

Learn the Facts About Avian or Bird Flu

Avian Flu Basics:

Avian influenza or bird flu is caused by the Influenza A virus. The most lethal strain, H5N1 affects birds primarily but has also been transmitted to people. Over the last four years, 312 cases of human infection and 190 deaths have been reported worldwide.¹ These human infections have resulted in a 60% mortality rate.² The virus is spread by direct contact with the secretions, blood, or feces of infected birds. Human to human transmission appears to have occurred in rare instances.

Who is at risk for getting bird flu?

Poultry workers who directly handle live or dead birds or have contact with bird secretions or droppings may be at risk for contracting bird flu. Poultry workers may also work part time as migrant and seasonal workers or have farmworker family members. In humans, the majority of deaths have occurred with children or those with weakened immune systems who have come into contact with infected birds or surfaces.

Signs and Symptoms in People:

Signs and symptoms in infected people include: fever, cough, sore throat, eye infections, muscle aches, pneumonia, acute respiratory distress and other severe and life-threatening complications. The main concern of a human pandemic stems from the theory that if a person, or an animal such as a pig, were infected with a human influenza virus and co-infected with the H5N1 virus, the two viruses could potentially mix genetic material (reassortment) to form a new strain of influenza A as lethal as H5N1 but with the ability to spread from person-to-person contact (antigenic shift).³

Symptoms in Birds:

It is often impossible to tell if a bird is infected with bird flu. Birds can have the disease for 3-7 days before showing any symptoms. They usually die several hours after their symptoms become evident. Infected birds may exhibit the following:

- sudden death without any visible signs
- lack of coordination
- purple discoloration of the wattles, combs, or legs
- soft-shelled or misshapen eggs
- lack of energy or appetite
- diarrhea
- swelling of the head, eyelids, comb, wattles, or hocks
- nasal discharge
- decreased egg production
- coughing or sneezing

Symptoms in Humans:

A person who is infected with bird flu may have the following symptoms:

¹ Current human H5N1 cases available at:

http://www.who.int/csr/disease/avian_influenza/country/cases_table_2007_06_12/en/index.html

² Available: <http://www.cdc.gov/flu/avian/outbreaks/current.htm> Accessed: 06/18/2007

³ Available: <http://www.cdc.gov/flu/avian/gen-info/transmission.htm> Accessed: 06/18/2007

- fever
- cough
- sore throat
- eye infections
- muscle aches
- pneumonia
- acute respiratory distress
- other severe and life-threatening complications

The symptoms of bird flu are similar to those of human flu. Those who have had direct contact with birds, bird droppings, or bird blood and develop the symptoms of bird flu should seek medical care as soon as possible. Ill poultry workers should notify their supervisor as well.

Treatment and Vaccine:

Most of the H5N1 virus strains that have proven to be deadly to humans are resistant to amantadine and rimantadine. Oseltamivir and zanamavir may prove effective in treatment but research has yet to conclude such effects.⁴ As of April 17, 2007 the FDA has approved a vaccine for one form of H5N1 but it is not currently available to the general public.

Protection and Prevention:

It is recommended that poultry workers get vaccinated for the human flu that occurs each year. This will reduce the likelihood that avian flu will change into a form that is easily spread from person to person. Poultry workers should also get up-to-date information about bird flu from their employer, their union, government agencies or their doctors. While at work, employees must wash their hands before eating, drinking, smoking or chewing gum. They need to avoid touching their eyes, nose or mouth while at work with unwashed hands. To protect their families, they should change their clothes and wash their hands and face before returning home or before touching family members. Additionally, they should bathe with hot water, soap and shampoo, and change clothes as soon as possible after work.

Employer Protections:

Poultry employers should provide their workers with the following:

- training on how to protect themselves and their families from bird flu
- protective equipment, such as coveralls, disposable gloves, goggles, and a respirator
- free vaccinations for the human flu
- hand washing stations with soap in the poultry barns.

Respirators are more protective than dust masks. The employer must have the employee evaluated by a doctor before use of respirator to ensure that his/her lungs and heart are strong enough to handle the physical strain of breathing through a respirator. If a high-seal respirator is used, the employee also must be “fit tested” to make sure that there is a good seal between the face and the respirator.

For more information: <http://www.cdc.gov/flu/avian/>

⁴ Available: <http://www.cdc.gov/flu/avian/gen-info/qa.htm> Accessed: 06/18/2007