

# Avian Influenza (Bird Flu)

## **Avian Flu in Birds is Spreading in Asia and Other Countries**

- Avian influenza - commonly called "bird flu" - is an infection caused by influenza viruses that occur naturally in birds.
- Wild birds can carry the viruses, but usually do not get sick from them. However, some domesticated birds, including chickens, ducks, and turkeys, can become infected, often fatally.
- One strain of avian influenza, the H5N1 virus, is endemic in much of Asia and has recently spread into Europe. Avian H5N1 infections have recently killed poultry and other birds in a number of countries.
- Strains of avian H5N1 influenza may infect various types of animals, including wild birds, pigs, and tigers.
- Symptoms in birds and other animals vary, but virulent strains can cause death within a few days.

## **Avian H5N1 Flu in Humans is Currently Very Limited and Not a Pandemic**

- Human H5N1 influenza infection was first recognized in 1997 when this virus infected 18 people in Hong Kong, causing 6 deaths.
- The World Health Organization is tracking the number of human cases of the H5N1 virus. See <http://www.pandemicflu.gov/#map>, for a map showing the nations with confirmed human cases and the number of cases.
- Currently, close contact with infected poultry has been the primary source for human infection. Though rare, there have been isolated reports of human-to-human transmission of the virus.
- Genetic studies confirm that the influenza A virus H5N1 mutates rapidly. Should it adapt to allow easy human-to-human transmission, a pandemic could ensue — it has not done so to date.
- At this time, it is uncertain whether the currently circulating H5N1 virus will lead to a global disease outbreak in humans — a pandemic.
- The reported symptoms of avian influenza in humans have ranged from typical influenza-like symptoms (e.g. fever, cough, sore throat, and muscle aches) to eye infections (conjunctivitis), acute respiratory distress, viral pneumonia and other severe, life-threatening complications.

## **Preventing and Treating Avian Flu in Humans**

- Vaccines to protect humans against H5N1 viruses currently are under development. In addition, research is underway on methods to make large quantities of vaccine more quickly.
- So far, research suggests that two antiviral medicines, oseltamavir (Tamiflu®) and zanamavir (Relenza®), may be useful treatments for H5N1 avian influenza. However, H5N1 viruses are generally resistant to two other available antiviral medications, amantadine and rimantadine, so they cannot be used to treat avian flu.