

# Highly Pathogenic Avian Influenza (HPAI) H5 Investigation Guideline

**Update: October, 2015**

The Centers for Disease Control and Prevention (CDC) considers the risk to people from birds infected with highly-pathogenic avian influenza (HPAI) H5 infections in poultry to be low and no human infections with these viruses have been detected at this time. However, similar viruses have infected people in the past and it is possible that human infections with these viruses may occur.

This information in this guide is based on the CDC's Interim Guidance on Influenza Antiviral Chemoprophylaxis of Persons Exposed to Birds with Avian Influenza A Viruses Associated with Severe Human Disease or with the Potential to Cause Severe Human Disease<sup>1</sup>, Interim Guidance on the Use of Antiviral Medications for the Treatment of Human Infections with Novel Influenza A Viruses Associated with Severe Human Disease<sup>2</sup>, Interim Guidance on Follow-up of Close Contacts of Persons Infected with Novel Influenza A Viruses Associated with Severe Human Disease and the Use of Antiviral Medications for Chemoprophylaxis<sup>3</sup>, and Influenza Antiviral Medications: Summary for Clinicians<sup>4</sup>. This guidance is also based on the United States Department of Agriculture's Health Monitoring Procedures for Avian Influenza Responders.

This guide provides local health departments with step-by-step instructions for response to detection of Highly Pathogenic Avian Influenza in their jurisdiction, as well as instructions for monitoring individuals who were potentially exposed to infected birds.

## **ABOUT HPAI-AFFECTED POULTRY FACILITY MANAGEMENT**

The United States Department of Agriculture (USDA) and the Kansas Department of Agriculture (KDA) are responsible for identifying birds infected with highly-pathogenic avian influenza (HPAI), including backyard and commercial poultry flocks. After a flock is identified, USDA staff, KDA staff, and outside contractors work to depopulate the flock to prevent HPAI from spreading.

## **PUBLIC HEALTH'S ROLE IN HPAI RESPONSE**

KDA, USDA, and the CDC will notify the Kansas Department of Health and Environment (KDHE) when HPAI is identified in any poultry flock throughout the state. KDHE will receive contact information for the owner of the infected poultry.

KDHE will also be notified of any Kansas resident who was potentially exposed to HPAI-infected birds while working at an affected facility, even if the facility is located in another state.

## INVESTIGATOR RESPONSIBILITIES

Local health departments (LHDs) will be responsible for contacting individuals who were exposed to HPAI-infected birds to:

1. verify and exchange contact information
2. assess their level of exposure
3. evaluate for illness compatible with influenza
4. describe parameters of the 10-day post-exposure monitoring plan
5. provide instructions to follow if illness manifests
6. provide antiviral prophylaxis guidance

KDHE and LHDs will also work with healthcare providers to ensure that monitored individuals will be properly evaluated and tested for possible HPAI infection, when indicated.

## STANDARD CASE INVESTIGATION

1. The KDHE epidemiologist on-call will create an EpiTrax “Avian Influenza Monitoring” record for each individual to be monitored and route it to the appropriate LHD.
2. KDHE will contact the LHD by telephone to alert them of the new monitoring record.
3. The LHD will initiate contact and complete the EpiTrax Avian Influenza Monitoring investigation form.
  - a. Verify and exchange contact information
    - i. Collect any needed phone numbers or email addresses
  - b. Confirm details about the birds they were exposed to
    - i. Collect information about the facility location and type (e.g. backyard flocks, layer, broiler, turkey, etc.)
  - c. Assess their level of exposure to infected birds
    - i. An exposed person is defined as a person with contact in the past 10 days to infected sick or dead birds, or infected flocks.
      1. This direct exposure may include: contact with birds (e.g., handling, slaughtering, defeathering, butchering, preparation for consumption); direct contact with surfaces contaminated with feces or bird parts (carcasses, internal organs, etc.); or prolonged exposure to birds in a confined space.
    - ii. All exposed persons should be monitored, regardless of the amount of Personal Protective Equipment (PPE) the person used during his/her response activities.
  - d. Evaluate for illness compatible with influenza
    - i. In addition to usual influenza-like illness symptoms of fever, cough, or sore throat, HPAI can cause conjunctivitis: eye tearing, redness, or irritation.

