

## **Veterinary Services' Guidance for Protecting Workers against Highly Pathogenic Avian Influenza**

### **GUIDANCE FOR POULTRY WORKERS AT RISK**

Highly pathogenic avian influenza (HPAI) is a highly contagious disease of poultry. Despite the uncertainties, poultry experts agree that immediate culling of infected and exposed birds is the first line of defense to both reduce further losses in the agricultural sector and to protect human health. However, culling must be carried out in a way that protects workers from exposures to highly pathogenic avian influenza viruses and therefore reduce the likelihood of infection, illness or viral reassortment.

Exposure to infected poultry, feces, respiratory secretions, and contact with contaminated surfaces is thought to result in transmission of virus to humans and subsequent infection; however, this is a rare occurrence. Although there is evidence of limited person-to-person spread of HPAI virus infection, sustained and efficient human-to-human transmission has not been identified.

The following summarizes recommendations for protecting workers at risk developed by the Centers for Disease Control and Prevention, the World Health Organization, and the Occupational Safety and Health Administration. Personnel involved in HPAI control and eradication activities must take these precautions.

1. All persons who have been in contact with poultry, feces, respiratory secretions, or contact with contaminated surfaces should wash their hands frequently. Hand hygiene should also be performed immediately after gloves are removed and should consist of washing with soap and water for 15-20 seconds or the use of other standard hand-disinfection procedures as specified by state government, industry, or USDA outbreak-response guidelines.
2. All workers involved in the culling, transport, or disposal of HPAI virus-infected poultry should be provided with appropriate personal protective equipment:
  - Protective clothing capable of being disinfected or disposed, preferably coveralls (plus an impermeable apron) or surgical gowns with long cuffed sleeves (plus an impermeable apron);
  - Gloves capable of being disinfected or disposed; gloves should be carefully removed and discarded or disinfected and hands should be thoroughly washed. Gloves should be changed if torn or otherwise damaged;
  - Respirators: the minimum recommendation is a disposable particulate respirator (e.g., N95, N99 or N100) used as part of a comprehensive respiratory protection program. The elements of such a program are described in 29 CFR 1910.134. Workers shall be medically cleared and fit tested for the model and size respirator they wear and be trained to fit-check the seal of the facepiece to the face at a minimum;

- Eye protection (e.g. goggles);
  - Boots or protective foot covers that can be disinfected or disposed.
3. Environmental clean up should be carried out in areas of culling, using the same protective measures as in items 1 and 2, above.
  4. Unvaccinated workers should immediately receive the current season's influenza virus vaccine to reduce the possibility of dual infection with avian and human influenza viruses.
  5. Workers should receive an influenza antiviral drug daily (that is approved for use as prophylaxis), for the duration of time during which direct contact with poultry, their secretions, or contact with contaminated surfaces occurs and continuing 5-7 days after the last day of potential virus exposure. Antivirals should be administered in combination with the influenza vaccine (as mentioned above). The choice of antiviral drug should be based on sensitivity testing when possible. In the absence of sensitivity testing, a neuraminidase inhibitor (e.g. oseltamivir) is the first drug of choice since the likelihood is smaller that the virus will be resistant to this class of antiviral drugs than to amantadine or rimantidine.
  6. Potentially exposed workers should monitor their health for the development of fever, respiratory symptoms, and/or conjunctivitis (i.e., eye infections) for 1 week after last exposure to HPAI virus-infected or exposed birds or to potentially contaminated environmental surfaces. Individuals who become ill should seek prompt medical care and give notification prior to arrival at the health care provider that they may have been exposed to HPAI virus.
  7. It is important to take measures to prevent the virus from being spread to other areas. To do this, disposable items of personal protective equipment should be discarded properly, and non- disposable items should be cleaned and disinfected according to outbreak-response guidelines.
  8. To prevent the possible risk of transmission of HPAI virus to their contacts, especially household members, ill persons should practice good respiratory and hand hygiene to lower the risk of transmission of virus to others. For more information, visit CDC's "Cover Your Cough" website: [www.cdc.gov/flu/protect/covercough.htm](http://www.cdc.gov/flu/protect/covercough.htm).
  9. Patients or health care providers that wish to report possible cases of zoonotic transmission of highly pathogenic avian influenza should consult with their local or State Department of Health.

## **GUIDANCE FOR VETERINARY LABORATORY WORKERS**

Highly pathogenic avian influenza A viruses are classified as "select agents" and must be handled under Biosafety Level (BSL) 3 enhanced or BSL 3-Agriculture laboratory standards. These include controlled access, double door entry with change room and shower out, use of respirators when working with specimens outside a biological safety cabinet, and decontamination of all wastes. Laboratories working on these viruses must be USDA-approved.

Clinical specimens from suspect HPAI virus cases may be tested by polymerase chain reaction (PCR) assays using standard BSL 2 work practices in a Class II biological safety cabinet. In addition, commercial antigen detection testing can be conducted under BSL 2 levels to test for influenza viruses.

All employers processing biologic specimens suspected of being infected with HPAI virus must ensure that their employees comply with all provisions of 29 CFR 1910.1030 for employee protection against bloodborne pathogens, including the reporting of accidental exposure to avian influenza virus. Any accidental exposure should be reported to an immediate supervisor or employee health department.

### **Additional Sources of Information on Avian Influenza**

Centers for Disease Control and Prevention, <http://www.cdc.gov/flu/avian/index.htm>

U.S. Department of Agriculture, Animal and Plant Health inspection Service, [http://www.aphis.usda.gov/lpa/issues/ai\\_us/ai\\_us.html](http://www.aphis.usda.gov/lpa/issues/ai_us/ai_us.html)

World Health Organization, "Avian influenza – fact sheet"  
[http://www.who.int/csr/disease/avian\\_influenza/en/](http://www.who.int/csr/disease/avian_influenza/en/)

World Health Organization, "Avian influenza frequently asked questions"  
[http://www.who.int/csr/disease/avian\\_influenza/avian\\_faqs/en/](http://www.who.int/csr/disease/avian_influenza/avian_faqs/en/)

APHIS Medical Surveillance Service Form 29 and How to Complete  
<http://www.aphis.usda.gov/mrpbs/forms/aphisforms.html>