

What is Avian Influenza?

Bird Flu is an infection caused by Avian (bird) Influenza (flu) viruses. These flu viruses occur naturally among birds. Wild birds worldwide carry the viruses in their intestines, but usually do not get sick from them. However, Bird Flu is very contagious among birds and can make some domesticated birds, including chickens, ducks, and turkeys, very sick and kill them.

Case Definition

Possible Avian Influenza Case:

I any individual presenting with fever ($>38^{\circ}\text{C}$)

And one or more of the following symptoms:

- a) Cough
- b) Sore throat
- c) Shortness of breath

And one or more of the following criteria:

- a) Laboratory evidence for influenza A by a test that does not sub-type the virus
- b) Having been in contact, during the 7 days prior to the onset of symptoms, with a confirmed case of Influenza H5N1 while this case was infectious (from 1 day before the onset of symptoms up to 7 days after the onset)
- c) Having been in contact, during the 7 days prior to the onset of symptoms, with birds, including chickens which have died of an illness
- d) Having worked in a laboratory, during the 7 days prior to the onset of symptoms, where there is processing of samples from persons or animals that are suspected of having highly pathogenic avian influenza infection (HPAI)

OR

II Death from an unexplained acute respiratory illness

And one or more of the following criteria:

- a) Residing in an area where HPAI is suspected or confirmed
- b) Having been in contact during the 7 days prior to the onset of symptoms with a confirmed case of influenza H5N1 while this case was infectious (from 1 day before the onset of symptoms up to 7 days after the onset)

How does Bird Flu spread?

Within a country, the disease spreads easily from farm to farm. Infected birds shed flu virus in their saliva, nasal secretions, and faeces. Susceptible birds become infected when they have contact with contaminated excretions or surfaces that are contaminated with excretions (vehicles, feed, cages or clothing – especially shoes – can carry the virus from farm to farm).

So called "wet" markets, where live birds are sold under crowded and sometimes-unsanitary conditions can be another source of spread.

The disease can spread from country to country through international trade in live poultry. Migratory birds, including wild waterfowl, sea birds, and shore birds, can carry the virus for long distances and have, in the past, been implicated in the international spread of highly pathogenic avian influenza.

What is the risk to humans from Bird Flu?

Bird Flu viruses do not usually infect humans, but several hundred cases of human infection with Bird Flu viruses have been reported since 1997. During an outbreak of Bird Flu among poultry (domesticated chicken, ducks, turkeys), there is a possible risk to people who have contact with infected birds or surfaces that have been contaminated with excretions from infected birds. The current outbreak of Avian Influenza A (caused by a virus called H5N1) among poultry in Asia is an example of a Bird Flu outbreak that has caused human infections and deaths.

What are the symptoms of Bird Flu in humans?

Symptoms of Bird Flu in humans have ranged from typical flu-like symptoms (fever, cough, sore throat and muscle aches) to eye infections, pneumonia, severe breathing problems (such as acute respiratory distress), and other severe and life-threatening complications.

Are there cases of Bird Flu in Sri Lanka?

There have been no reported cases of Avian Flu in Sri Lanka. However, all countries in and outside Asia, including Sri Lanka, are preparing for the possibility of an Influenza outbreak as a precautionary measure.

What is an Influenza pandemic?

An Influenza pandemic is a global outbreak of disease that occurs when a new Influenza virus appears or "emerges" in the human population, causes serious illness, and then spreads easily from person to person worldwide. Pandemics are different from seasonal outbreaks or "epidemics" of Influenza. **Seasonal outbreaks** are caused by subtypes of Influenza viruses that are already in existence among people, and for which vaccines exist. **Pandemic outbreaks** are caused by new subtypes or by subtypes that have never circulated among people or that have not circulated among people for a long time, against which people have no immunity or vaccines. Past Influenza pandemics have led to high levels of illness, death, social disruption, and economic loss.

Can a pandemic be avoided?

No one knows for sure. However, WHO remains optimistic that, if the right actions are taken quickly, an Influenza pandemic can be avoided. The first priority, and the major line of defence, is to reduce opportunities for human exposure to the largest reservoir of the virus; infected poultry. This is achieved through the rapid detection of poultry outbreaks and the emergency introduction of control measures, including the destruction of all infected or exposed poultry stock, and the proper disposal of carcasses.

Is there a vaccine and/or a treatment?

Scientists are currently in the process of developing a vaccine against Influenza H5N1 for use in humans. However, the testing and manufacturing process will take some time to complete and the vaccine may not be ready in time or in sufficient quantities to stop a widespread human outbreak, if one occurs.

