Interim Guidance for Monitoring Individuals with Exposure to Avian Influenza

Overview

Avian influenza, also referred to as "bird flu," is a respiratory illness caused by viruses that typically only infect birds but can also spread to other animals such as dairy cows. In infected animals, avian influenza viruses can be found in feces (manure), saliva, nasal secretions, mucous, and raw milk. The viruses can also be present in the environment (such as barns or coops) where infected animals are housed. People can be exposed to the viruses if they have direct contact with these materials in their eyes, nose, or mouth or if they breathe in the viruses that have been aerosolized into the air as tiny droplets or dust particles.

Avian influenza viruses do not normally infect people, but rare cases of human infection have occurred. People with close or prolonged unprotected contact with infected birds, such as sick/dead poultry, or other infected animals, such as dairy cows, or their contaminated environments are at greater risk of infection. Illness in people that is caused by avian influenza infection can range in severity from no symptoms or mild illness to severe disease that has resulted in death. The overall risk to human health associated with the ongoing outbreaks of highly pathogenic avian influenza (HPAI) A(H5N1) viruses has not changed in the U.S. and the public health risk remains low at this time.

Because CDC considers HPAI A(H5N1) viruses to have the potential to cause severe disease in infected humans, CDC has provided guidance for preventing human exposures to HPAI A(H5N1) viruses and infection prevention and control measures, including the use of personal protective equipment, testing, antiviral treatment, patient investigations, monitoring of exposed persons, and antiviral chemoprophylaxis of exposed persons. This document provides an overview of CDC's guidance and Missouri-specific processes for LPHAs.

Notification Process

Notifications of HPAI-positive animals will generally come to DHSS from state agency partners at the Missouri Department of Conservation (MDC) and the Missouri Department of Agriculture (MDA). In some cases, notifications of United States Department of Agriculture (USDA) or other agency responders that have been deployed to assist with HPAI outbreaks in other states may come to DHSS through the Epi-X notification system. When these notifications are received, a Bureau of Communicable Disease Control and Prevention (BCDCP) Epidemiologist will reach out by email and phone call as soon as possible to notify impacted local public health jurisdictions of positive detections or potentially exposed residents, workers, and responders. Contact information for potentially exposed individuals may not be immediately available to DHSS, but this information and other applicable details related to exposure will be shared with jurisdictions as quickly as possible.

Monitoring

In general, persons with possible exposures to animals known to be infected with avian influenza, their environments (such as barns or coops), or raw dairy from impacted farms, even

in the absence of contact with the cows, should be monitored for signs and symptoms consistent with HPAI A(H5N1) virus infection starting the first day (day 0) of exposure and continuing until **10 days after the last date of exposure**. The actual duration of monitoring may be longer than 10 days for persons with ongoing opportunities for exposure. The following includes information on symptoms and additional guidance on the public health expectations for monitoring.

The typical symptoms that exposed individuals should be monitored for include the following:

- Fever (may not always be present)
- Chills or feeling feverish
- Cough
- Sore throat
- Runny or stuffy nose
- Sneezing
- Muscle or body aches
- Headache
- Fatigue
- Shortness of breath or difficulty breathing
- Diarrhea
- Nausea or vomiting
- Eye redness or irritation (conjunctivitis)

All individuals identified with possible exposures to avian influenza should be monitored. The type of monitoring will depend on the epidemiology of the virus and the individual's exposures. The level of exposure and the monitoring required can vary if the individual was wearing appropriate personal protective equipment (PPE), and if wearing PPE, whether there were any reported breaches. If appropriate PPE is worn and there are no known breaches, the individual most likely qualifies for passive monitoring. If there was no PPE, inadequate PPE, or reported breaches to PPE, then active monitoring is warranted. Both types of monitoring will involve making initial contact with the exposed individual to provide education about avian influenza, what signs and symptoms to watch for, and instructions for what to do if any symptoms develop during the monitoring period. In some situations, a combination of active and passive monitoring may be recommended.

The appropriate PPE may vary depending on specific activities being performed by an individual. For field workers, such as wildlife staff collecting sick or dead birds outdoors in the field, appropriate PPE may consist of only a mask, gloves, and rubber boots. For staff assisting with collecting swabs from sick or dead birds, assisting with flock depopulation activities, collecting specimens or working with infected cattle, or those who are frequently entering barns, coops, or other potentially contaminated areas on an affected premise, appropriate PPE will include additional items such as eye protection, respirators, Tyvek suit or protective gown, etc. Please see CDC's Avian Influenza (Bird Flu) Resources and Reducing Exposure for Workers to Avian Influenza A Viruses pages for more details on PPE.

