

## Avian Flu

Avian influenza (AI) viruses infect wild birds and poultry (e.g., chickens). They are divided into two groups based upon the severity of the disease they produce in poultry: low pathogenicity AI (LPAI) viruses and highly pathogenic AI (HPAI) viruses. LPAI viruses occur naturally in wild birds but can spread to poultry where they generally cause minor illness. However, HPAI viruses are highly contagious and cause high mortality in poultry. While LPAI viruses pose little threat to human health, certain HPAI viruses have caused serious illness and even death. Of particular concern to public health are the HPAI H5N1 viruses that are spreading rapidly in some parts of the world. HPAI H5N1 viruses have caused the deaths of millions of birds and of over 140 people worldwide. These deaths have thus far been restricted to Asia, the Middle East, and Africa. As of October 2006, the HPAI H5N1 virus has not been found in the United States.

Although HPAI H5N1 viruses have the potential to develop into pandemic viruses if they acquire the ability to pass readily from human-to-human, thus far, there has been only very limited transmission between humans. This document provides interim guidance for protecting employees who may be exposed if there is an outbreak of HPAI H5N1 in the United States. For the most up-to-date information on the occurrence of HPAI H5N1 outbreaks throughout the world, as well as other HPAI virus outbreaks that may also pose a hazard to human health, consult the Department of Health and Human Services (HHS) web site at: [www.avianflu.gov](http://www.avianflu.gov).

### Symptoms of Avian Influenza (AI) in Humans

Range from: fever, cough, sore throat and muscle aches; to diarrhea, eye infections, pneumonia and severe respiratory diseases; and other severe and life-threatening complications.

The symptoms of avian influenza may depend on which virus caused the infection but often are similar to those associated with human seasonal influenza.

Individuals with these symptoms may be experiencing an illness other than influenza. Therefore, laboratory tests can be used to confirm avian influenza infection in humans.

### How People Become Infected

So far, most cases of avian influenza infection in humans have resulted from direct contact with infected poultry (e.g., domesticated chickens, ducks, and turkeys) or contact with surfaces soiled with discharges from their mouths, beaks, or with feces. Other possible means of infection include consuming raw or undercooked poultry or poultry products and inhaling contaminated poultry particles (e.g., this could occur during butchering).

Eating properly handled and cooked poultry and eggs is safe. Cooking poultry to an internal temperature of 165°F and eggs until they are firm throughout kills the AI virus.

### Employees at Potential Risk of Exposure

- Poultry employees involved in eradication activities (for example, depopulating poultry);
- Animal handlers (other than poultry employees);
- Laboratory employees;
- Health care workers treating patients with known or suspected avian influenza viruses;
- Food handlers;
- Airport personnel with close exposure to passengers suspected of being avian influenza-infected; and
- Travelers on temporary work assignments abroad in areas affected by HPAI H5N1 outbreaks.

## Treatment

Prescription antiviral drugs approved for influenza (based on seasonal outbreak data) may be of some benefit in treating avian flu infection in humans. However, influenza viruses can become resistant to these drugs, so these medications may not always work. For some of these drugs to be most effective, they must be taken within 48 hours after the first sign of symptoms. Additional drugs may be developed for influenza, and it is not yet known whether they will be more effective.

## General Precautions for People Who May Be Exposed to Avian Flu Viruses

- Use proper hand hygiene practices. Clean your hands often and thoroughly, preferably using soap and water for 15-20 seconds (or a waterless, alcohol-based hand rub when soap is not available), especially if you are handling poultry or poultry products.
- If possible, avoid contact with poultry and other birds suspected or known to be infected.
- Avoid eating uncooked or undercooked poultry or poultry products.
- If you are sick, stay at home except to get medical attention.
- Cover your mouth and nose when you cough or sneeze.

Specific control measures should be selected as appropriate to the particular exposure situation.

- If eradication (depopulating) of poultry is necessary, use the following personal protective equipment (PPE):
  - ◆ Disposable gloves or gloves that can be disinfected;
  - ◆ Protective clothing (e.g., long-sleeved coveralls with waterproof aprons that can be disinfected or disposed of);

- ◆ Disposable protective shoe covers or boots that can be cleaned and disinfected;
- ◆ Safety goggles;
- ◆ Wear at least the minimum level of respiratory protection, N95 or higher respirator; and
- ◆ Employees should follow proper containment and decontamination procedures when wearing PPE.

- Employees should check with their health care providers about seasonal flu vaccine or antiviral drugs.
- If you believe that you may have been exposed to avian influenza:
  - ◆ Monitor your health for 10 days;
  - ◆ If you become ill with fever and develop a cough or difficulty breathing, consult a health care provider about what steps to take; and
  - ◆ Do not travel while sick, and limit contact with others as much as possible to help prevent the spread of any infectious disease.

## Training

Employees with potential for exposure should receive training on hazards associated with exposure to HPAI H5N1 and on the procedures in place in their facility to isolate and report cases and reduce exposures.

## Additional Information

More information on avian influenza can be found on OSHA's website, [www.osha.gov](http://www.osha.gov) and search on "avian flu." For up-to-date information about outbreaks of HPAI viruses and treatments see: [www.avianflu.gov](http://www.avianflu.gov).

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

For more complete information:



U.S. Department of Labor

[www.osha.gov](http://www.osha.gov)

(800) 321-OSHA