

Health Advisory

Influenza Testing in Persons with Severe Respiratory Illness

7/11/2024

Please see the below advisory from the Pennsylvania Department of Health (PADOH) regarding testing for influenza in persons with severe respiratory illness. Due to an ongoing global outbreak of Highly Pathogenic Avian Influenza A (H5N1) in poultry and wild birds, and a U.S. dairy cattle outbreak that has affected 12 states thus far, influenza testing should continue through the summer and appropriate specimens should be forwarded to the PADOH Bureau of Laboratories (BOL).

Despite the end of typical flu season, healthcare providers should continue to perform influenza testing for patients with respiratory illness and pursue more specific testing for influenza A subtypes for:

- Persons hospitalized with severe respiratory illness.
- Persons with influenza-like illness with or without fever and conjunctivitis, particularly individuals with relevant exposures (e.g., dairy cows, raw milk, wild birds, poultry, agricultural fair attendance, other animal exposures, etc.).

Hospitals and clinical laboratories that conduct multiplex respiratory virus testing with capacity to detect commonly circulating influenza A subtypes should perform this extended testing on the above patients and forward leftover specimen to PADOH BOL for further testing for patients with the following results:

- Influenza A positive but subtype negative
- Influenza A positive, subtype influenza A (H1) but NOT influenza A (H1) pdm09

Healthcare facilities who lack access to multiplex molecular testing to detect influenza A subtypes (e.g., rapid antigen, molecular tests without common influenza A subtype differentiation) should also collect a nasopharyngeal (NP) swab in at least 3mL of viral transport media (VTM) from the above patients for testing at PADOH BOL in addition to performing the facility's available influenza testing.

Specimens sent to PADOH BOL must be in VTM. Specimens in Universal Transport Media (UTM) will not be accepted. Specimens for rapid testing cannot be used. Ensure patients who are seen as an outpatient and have relevant exposures have a NP swab collected in VTM in addition to any rapid testing specimen.

Specimens that test positive for influenza A but not a common subtype and those from patients with relevant animal exposures that are not subtyped should be sent to the PADOH BOL immediately through a rush courier. Call PADOH BOL at (610) 280-3464 to arrange for rush shipping and notify the Philadelphia Department of Public Health (PDPH) Division of Disease Control (DDC) at (215) 685-6741 during business hours and (215) 686-4514 after hours. Hospitals should send specimens from hospitalized patients without relevant animal exposures and no subtyping performed through routine shipping procedures.

Resources:

- Detailed specimen collection and shipping instructions:
<https://www.health.pa.gov/topics/Documents/Laboratories/Viral%20Testing%20Respiratory%20Swab%20Collection%20and%20Shipping%20Instructions.pdf>
- Instructions for collection of conjunctival specimens from patients with suspected H5N1 infection:
[https://www.aphl.org/programs/infectious_disease/influenza/Documents/Conjunctival%20Sample%20Collection%20for%20Influenza%20A\(H5\)%20Testing.pdf](https://www.aphl.org/programs/infectious_disease/influenza/Documents/Conjunctival%20Sample%20Collection%20for%20Influenza%20A(H5)%20Testing.pdf). Notify PDPH DDC before collecting conjunctival specimens.

- On July 16, 2024 from 2:00pm to 3:00pm, CDC will host a [webinar](#) entitled *Update on Highly Pathogenic Avian Influenza A(H5N1) Virus for Clinicians and Healthcare Centers*. The webinar will be recorded, and free continuing education credits are available.

Testing for Influenza in Persons with Severe Respiratory Illness

DATE:	June 6, 2024
TO:	Health Alert Network
FROM:	Debra L. Bogen, MD, FAAP, Acting Secretary of Health
SUBJECT:	Testing for Influenza in Persons with Severe Respiratory Illness
DISTRIBUTION:	Statewide
LOCATION:	Statewide
STREET ADDRESS:	N/A
COUNTY:	N/A
MUNICIPALITY:	N/A
ZIP CODE:	N/A

This transmission is a “Health Advisory” provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; **EMS COUNCILS:** PLEASE DISTRIBUTE AS APPROPRIATE; **FQHCs:** PLEASE DISTRIBUTE AS APPROPRIATE **LOCAL HEALTH JURISDICTIONS:** PLEASE DISTRIBUTE AS APPROPRIATE; **PROFESSIONAL ORGANIZATIONS:** PLEASE DISTRIBUTE TO YOUR MEMBERSHIP; **LONG-TERM CARE FACILITIES:** PLEASE SHARE WITH ALL MEDICAL, INFECTION CONTROL, AND NURSING STAFF IN YOUR FACILITY

Summary

- A global outbreak of highly pathogenic avian influenza A(H5N1) in wild birds and poultry has been ongoing since 2022. Poultry and wild bird outbreaks have been detected in all U.S. states, including Pennsylvania.
- In 2024, influenza A(H5N1) has been detected in U.S. dairy cattle herds in 9 states. **No cases have been detected in Pennsylvania so far.**
- To date, 28 human cases of influenza A(H5N1) have been reported from eight countries, including four in the U.S. Of those cases outside of the U.S., 14 had severe illness and seven died.
- Given the potential for severe human infections with influenza A(H5N1) viruses and the recent spread into dairy cattle, the U.S. Centers for Disease Control and Prevention (CDC) is asking that clinicians continue to test for influenza in patients with respiratory illness throughout the summer, particularly in individuals who are severely ill, or individuals with influenza-like illness with or without a fever or conjunctivitis, particularly in persons with relevant exposures (e.g., dairy cows, raw milk, wild birds, poultry, agricultural fair attendance).
- Hospitals and clinical laboratories should forward any specimens that are positive for influenza A but are subtype negative, or influenza A positive specimens that are subtype influenza A (H1) and not influenza A(H1)pdm09 on tests designed to provide an influenza subtyping result and confirmed upon retest or specimens from severely ill patients for which subtyping is not done, to the state public health laboratory for further testing.
- If you have any questions, please call the Pennsylvania Department of Health (DOH) at 1-877-PA-HEALTH (1-877-724-3258) or your local health department.

