

## Date: January 17, 2025

From: Kansas Department of Health and Environment – Division of Public Health To: Kansas Health Care Providers, Laboratories, and Local Health Departments RE: Accelerated Subtyping of Influenza A in Hospitalized Patients

#### **Summary**

The Centers for Disease Control and Prevention (CDC) issued <u>Health Advisory No. 520</u> on January 16, 2025, to inform clinicians and laboratories of sporadic human infections with avian influenza A(H5N1) viruses amid high levels of seasonal influenza activity. CDC and the Kansas Department of Health and Environment (KDHE) are recommending a shortened timeline for subtyping all influenza A specimens among hospitalized patients and laboratories are reminded to test for influenza in patients with suspected influenza and, going forward, to now expedite the subtyping of influenza A-positive specimens from hospitalized patients. This approach can help prevent delays in identifying human infections with avian influenza A(H5N1) viruses, supporting optimal patient care and timely infection control and case investigation. <u>The risk from avian influenza A(H5)</u> to the general public remains low.

Mandated Reporters, including clinicians, are required by Kansas Administrative Regulation (K.A.R. 28-1-2) to report all confirmed and suspected cases of avian influenza A(H5) within four (4) hours of suspicion or diagnosis to the 24/7 KDHE Epidemiology Hotline (877-427-7317, option 5). Laboratories are required by K.A.R. 28-1-18 to report laboratory reports of avian influenza A(H5) cases to KDHE using an approved electronic method.

### Background

A panzootic of highly pathogenic avian influenza A(H5N1) viruses is currently affecting wild birds. In the U.S., there have been outbreaks among poultry and dairy cows, as well as infections among other animals. Since 2022, <u>67 total human cases of avian influenza A(H5) virus infection</u> have been identified in the U.S., with 66 of these cases occurring in 2024. Most infections in humans have been clinically mild but <u>one fatality</u> has been reported. Many individuals infected with avian influenza A(H5) viruses have reported unprotected workplace exposures, such as handling infected or sick dairy cows or poultry without using recommended personal protective equipment. However, one case involved exposure to backyard poultry or wild birds. The source of the exposure in two confirmed cases in the U.S. could not be determined.

Enhancing and expediting influenza A virus subtyping of specimens from hospitalized patients can help avoid potential delays in identifying human infections with avian influenza A(H5) viruses. Such delays are more likely while seasonal influenza activity is high, as it is now, due to high patient volumes and general burden on healthcare facilities. Additional testing also ensures optimal patient care along with timely infection control. Furthermore, expediting transportation of such specimens to commercial or public health laboratories for additional testing may also



accelerate public health investigation of severe influenza A(H5) cases and sharing of information about these viruses.

- Most influenza tests ordered in clinical settings do not distinguish avian influenza A(H5) viruses from seasonal influenza A viruses; a positive result simply confirms influenza A virus infection. Therefore, using tests that identify the seasonal influenza A virus subtype will help identify where infection with a seasonal influenza A virus is present.
- If a test result is positive for influenza A virus but negative for seasonal influenza A virus subtypes [i.e., A(H1) and A(H3)], the virus detected might be a novel influenza A virus, such as influenza A(H5), and these specimens should be submitted for additional testing.
- The Kansas Health and Environmental Laboratories (KHEL) offers free A(H5) subtyping. Alternatively, there are now a few commercial laboratories offering influenza A(H5) subtyping in the clinical setting.
- The Food and Drug Administration offers a list of influenza A typing and subtyping tests. Services like diagnostic and subtype testing that are reasonable and necessary to diagnose illness are covered in most cases by both <u>public</u> and private health insurers.

Subtyping is especially important in people who have a history of relevant exposure to wild and domestic animals infected or possibly infected with avian influenza A(H5N1) viruses.

Public health officials still consider the risk from avian influenza A(H5) viruses to the public to be low but are closely monitoring this dynamic situation. At this time, while seasonal influenza levels are high nationally, nearly all people who are currently hospitalized with influenza A virus infections probably have seasonal influenza.