An antiviral drug called oseltamivir, or Tamiflu, can be used to treat the flu. Tamiflu is used for treating patients one year of age and older whose flu symptoms started within the last day or two, Tamiflu can also be used to reduce the chance of getting the flu if there is a flu outbreak in the community. For prevention purposes, Tamiflu is only recommended for people aged 13 and above. However, it is not clear if Tamiflu will be effective in treating and preventing a new strain of the influenza that might cause a pandemic. It has not been shown to help in flu-like illnesses caused by any virus other than Influenza A and B. The safety and effectiveness of Tamiflu have not been determined in people with chronic heart or lung disease, kidney failure, or in people with high-risk underlying medical conditions. Moreover, in the case of a rapidly spreading epidemic, supplies might become very short.

Dosage for treatment

Adults and adolescents (>13years of age) - 75mg twice daily for 5days

Children (>1year of age) <15kg body weight: 30mg twice daily for 5 days

15-23kg body weight: 45mg twice daily for 5 days

24-40kg-body weight: 60mg twice daily for 5 days

>40kg body weight: 75mg twice daily for 5days

There is a vaccine available to protect against seasonal human Influenza. This vaccine will not protect against a pandemic strain but it will protect against seasonal influenza which, at a time of pandemic, could be mistaken as being caused by the pandemic virus. Such a situation would create unnecessary concern and misuse of limited antiviral medications.

Can I continue to eat chicken?

Yes. Avian Flu is not a food-borne virus, so eating chicken is safe as long as the meat or eggs are well cooked. However, the person preparing the food may be at risk of becoming infected if the bird was sick and the environment where the sick chicken was processed may be contaminated.

What are the precautionary measures?

In addition to the public health measures, which will be the responsibility of the authorities, common personal hygiene measures should be taken to avoid Avian Influenza.

- Avoid all direct contact with poultry, including touching well-appearing, sick, or dead chickens and ducks. Avoid places such as poultry farms and bird markets, where live poultry are raised or kept, and avoid handling surfaces contaminated with poultry faeces or excretions.
- Do not eat food made from raw poultry products.
- After handling eggs or poultry thoroughly clean your hands and any surfaces used with water and mild detergent, handle and dispose of waste carefully.
- Separate raw meat from cooked or ready-to-eat foods or vegetables to avoid cross contamination.
- Wash egg shells in soapy water before handling and cooking, and wash your hands afterwards.
- Avoid using the same knives or the same chopping boards for vegetable, cooked and raw food. Do not handle both raw and cooked foods without washing your hands in between and do not place cooked meat back on the same plate or surface it was before cooking.
- Avoid touching your nose, mouth, and eyes.
- Wash your hands frequently and thoroughly with soap and water.

If you believe you have been exposed to infected poultry or people:

- Monitor your health for 10 days by taking your temperature twice a day.
- Do not travel while sick, and limit contact with others as much as possible to help prevent the spread of any infectious illnesses.
- If you become sick with symptoms such as a fever, difficulty in breathing, a cough, or any illness that requires prompt medical attention, seek immediate advice from your doctor.

What should I do in case of an outbreak of human Influenza?

With normal Influenza or pandemic Influenza, the virus will be spreading easily from person to person. The main way that Influenza viruses are spread from person to person is through the respiratory droplets created by coughs and sneezes ("droplet spread"). In the event of Influenza pandemic, good

respiratory habits and good personal hygiene practices may reduce the spread of the disease.

It is important to pay attention to the following:

- Cover your nose and mouth when coughing/sneezing, and turn away from other people. Use a paper tissue and dispose of it in a rubbish bin. Teach children to do this too.
- Wash your hands often and thoroughly with soap and water. Care should be taken to wash hands especially after any contact with secretions from nose or mouth, as these can carry a virus.
- Avoid shaking hands or close contact with people exhibiting symptoms of a cold.
- Children are especially prone to touching their face, eyes and mouth with unwashed hands. Therefore teaching children the importance of proper hand washing after coughing, sneezing and touching dirty items is very important.
- Avoid touching your eyes, nose or mouth, as germs are often spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose or mouth.

What should I do if I get Influenza?

- Stay away from work, and try to avoid contact with other people.
- Keep your distance from others to protect them from getting sick too.
- Rest! Do not undertake stressful/energetic activity.
- Drink plenty of liquids.
- Avoid using alcohol and tobacco.
- Take medication to relieve the symptoms of flu.
- Persons aged below 18 should NEVER take aspirin to treat symptoms of influenza because of the risk of a rare but serious complication called Reyes Syndrome.
- Monitor your temperature. If it exceeds 39/40°C, report it to a doctor.
- Follow proper etiquette and hygiene as detailed above.
- You may be asked to wear a surgical mask to help protect others.