Contact Follow-up and Monitoring

1. ***Initial Call:***

Local public health agencies (LPHAs) should contact all individuals with possible exposures to avian influenza (except in-state responders for MDA, MDC, and USDA at this time), regardless of PPE use, as soon as they are notified of the positive detection or exposure. This includes notifications after hours and on weekends and holidays. The purpose of the initial call is to learn more about the possible exposures, identify all persons with opportunities for exposure, and provide education regarding avian influenza to ensure the exposed individual understands the following:

- Risks associated with exposure to avian influenza.
- Specific signs and symptoms to watch for.
- Type of monitoring (active or passive) required based on reported exposures, frequency and duration of monitoring, and the process for reporting.
- The specifics of who at the LPHA the individual with exposure is supposed to report to and the process for reporting (text, email, phone, other). Guidance for exposed individuals should include how to reach the LPHA on weekends and holidays in the event symptoms develop or for other concerns.
- Testing recommendations;
    - For asymptomatic contacts:
        - offer testing if still within 10 days since last date of exposure,
        - discuss the importance of being tested and the process for specimen collection and testing at the Missouri State Public Health Laboratory (MSPHL),
        - and discuss where the individual plans to seek specimen collection.
    - For symptomatic contacts:
        - strongly recommend testing,
        - discuss where the individual plans to seek medical care and specimen collection,
        - emphasize the importance of staying home and away from others, unless seeking health care, in which case the importance of calling in advance and providing prior notice of their exposure before arriving at the healthcare facility,
        - and the importance of being tested and the process for specimen collection and testing at MSPHL.
- Guidance regarding treatment or prophylaxis.
- Recommendations regarding isolation and avoiding exposing others if they are symptomatic or become symptomatic during the monitoring period.

For HPAI related fact sheets and educational materials see CDC's Avian Influenza (Bird Flu) Resources.

2. Monitoring:

Active Monitoring: Active monitoring is recommendedfor all individuals with possible exposures while not wearing appropriate PPE or persons with a breach in PPE. All individuals

under active monitoring should contact the LPHA daily via email, phone call, text message, etc. to report, regardless of whether they have developed any signs or symptoms. Monitoring should begin on the date the LPHA makes initial contact with the exposed person(s) and end on day 10 from their last exposure. The last day of exposure would be considered (Day 0). The LPHA is asked to provide daily updates to their BCDCP District Epidemiologists via email. BCDCP is required to provide regular updates on monitoring of persons exposed to HPAI to CDC.

Other monitoring options may be considered for persons who reported consistent and correct use of the recommended PPE with no reported breaches.

Testing

Upon notification of a positive detection of avian influenza A(H5N1), LPHA staff should make sure that they have avian influenza test kits from the SPHL on-hand. Kits can be ordered directly through the MSPHL or requests for kits can be coordinated through your BCDCP District Epidemiologists. Please note that test kits were recently updated to include materials for collecting conjunctival swabs, so if your health department ordered a kit prior to April 2024, you should discuss with your District Epidemiologists on whether you need to order additional supplies. Please also check that that the viral transport media has not expired if you have previously ordered test kits on hand.

Influenza testing that is done through doctor's offices and commercial testing laboratories may not detect avian influenza A(H5N1) infection, so specimens should be sent to MSPHL for testing. **If an individual develops any signs or symptoms consistent with avian influenza during their exposure period or within 10 days of their last exposure, collecting specimens for testing at the MSPHL is strongly recommended.** Per CDC's Interim Recommendations for Prevention, Monitoring, and Public Health Investigations, CDC is expanding influenza A(H5N1) testing recommendations to include **asymptomatic** persons with high risk of exposure to HPAI A(H5N1) virus [e.g., exposed to animals infected with HPAI A(H5N1) virus who reported not wearing recommended PPE or who experienced a breach in recommended PPE], as well as asymptomatic close contacts of a confirmed case of HPAI A(H5N1) virus infection. If a need for testing occurs because an individual meets the criteria above, contact your District Epidemiologists right away to coordinate testing through the SPHL.

