have been found in central and southern Taiwan.

The Council of Agriculture's Bureau of Animal and Plant Health Inspection and Quarantine said that the H5N2 subtype cannot be spread from animals to humans and that the virus does not have any negative effects on the human body.

The question is: Is this really true?

In 2005, in Ibaraki Prefecture in Japan, 5.78 million chickens at 41 farms were infected with the low-pathogenic H5N2 virus.

Although no one who had been in contact with the chickens showed any symptoms, the result of a serological study found that workers at poultry farms had higher levels of H5N2 antibodies than healthy people in the general population. It is important to note that seasonal flu vaccine inoculations or other anti-flu treatments might have an influence on neutralizing antibody-positive status. However, this study has been seen as the first example of people being infected with H5N2.

Last year, a group of researchers in Niger published a report saying that they had found H5N2 antibodies in eight people who had been in contact with animals. In Taiwan, avian infections with low-pathogenic H5N2 were reported in 2003 and 2004, as well as between 2008 and 2011, while infections with the highly pathogenic H5N2 subtype occurred for the first time in 2012.

Following the 2012 epidemic, six people who had been in contact with animals were discovered by staff from the Centers for Disease Control to have antibodies, which means that they could have been infected with H5N2.

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Furthermore, a research team in South Korea discovered the H5N2 virus in pigs, a result that shows that interspecies infections from poultry to mammals has already occurred. This is more evidence that the H5N2 virus might be capable of genetic recombination and could become highly pathogenic to humans.

Last year, South Korea set a new record when it culled 15 million domestic birds due to another highly pathogenic strain, H5N8. South Korean researchers issued an urgent public health alert because they found that this new virus contained the highly pathogenic antigen H5, that the virus could bind to human-like receptors and that it could reproduce in the respiratory tracts of mammals.

Based on this academic evidence, it can be said that although researchers still cannot draw the conclusion that the H5N2 and H5N8 subtypes infect people, there is the possibility that they can.

In particular, flu epidemics are most common during the winter, and once a human influenza virus comes in contact with the avian flu virus, it is possible that genetic recombination could occur. This is why the government must not take lightly the occurrence of the H5N2 and H5N8 viruses, and it is imperative that they maintain strict control of epidemics and quickly cull any poultry that has been infected.

In addition, if anyone who has been in contact with poultry or pigs develops a fever, a cough or muscle pain, they must wear a face mask and immediately contact a doctor, remembering to describe the circumstances under which they were in contact with the animal.

At the same time, the public should be sure that chicken and eggs are thoroughly cooked before eating.

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Translated by Perry Svensson

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Source: [Taipei Times - Editorials 2015/01/16](#)