Background

A global outbreak of highly pathogenic avian influenza A(H5N1) in wild birds and poultry has been ongoing since 2022. The virus was first identified in birds in the U.S. in January 2022, and since then, outbreaks have been reported throughout the U.S. Recently, the virus has spilled over to other mammals and has caused outbreaks in dairy farms in 9 states. No cases have been detected in Pennsylvania thus far. Over 90 million poultry and 79 cattle herds have been affected in the U.S, making this the worst domestic outbreak of avian influenza in animals in U.S. history (1).

Human cases associated with Highly Pathogenic Avian Influenza A(H5N1)

Sporadic cases of highly pathogenic avian influenza A(H5N1) virus infections in mammals have been reported in eight countries, including the U.S. and Canada (2). Globally, 28 human cases of H5N1 infection have been reported between January 2022 and June 4, 2024, with four cases occurring in the U.S. Of these 28 cases, most of whom had been exposed to infected birds, 14 individuals were hospitalized, and 7 fatalities were reported (3). Previously, the virus had not spread from cows to humans, but between April and June 2024 a farm worker in Texas and two farm workers in Michigan tested positive for influenza A(H5N1). The fourth U.S. human case occurred in April 2022 due to exposure to infected poultry. To date, no human-to-human transmission has been reported in the United States or globally. At present, influenza A(H5N1) is believed to pose a low risk to the health of the general public; however, some people may have job-related or recreational exposures to birds, cattle or other animals that put them at higher risk of infection. Furthermore, influenza viruses can undergo rapid changes, which can lead to enhanced transmissibility and increased severity of illness. Therefore, throughout this summer (and similar to the past summer seasons), CDC is recommending enhanced surveillance for influenza among individuals who are ill with respiratory disease.

Recommendations for medical providers and laboratories

- Consider influenza testing in any persons with an influenza-like illness with or without a fever or conjunctivitis, particularly in persons with relevant exposures (e.g., dairy cows, raw milk, wild birds, poultry, agricultural fair attendance) or who may have recently traveled to a country of known H5N1 animal outbreaks.
- Influenza testing should be done for all patients hospitalized or in the ICU with severe respiratory illness. Hospitals and clinical laboratories should attempt to subtype all influenza A positive samples from these patients.
- All specimens that test positive for influenza A but are subtype negative when tested using a respiratory panel that includes influenza type and subtype (i.e., specimens that are subtype negative) *should be immediately sent to the state public health laboratory for further testing*. Call the Bureau of Laboratories at (610) 280-3464 to arrange for shipping. Detailed specimen collection and shipping instructions can be found at: <https://www.health.pa.gov/topics/Documents/Laboratories/Viral%20Testing%20Respiratory%20Swab%20Collection%20and%20Shipping%20Instructions.pdf>
- In addition, all specimens from severely ill patients that test positive for influenza A in settings where subtyping cannot be performed should be forwarded to the state public health laboratory for subtyping. Submission instructions are in the link above. No prior phone calls to the Bureau of Laboratories are needed for this type of testing.
- Submissions of additional influenza A and B positive specimens that have not undergone influenza subtyping testing is crucial for enhancing our surveillance and ensuring rapid detection of any human infections with influenza A(H5N1).

- Positive influenza laboratory tests and lab-confirmed influenza-associated hospitalizations and deaths are reportable to DOH through our electronic disease surveillance system, PA-NEDSS.
- For guidance regarding evaluating and managing cases suspected to have novel influenza A, refer to CDC's guidance at: <https://www.cdc.gov/flu/avianflu/clinicians-evaluating-patients.htm>.

These steps will help ensure that any human cases of novel influenza in the U.S., including A(H5N1), are identified and contained immediately. Thank you for your continued support for the prevention and control of influenza. If you have any questions, please contact DOH (877-PA-HEALTH) or your local health department.

For More Information

- 1- [CDC Strategy for Enhanced Summer 2024 Influenza Surveillance](#)
- 2- [Guidance to Commercial Laboratories on Increasing Submission of Influenza A and B Positive Samples to State and Local Public Health Laboratories for Additional Subtyping \(including H5\)](#)
- 3- [Guidance for Health Professionals and Laboratorians](#)
- 4- [Current U.S. Bird Flu Situation in Humans](#)
- 5- [Bird Flu Detections in Backyard and Commercial Birds](#)

References:

- 1- <https://www.cdc.gov/flu/avianflu/avian-flu-summary.htm>
- 2- <https://www.cdc.gov/flu/avianflu/inhumans.htm>
- 3- <https://www.who.int/teams/global-influenza-programme/avian-influenza/monthly-risk-assessment-summary>

Individuals interested in receiving PA-HANs are encouraged to register at [HAN Notification Registration \(mir3.com\)](#)

Categories of Health Alert messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of June 6, 2024 but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.