

Bird flu (avian influenza)

Bird flu, also known as avian influenza, is a type A influenza virus. It is lethal to poultry and is potentially fatal in humans. Bird flu spreads between both wild and domesticated birds. It has also been passed from birds to humans who are in close contact with poultry or other birds.

There is no clear evidence that the virus can be transmitted from human to human. However this may have happened in rare cases, where a person has become ill after caring for a sick family member.

Scientists are concerned that the bird flu virus may combine with a human flu virus and mutate, which may make transmission between humans possible.

The strain of bird flu presently affecting Asia is the H5N1 strain. This strain has killed more than 130 people in Indonesia, Vietnam, Cambodia, Thailand, Turkey, Azerbaijan, Egypt, China, and Iraq since 2003.

Bird flu in Australia

There are no reports of the current bird flu strain in Australia, either among birds or people.

There have been five previous bird flu outbreaks in Australia among commercial flocks, all of which were contained and eradicated. The last outbreak was in 1997 in Tamworth in New South Wales.

How the virus is spread

Water birds such as wild ducks are believed to be the carriers of all avian influenza type A viruses. The viruses are carried inside the birds' intestines and are distributed into the environment via bird faeces (poo). Migratory birds infected with the virus could potentially spread the bird flu to any of the countries they visit.

Wild birds don't usually show symptoms of bird flu, although the currently circulating H5N1 strain has caused illness and death in some wild birds. The avian influenza virus can more frequently kill domesticated birds, such as chickens and turkeys.

Symptoms in birds differ according to the species but can include diarrhoea, breathing difficulties, swollen head and death. A sick bird sheds the virus in its feathers, mucous, saliva and faeces.

Humans who have close contact with sick birds are at risk of infection with bird flu. For example a person may handle a sick bird, contaminate their hands with chicken faeces, and forget to wash their hands before eating. They will then ingest the infected bird faeces. This is the most common way for a human to catch the bird flu. The virus can also survive in raw poultry meat but is destroyed during normal cooking.

There is no evidence that the current circulating H5N1 strain of bird flu can be spread easily from human to human.

Symptoms in humans

Although there have been too few human cases to determine the exact incubation period of bird flu, it would be expected to be from three to 10 days. The symptoms of bird flu in humans are similar to those of regular influenza and include:

- Fever
- Sore throat

- Cough
- Headache
- Aching muscles.

Complications

Bird flu in humans can cause a range of serious and potentially fatal complications, including:

- Eye infections
- Pneumonia, including viral pneumonia
- Acute respiratory distress
- Inflammation of the brain and heart.

Tell your doctor if you have been to a country where there is bird flu

If you have recently returned from a country that had an outbreak of bird flu and you get flu symptoms, see your doctor immediately. When making the appointment, tell the clinic staff about your travel including any visits to markets, farms or anywhere else where birds were present. You can look up which countries are affected by bird flu on the WHO webpage (http://www.who.int/csr/disease/avian_influenza/en/index.html).

Influenza viruses can mutate

Influenza viruses that infect animal species can mutate and infect humans. The human immune system may have no defences against viruses that previously only infected animals. That's why infection with these viruses can result in more severe disease in people.

If the H5N1 bird flu virus were to mix with a human influenza virus, such a 'combined' virus could create a new human influenza virus that could spread rapidly.

Health experts are concerned that the current bird flu affecting parts of Asia, the Middle East, Africa, and Europe could become a worldwide pandemic if the virus does mutate. The worst influenza pandemic in modern history was the Spanish flu, which occurred in 1918–19 and killed up to 50 million people.

Measures to contain the spread of the current bird flu virus include identifying and culling affected poultry flocks, research into tests and vaccines, and rigorous quarantine practices.

Australia is ready to respond to an outbreak

Federal and state governments have been working together to plan their response to an outbreak of bird flu.

An episode of bird flu in Australia would trigger the Australian Action Plan for Pandemic Influenza, a federal government plan. Victoria also has a Pandemic Influenza Plan, which details the steps that will be used by state government agencies and health services to manage an outbreak.

A separate federal government plan, the Australian Veterinary Emergency Plan, is designed to manage bird flu outbreaks among bird populations such as poultry farms.

Key measures to prevent an outbreak of bird flu include keeping wild birds and domesticated birds apart, and making sure that domesticated birds have a safe supply of drinking water.

Treatment and vaccines

Several antiviral medications used to treat human influenza are also effective for bird flu. These could be used if a person developed symptoms after possible exposure to avian influenza, or to prevent illness in a person who was in close contact with avian influenza.

At present people living in Australia, or people making short visits to affected countries, do not need to have antiviral medications. However Australians living in countries affected by avian influenza should consider having access to a supply of antiviral medication, to be used on medical advice.

The Australian Government is stockpiling Relenza and Tamiflu, two drugs that may be used in the treatment of human cases of bird flu. In the case of an outbreak in humans, these drugs would be used to maintain essential services, prevent transmission and provide treatment for people who are already ill.

A vaccine against bird flu is in development, but is not currently available. The current influenza vaccines will not protect humans against bird flu. However, people who may be exposed to bird flu should consider being vaccinated against human influenza viruses to reduce the risk of the viruses 'mixing' to form a new flu strain.

Advice for travellers and Australians living overseas

People making short visits to affected countries do not need to have antiviral medications.

However Australians living in countries affected by bird flu should consider having access to a supply of antiviral medications to be used on medical advice. This may include having a supply of antiviral medications in their home, particularly if they live some distance from urban centres and cannot therefore ensure access to antiviral medications stored locally.

Be aware of the risk of bird flu if you are travelling to, or living in, a country where outbreaks are occurring in birds or humans. Suggestions include:

- Avoid contact with wild or domesticated birds. Don't go to farms or market places.
- Stop young children from putting contaminated objects or their own fingers into their mouths.
- Eggshells may be contaminated with bird faeces. Wash eggs thoroughly before breaking and wash your hands thoroughly after handling eggs.
- Avoid foods that contain uncooked egg, such as mayonnaise.
- Wash hands, chopping boards and utensils thoroughly after handling raw poultry.
- Cook poultry at high temperatures. Cooking temperatures of 80°C or higher destroy the bird flu virus in about 60 seconds.

Where to get help

- Your doctor
- Emergency Animal Disease Watch Hotline, Australian Government Department of Agriculture, Fisheries and Forestry Tel. 1800 675 888
- Communicable Diseases Section, Department of Health Victoria Tel. 1300 651 160

Things to remember

- Bird flu is spread between birds and from birds to humans.
- Exposure to birds, bird faeces or feathers is the most likely way for a human to catch bird flu.
- See a doctor immediately if you have recently returned from a country that has had an outbreak of bird flu and you get flu symptoms.

This page has been produced in consultation with, and approved by:

Department of Health - Communicable Disease Prevention and Control Unit

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