# Avian influenza

#### Avian influenza avian flu or bird flu

it refers to an illness caused by any of many different strains of influenza viruses that have adapted to a (specific host) birds.

### **Causes**

avian influenza viruses (influenza A virus), There are many subtypes but only some strains of four subtypes have been highly pathogenic in humans. These are types H5N1, H7N3, H7N7, H7N9, and H9N2.

## spreading of avian influenza

Most human contractions of the avian flu are a result of either handling dead infected birds or from contact with infected fluids. While most wild birds mainly have only a mild form of the H5N1 strain, once domesticated birds such as chickens or turkeys are infected, it could become much more deadly because the birds are often within close contact of one another. There is currently a large threat of this in Asia with infected poultry due to low hygiene conditions and close quarters. Although it is easy for humans to become infected from birds, it's much more difficult to do so from human to human without close and lasting contact.

Spreading of H5N1 from Asia to Europe is much more likely caused by both legal and illegal poultry trades than dispersing through wild bird migrations,

#### **H5N1**

The highly pathogenic influenza A virus subtype H5N1 is an emerging avian influenza virus that has been causing global concern as a potential pandemic threat.

H5N1 has killed millions of poultry in a growing number of countries throughout Asia, Europe, and Africa. Health experts are concerned that the coexistence of human flu viruses and avian flu viruses (especially H5N1) will provide an opportunity for genetic material to be exchanged between species-specific viruses, possibly creating a new virulent influenza strain that is easily transmissible and lethal to humans. The mortality rate for humans with H5N1 is 60%.

### **H7N9**

Influenza A virus subtype H7N9 is a novel avian influenza virus first reported to have infected humans in 2013 in China

### **Signs and Symptoms in Humans**

Signs and symptoms may depend on which avian influenza A virus caused the infection.

Low pathogenic avian influenza A virus infections of humans have been associated with generally mild, non fatal illness, humans have ranged from conjunctivitis to influenza-like illness (e.g., fever, cough, sore throat, muscle aches) to lower respiratory disease

Highly pathogenic avian influenza A virus infections of humans have been associated with a wide range of illness, (e.g. shortness of breath, difficulty breathing, pneumonia, acute respiratory distress,), sometimes accompanied by nausea, abdominal pain, diarrhea, vomiting and sometimes neurologic changes. Sometimes infection with highly pathogenic avian influenza A virus infection leads to death, especially with HPAI H5N1 virus.

#### **Influenza Prevention**

People who have fewer chances to contact with birds do not belong to the high-risk group of HPAI. If people take precautions correctly and be more careful, the chance of infection will be very low, even among farmers.

Try to avoid flu infection in any situation will be necessary. Protecting eyes, nose, mouth and hands from virus particles will be a major priority because these are the most common passageways for a flu virus to transfer into the body.

Bird flu virus particles may also be transferred through clothing or even shoes.

The final step is people should always have sanitized hands in order to further reduce the chances of cross-contamination

Any unprotected clothing or footwear should be disinfected.

Avoid contact with poultry and maintain good personal hygiene is very important