## **Recommendations for Testing of Hospitalized Patients**

CDC and KDHE recommends that all influenza A positive respiratory specimens from hospitalized patients be subtyped for seasonal influenza A viruses [A(H1) and A(H3)] as soon as possible following admission—ideally within 24 hours—to support optimal patient care, proper infection prevention and control measures, and to facilitate rapid public health investigation and action. Refer to included submission algorithms for clinicians and laboratories.

## **Recommendations for Clinicians**

- When collecting a thorough exposure history from a patient with suspected or confirmed influenza who is hospitalized, ask about the following potential exposures:
  - Wild and domestic animals (e.g., poultry, dairy cows), including pets (e.g. cats),
  - Animal products (e.g., raw cow milk and raw cow milk products, raw meat-based pet food), or
  - $\circ$  Recent close contact with a symptomatic person with a probable or confirmed case of A(H5).
- Implement appropriate infection control measures (e.g., standard + contact + droplet precautions) when influenza is suspected.



- If avian influenza A(H5) virus infection is suspected, probable, or confirmed in a hospitalized patient, place the patient in an airborne infection isolation room (AIIR) with negative pressure with implementation by caregivers of <u>standard</u>, <u>contact</u>, <u>and airborne precautions</u> with eye protection (goggles or face shield).
- Test for seasonal influenza A in hospitalized patients with suspected seasonal influenza or novel influenza A virus infection using available diagnostic testing for initial diagnosis.
  - If the initial diagnostic test does not subtype [e.g., identify A(H1) and A(H3)], order an influenza A subtyping diagnostic test within 24 hours of hospital admission for patients who tested positive for influenza A.
  - Subtyping should be performed with assays available to the testing laboratory, as follows:
    - Subtyping tests should be performed in the hospital clinical laboratory, if available.
    - Alternatively, specimens should be sent to a commercial clinical laboratory.
    - If influenza A virus subtyping is not available through one of these routes, arrangements can made for influenza A virus-positive specimens to be subtyped at KHEL.
- Any hospitalized patients with suspected seasonal influenza or avian influenza A(H5) should be started on antiviral treatment with oseltamivir as soon as possible without waiting for the results of influenza testing.
  - Consider combination antiviral treatment for hospitalized patients with avian influenza A(H5) virus infection.
- Notify the 24/7 KDHE Epidemiology Hotline (877-427-7317, option 5) within four (4) hours if avian influenza A(H5N1) virus infection is suspected, probable, or confirmed in a hospitalized patient.
- Questions about appropriate clinical management or testing of hospitalized patients with novel influenza A virus infection [e.g. A(H5)], including questions about combination antiviral treatment dosing or testing for antiviral resistance, can be directed to the CDC Influenza Division for consultation with a medical officer via the CDC Emergency Operations Center at 770-488-7100.

## **Recommendations for Clinical Laboratories**

• For hospitalized patients, subtype and send respiratory specimens that are positive for influenza A but negative for seasonal influenza A virus subtypes [i.e., negative for A(H1) and A(H3)] to KHEL as soon as possible and within 24 hours of obtaining the results. Do not batch specimens for consolidation or bulk shipment. Notify the KDHE Epidemiology Hotline at 1-877-427-7317 within 4 hours.



• If influenza A virus subtyping is not available at the hospital or the clinical laboratory of the treating facility, send specimens to a commercial laboratory or KHEL within 24 hours. Do not batch specimens for consolidation or bulk shipment. Immediately contact the 24/7 KDHE Epidemiology Hotline (877-427-7317, option 5) if a positive result for influenza A(H5) virus is obtained using a laboratory developed test (LDT) or another A(H5) subtyping test to initiate important <u>time-critical actions</u>.

### **Recommendations for Local Health Departments**

Local health departments are advised to take the following actions in response to avian influenza A(H5). Your proactive response and collaboration are vital to protecting public health in Kansas.