- ii. Contact KDHE's epidemiology hotline immediately at 877-427-7317 if the individual has signs or symptoms of influenza.
- e. Describe parameters of the 10-day post-exposure monitoring plan
  - i. After interviewing the individual on day 1 post-exposure, the individual should monitor himself/herself for symptoms until day 10 post-exposure.
    - 1. The LHD is not required to make contact with the monitored individual on days 2-9 post-exposure, but more frequent or in-person monitoring may be employed as resources permit.
  - ii. The LHD will make contact with the individual again on day 10 post-exposure to ensure that he or she did not experience any symptoms.
  - iii. The individual should notify the LHD if he/she plans to leave the state during the monitoring period, so that state may be notified.
    - 1. Individuals are allowed to travel within and between states during the 10-day post-exposure monitoring period.
    - 2. If travel is planned, an interstate movement notification will be sent to the receiving state by KDHE.
      - a. The receiving state will monitor the individual for the duration of his/her stay in that state.
        - i. If the individual returns to Kansas prior to day 10 postexposure, the LHD will complete the monitoring process.
- f. Provide instructions to follow if illness manifests
  - i. The individual should immediately contact the LHD or KDHE's epidemiology hotline at 877-427-7317 if he or she develops signs or symptoms of influenza.
    - 1. If KDHE determines the individual should be tested for HPAI, the individual's healthcare provider will be asked to collect specimen(s) for HPAI testing and immediately prescribe antivirals.
  - ii. The LHD should determine which hospital the individual would prefer to visit if symptoms develop.
    - 1. Hospitals are strongly preferred as the site of specimen collection, as hospitals are more equipped than clinics to use the appropriate PPE (i.e., a respirator that is at least as protective as a fit-tested NIOSHcertified disposable N95 filtering facepiece respirator)
- g. Provide antiviral prophylaxis guidance
  - i. Anyone who has had contact with sick and dying poultry or HPAI-contaminated poultry environments without the use of full PPE may be at risk for infection.
  - ii. The risk of infection is low.

- iii. Antiviral medication is available, and may lessen the risk of infection even more.
- iv. The individual should consult with a physician regarding the use of antiviral prophylaxis.
  - 1. CDC guidance should be considered
    - a. Interim Guidance on Influenza Antiviral Chemoprophylaxis of Persons Exposed to Birds with Avian Influenza A Viruses Associated with Severe Human Disease or with the Potential to Cause Severe Human Disease
      - i. <http://www.cdc.gov/flu/avianflu/guidance-exposed-persons.htm>
  - 2. If antiviral chemoprophylaxis is initiated, treatment dosing for the neuraminidase inhibitors oseltamivir or zanamivir (one dose, twice daily) is recommended in these instances instead of the typical antiviral chemoprophylaxis regimen (once daily).
    - a. For specific dosage recommendations for treatment by age group, please see Influenza Antiviral Medications: Summary for Clinicians
      - i. <http://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>
- h. KDHE and the LHD will consult with the individual's preferred hospital to ensure that monitored individuals will be properly evaluated and tested for possible HPAI infection, including
  - i. Airborne precautions are followed during specimen collection
    - 1. CDC guidance for infection control is available at <http://www.cdc.gov/flu/avianflu/novel-flu-infection-control.htm>
    - 2. If proper PPE is not available, KDHE and the LHD may determine if another nearby hospital is more feasible for specimen collection.
  - ii. Proper testing and shipping materials are available at the hospital 1. If materials are not available, KDHE may ship the materials to the provider in advance.
  - iii. Proper antiviral dosage is prescribed immediately, without waiting for the individual's HPAI test results .

## **CONTACT INVESTIGATION (IF NECESSARY)**

- 1. If the individual tests positive for HPAI, additional investigation will be necessary
  - a. Close contacts will be monitored daily for 10 days after the last known exposure to a confirmed or probable case.

- i. Close contacts are defined as persons within approximately 6 feet (2 meters) or within the room or care area of a confirmed or probable novel influenza A case patient for a prolonged period of time, or with direct contact with infectious secretions while the case patient was likely to be infectious (beginning 1 day prior to illness onset and continuing until resolution of illness).
- ii. In general, decisions to initiate antiviral chemoprophylaxis should be guided by the following risk stratification:
  1. Highest-risk exposure groups (recognized risk of transmission)
    - a. Household or close family member contacts of a confirmed or probable case
  2. Moderate-risk exposure groups (unknown risk of transmission)
    - a. Health care personnel with unprotected close contact with a confirmed or probable case
  3. Low-risk exposure groups (transmission unlikely)
    - a. Others who have had social contact of a short duration with a confirmed or probable case in a non-hospital setting (e.g., in a community or workplace environment)
    - b. The LHD should conduct **daily, active** monitoring for close contacts in the highest-risk and moderate-risk exposure groups.
    - c. Decisions to initiate antiviral chemoprophylaxis for persons in moderate- and low-risk exposure groups should be based on clinical judgment, with consideration given to the type of exposure and to whether the close contact is at high risk for complications from influenza
      - i. See the Influenza Antiviral Medications: Summary for Clinicians (<http://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm>).

## **References**

1. Interim Guidance Influenza Antiviral Chemoprophylaxis of Persons Exposed to Birds with Avian Influenza A Viruses Associated with Severe Human Disease or with the Potential to Cause Severe Human Disease. <http://www.cdc.gov/flu/avianflu/guidance-exposed-persons.htm> Accessed October, 2015.
2. Interim Guidance on the Use of Antiviral Medications for the Treatment of Human Infections with Novel Influenza A Viruses Associated with Severe Human Disease. <http://www.cdc.gov/flu/avianflu/novel-av-treatment-guidance.htm> Accessed October, 2015.
3. Interim Guidance on Follow-up of Close Contacts of Persons Infected with Novel Influenza A Viruses Associated with Severe Human Disease and the Use of Antiviral Medications for Chemoprophylaxis. <http://www.cdc.gov/flu/avianflu/novel-av-chemoprophylaxis-guidance.htm> Accessed October, 2015.

4. Influenza Antiviral Medications: Summary For Clinicians.

<http://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm> Accessed October, 2015.