

Avian influenza ("bird flu")

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Avian influenza is primarily a disease of birds. Overseas, humans have rarely been infected after close contact with infected birds. To prevent infection, avoid contact with birds and their droppings in affected countries.

What is avian influenza (bird flu)?

AI is an infectious disease of birds, caused by a number of different strains of AI virus. Some AI viruses circulate in wild bird populations causing no disease or only mild disease. Infection of domestic poultry, such as chickens, can cause severe disease. On rare occasions, some strains of AI virus can infect and cause disease in humans.

An AI virus, called H5N1, was first recognised in 1997 in Hong Kong. This strain reappeared in late 2003 and rapidly spread to birds in other countries in Asia; and later to some areas of the Middle-East, Europe and Africa. The H5N1 AI strain has caused serious infections in humans and deaths. To date this strain of AI has not been found in Australia.

Another AI virus, called H7N9 avian influenza, was first recognised in early 2013 in eastern China. The H7N9 AI strain has also caused serious infections in humans and deaths. To date this strain of AI has not been found in Australia.

Australia has had a number of small outbreaks of other strains of AI on poultry farms associated with very few mild human infections.

What are the symptoms?

When people are infected with an AI virus, no symptoms or mild symptoms such as red sore eyes (conjunctivitis) occur most frequently.

However, infection with some strains of AI such as H5N1 or H7N9 can cause symptoms similar to severe human influenza (fever, cough, tiredness, muscle aches, sore throat, shortness of breath, runny nose, headache). Pneumonia, encephalitis (inflammation of the brain) and diarrhoea may occur.

Symptoms generally appear between 2 and 10 days following exposure.

How is it spread?

AI viruses infect people following close contact with infected poultry or materials contaminated with poultry feathers, faeces or other waste from poultry facilities. Humans infected with an AI virus do not easily transmit the infection to others. When this has occurred it seems to have been due to close contact with a sick person over several days.

Eating properly cooked poultry products including chicken or eggs does not result in AI infection.

Who is at risk?

Most people are not at risk of this disease, except if they come in contact with infected birds or their secretions while in affected areas of the world, or possibly if caring for a person infected with the virus.

How is it prevented?

People who are in contact with patients with AI, or who are working with infected birds, must use personal protective equipment (including P2 respirators, goggles, gloves and protective clothing), and follow excellent infection control and may require anti-influenza medication. Vaccination with seasonal influenza vaccine is strongly recommended.

Laboratory workers handling specimens must follow special safety requirements.

A human vaccine is not available for avian influenza.

People travelling to areas affected by avian influenza should:

- avoid poultry farms and live bird “wet” markets
- wash their hands thoroughly after handling uncooked poultry products such as meat or eggs, and
- ensure that poultry or poultry products are cooked thoroughly before eating.

How is it diagnosed?

AI infection can be diagnosed in people with symptoms who have a history of exposure to the virus using specimens of blood, or from swabs of the nose and throat. Testing is done at specialised laboratories.

How is it treated?

Specific anti-influenza drugs are likely to be effective against AI in human and are used to treat people with AI virus infections. Isolation of the patient and supportive medical care may be necessary.

What is the public health response?

Australian biosecurity officers conduct surveillance for the illegal importation of birds or bird products at Australian borders.

Doctors and laboratories must notify people with suspected AI to the local public health unit.

Should human cases be suspected in Australia, the local public health unit will work with the patient, the treating doctors, and the laboratory to confirm the diagnosis. Cases will be isolated from others to prevent further infections.

Close contacts of cases will be counselled about the risk of infection. Should they develop symptoms, they will also be isolated and tested for AI.

Additional resources

- NSW Health Influenza website: www.health.nsw.gov.au/Infectious/influenza/
- NSW Department of Primary Industries: www.dpi.nsw.gov.au/
- Australian Government Smartraveller website: www.smartraveller.gov.au/
- World Health Organization (WHO): www.who.int/influenza/human_animal_interface/avian_influenza/en/
- U.S. Centers for Disease Control and Prevention: www.cdc.gov/flu/avianflu/
- Australian Government Department of Health - Avian influenza: www.health.gov.au/internet/main/publishing.nsf/Content/health-avian_influenza-index.htm

For further information please call your local public health unit on **1300 066 055** or visit the New South Wales Health website: www.health.nsw.gov.au .