LPHAs should decide whether their agency will collect specimens from persons with exposures. If specimen collection can be done by LPHA staff, please read the guidance on specimen collection, personal protective equipment (PPE) and ensure access to PPE, and that staff collecting specimens are knowledgeable on using PPE. If specimen collection cannot be done by LPHA staff, it is recommended that LPHAs have an alternate plan for specimen collection such as a local health clinic, urgent care, or hospital facility. If a person needs testing following a possible exposure, the SPHL avian influenza test kit can be provided to the testing facility for collection. Specimens sent to the SPHL will be tested for influenza as well as COVID-19. For

testing assistance after normal business hours or on weekends/holidays, please contact the DHSS Emergency Response Center at 800-392-0272 and ask for the BCDCP On-Call Epidemiologist.

Treatment

Outpatients meeting epidemiologic exposure criteria who develop signs and symptoms compatible with influenza should be referred for prompt medical evaluation, testing, and empiric initiation of antiviral treatment with oseltamivir (twice daily x 5 days) as soon as possible. Clinical benefit is greatest when antiviral treatment is administered early, especially within 48 hours of illness onset. Additionally, hospitalized patients who are confirmed, probable, or suspected cases of human infection with HPAI A(H5N1) virus, regardless of time since illness onset are recommended to initiate antiviral treatment with oral or enterically administered oseltamivir as soon as possible. Antiviral treatment should not be delayed while waiting for laboratory testing results.

Per CDC's Interim Recommendations for Prevention, Monitoring, and Public Health Investigations, asymptomatic persons exposed to animals infected with HPAI A(H5N1) virus who reported not wearing recommended PPE or who experienced a PPE breach in recommended PPE and who tested positive for influenza A(H5) virus should be offered oseltamivir treatment (unless already receiving oseltamivir post-exposure prophylaxis). Exposed asymptomatic persons who test negative for influenza A(H5) virus should continue to be actively monitored for signs and symptoms of acute respiratory illness or conjunctivitis until 10 days after the last known exposure to HPAI A(H5N1) virus. Any exposed person who tested positive for A(H5) virus while asymptomatic and who develops signs or symptoms of acute respiratory illness or conjunctivitis while receiving oseltamivir for treatment or post-exposure prophylaxis, should be isolated, and tested again for influenza A(H5) virus.

Please see CDC's Interim Guidance on the Use of Antiviral Medications for Treatment of Human Infections with Novel Influenza A Viruses Associated with Severe Human Disease for detailed guidance on dosing and treatment duration.

For any questions regarding this interim guidance for the monitoring of persons with exposures to avian influenza, please contact the BCDCP Epidemiologists in your district.

Resources

- **Centers for Disease Control and Prevention:**
  - About Bird Flu | Bird Flu | CDC
  - H5 Bird Flu: Current Situation
  - Highly Pathogenic Avian Influenza A(H5N1) Virus: Interim Recommendations for Prevention, Monitoring, and Public Health Investigations
  - Symptom Monitoring Among Persons Exposed to HPAI
  - Information for Workers Exposed to H5N1 Bird Flu
  - CDC Expands Guidance to Better Protect Farm Workers and Livestock Owners to Lower the Risk of Becoming infected with Bird Flu

    - H5 Bird Flu Resources for Farm Workers
    - Reducing Exposure for Workers to Avian Influenza A Viruses
    - H5 Bird Flu Resources for Farm Owners and Employers
    - Avian Influenza (Bird Flu) Resources
    - Avian Influenza Social Media Toolkit
    - H5N1 Informational Videos
    - Interim Guidance on the Use of Antiviral Medications for Treatment of Human Infections with Novel Influenza A Viruses Associated with Severe Human Disease
    - Signs and Symptoms of Bird Flu in People

- **Missouri Department of Conservation:**
    - Report a Wildlife Health Event

- **Missouri Department of Agriculture:**
    - MDA Avian Influenza (mo.gov)

- **United States Department of Agriculture:**
    - USDA APHIS | Avian Influenza
    - USDA APHIS | Detections of Highly Pathogenic Avian Influenza
    - Detection of Highly Pathogenic Avian Influenza in Dairy Herds: Frequently Asked Questions
    - Detections of Highly Pathogenic Avian Influenza (HPAI) in Livestock

- **Missouri Department of Health and Senior Services**
    - Human H5 bird flu case confirmed in Missouri

- **Missouri State Public Health Laboratory**
    - Avian Influenza (H5N1)
    - Avian Influenza Specimen Collection and Submission Instructions