



# Avian Influenza ("Bird Flu")

Influenza experts are concerned that the recent H5N1 outbreak in birds could mutate to produce a new strain of influenza virus. A large-scale, worldwide influenza epidemic could result. There have been no suspected or confirmed cases in Australia to date.

## What is avian influenza (bird flu)?

Avian influenza is an infectious disease of birds. Usually the virus circulates in wild bird populations causing no disease or only mild disease. Infection of domestic poultry, such as chickens, can cause severe disease in these birds. There are a number of different strains of avian influenza, only a few of which can cause disease in humans.

A new type of avian influenza, called influenza A H5N1, was first recognised in 1997 in Hong Kong. This strain reappeared in late 2003 and rapidly spread to several Asian countries causing severe infection in many domestic poultry flocks. There is no evidence that avian influenza is currently infecting birds in Australia.

This virus has also infected a number of people who had close contact with sick poultry or with poultry droppings. Since 28 December 2003, over 110 confirmed cases of avian influenza in humans have been reported in Thailand, Vietnam, Cambodia and Indonesia, and many of these people have died.

At this stage, humans infected with the H5N1 virus do not appear to be able to easily infect others. Exposure to infected poultry and their faeces (or dust or soil contaminated with poultry faeces) can result in human infection. Eating cooked poultry products including chicken or eggs does not result in infection.

A large-scale, worldwide influenza epidemic is called a pandemic. Pandemics occur when a new virus emerges to which people have little or no immunity. Previous influenza pandemics occurred in 1918-19, 1957-58 and 1968-69. In the 1918-19 pandemic, between 20 and 40 million people died. Many scientists are concerned that the recent H5N1 outbreak in birds could mutate to produce a new strain of influenza virus that is easily spread among people, resulting in a pandemic.

### What are the symptoms?

Different strains of avian influenza can lead to different symptoms in people. All strains can cause symptoms typical of human influenza (fever, cough, tiredness, muscle aches, sore throat, shortness of breath, runny nose, headache). In some cases the H5N1 strain has caused a severe pneumonia and, in a small number of cases, the patient has had encephalitis (inflammation of the brain) or diarrhoea. The most common symptom of humans infected with H7 strains is conjunctivitis

(inflammation of the lining of the eye). Symptoms generally appear between two to four days following exposure.

#### Who is at risk?

Most people are not at risk of this disease. People at risk of becoming infected with H5N1 are those who come into contact with sick birds or their faeces while living or travelling in areas where the virus is circulating, or (rarely) people who have had close contact with a person with the human form of the disease in the affected areas.

## How is it prevented?

A human vaccine is not available for the new avian influenza strain. Existing vaccines for normal human influenza will not provide protection against avian influenza, including the H5N1 strain. Scientists worldwide are currently working to develop a suitable vaccine for this strain.

## How is it diagnosed?

Avian influenza virus infection can be diagnosed using specimens of blood, sputum or from swabs of the nose and throat. Testing is done at a specialised laboratory.

### How is it treated?

Specific anti-influenza drugs are likely to be effective against avian influenza in humans and are used to treat people with the H5N1 strain.

#### What is the public health response?

Outbreaks of different strains of avian influenza have occurred previously in Australia. However, there have been no recent reports of avian influenza in Australian birds and there are no reports of Australian people with H5N1 virus infection. Australia does not import live poultry or uncooked poultry products from Asia and there is surveillance for the illegal importation of birds or bird products at Australian borders.

Should suspected human cases occur in NSW, NSW Health would work with the patient, the treating doctors and the laboratory to confirm the diagnosis. Suspected cases would be isolated from others to prevent further infections. Close contacts of these cases who may be exposed to the virus will be given information about the risk of infection. Should these people also develop symptoms, they would also be isolated and tested for avian influenza.

#### Travel advice

Australians travelling to areas affected by avian influenza can reduce their risk of infection by avoiding poultry farms and live bird markets. They should also ensure that uncooked poultry and eggs are handled hygienically, washing hands after handling these and ensure that poultry is cooked thoroughly before eating.

#### For more information

Australian Government Department of Health and Ageing information hotline **1800 004 599.** 

### **Related links**

NSW Health influenza factsheet (usual human influenza) http://www0.health.nsw.gov.au/factsheets/infectious/influenza.html

Australian Government Department of Health and Ageing – Avian influenza http://www.health.gov.au/internet/main/publishing.nsf/Content/health-avian\_influenza-index.htm

World Health Organization

http://www.who.int/influenza/human\_animal\_interface/en/

Travel Advice (Australian Government Department of Foreign Affairs and Trade) http://www.smartraveller.gov.au/

U.S. Centers for Disease Control and Prevention http://www.cdc.gov/flu/avian/index.htm

# Further information - Public Health Units in NSW



1300 066 055

www.health.nsw.gov.au

If you need help making phone calls in English, ring the Translating and Interpreting Service (TIS) on 131 450.

Telephone numbers are correct at time of publication but are not continually updated. You may need to check the numbers in the telephone directory.

You can find more health information in your language on the Multicultural Communication website at http://www.mhcs.health.nsw.gov.au

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