- Share this alert with hospitals, healthcare providers, and laboratories in your county to ensure they are informed and prepared.
- Promptly report any suspected or confirmed cases of novel influenza A virus infection [e.g. A(H5)] to the KDHE Epidemiology Hotline at 877-427-7317 (option 5) and encourage clinicians and laboratories to do the same.
- The KDHE Infectious Disease Epidemiology and Response Team will lead the public health investigations but may request your assistance with contact tracing efforts as needed. Relevant case details will be shared with your health department through the EpiTrax system to support coordination.
- For any questions or further clarification, please reach out to the KDHE Epidemiology Hotline at <u>kdhe.epihotline@ks.gov</u> or your regional epidemiologist.

### Kansas Health and Environmental Laboratories Subtyping Guidance

KHEL offers subtyping on specimens positive for influenza A but negative for seasonal influenza A virus subtypes [i.e., negative for A(H1) and A(H3)]. Please ensure specimen collection, storage, and shipping instructions are followed. Failure to adhere to this guidance will result in specimens that are unsatisfactory for testing.

- **Specimen**: nasopharyngeal (NP), nasal, oropharyngeal (throat) and conjunctival\* swabs in leakproof sterile container with a **minimum of 1mL of viral transport media** (VTM)
  - Specimen source must be listed on each collection tube.
  - *Conjunctival swabs should only be submitted upon consultation with and approval from KDHE epidemiology.*
- Swab type: sterile Dacron or polyester-tipped swab (non-wooden shaft)
- Transport/storage temperature: refrigerated at 2-8°C and shipped with cold packs to maintain 2-8°C. Indicate "REFRIGERATE" on external packaging.
  - In the event of delayed transport, specimens should be frozen at -70°C and shipped on dry ice to remain frozen. Indicate "FROZEN" on any external packaging.
- **Specimen stability**: 3 days refrigerated (i.e., must be received by KHEL with cold packs to maintain 2-8°C within 3 days of collection)



- Frozen specimens must be frozen within 3 days of collection at -70°C and shipped with dry ice to remain frozen for valid testing.
- Report turnaround: 1-2 days from receipt at KHEL
- **Documents to include**: KDHE Universal Laboratory Specimen Submission Form completed with below details
  - **Test type request**: specify "*Previous influenza A detection, hospitalized patient*" in the Epidemiology Approval section.
  - **Forms to include**: one submission form per patient submission with specimen sources clearly marked on the swab and form.
- **Shipping:** send via overnight delivery/courier to Kansas Health and Environmental Laboratories: 6810 SE Dwight St. Topeka, KS 66620
  - If shipping through UPS/FedEX, ensure weekend delivery option is selected.
  - Specimens may be transported to KHEL through the free courier service stopping at local county health departments and many hospitals statewide. Contact KHEL Customer Service at (785) 296-1620 or email <u>kdhe.khel\_help@ks.gov</u>.

### **Recommendations for the Public**

- People should avoid direct contact with sick or dead wild birds, poultry, or other animals with or suspected to be infected with avian influenza A viruses. If contact is necessary, wear protective gear such as gloves, a well-fitting mask, and eye protection.
- Report illness or deaths among five (5) or more wild birds to the Kansas Department of Wildlife and Parks through their website at <u>ksoutdoors.com</u>.
- For illness in poultry or owned birds, contact the Kansas Department of Agriculture at 833-765-2006, email <u>KDA.HPAI@ks.gov</u> or visit their website at agriculture.ks.gov/AvianInfluenza.
- <u>Additional information</u> on protecting yourself from avian influenza A(H5) infection is available from CDC.

### **For More Information**

H5 Bird Flu: Current Situation | CDC Interim Guidance for Infection Control within Healthcare Settings for Suspected or Confirmed Novel Influenza A Viruses | CDC Interim Guidance on Use of Antiviral Treatment of Human Infections with Novel Influenza A Viruses | CDC Influenza Surveillance in Kansas | KDHE Disease Reporting Requirements | KDHE Avian Influenza | KDA