Health Advisory: Avian Influenza A(H5N1) Testing in Hospitalized Patients

Minnesota Department of Health, Thu, Jan 23 12:00 CST 2025

Action Steps

Local and tribal health department: Please forward to hospitals, clinics, urgent care, emergency departments, and travel clinics in your jurisdiction.
Hospitals, clinics and other facilities: Please distribute to health care providers who might see hospitalized patients with respiratory illness.
Health care providers:

- Review the CDC HAN: Accelerated Subtyping of Influenza A in Hospitalized Patients (https://www.cdc.gov/han/2025/han00520.html). This guidance is meant to increase the speed of testing and is not a change in testing requirements and does not indicate an increased risk for avian influenza A(H5N1) infections in humans.
- Request subtyping ideally within 24 hours of hospital admission for hospitalized patients who test positive for influenza A, using in-house subtyping or a commercial clinical laboratory, if available. Specimens from hospitalized patients that are not able to be subtyped in-house or through a commercial clinical laboratory should be submitted to the Minnesota Department of Health Public Health Laboratory (MDH-PHL) within 24 hours of receiving results: Specimen Collection and Testing for Seasonal Influenza (https://www.health.state.mn.us/diseases/flu/hcp/lab.html).
- Be aware that seasonal influenza is widely circulating in Minnesota and the most likely cause of influenza-like illness. The risk of avian influenza A(H5N1) to the general public is low, it is an occupational risk and typically limited to people who have direct contact with infected animals.
- Take a comprehensive patient history for hospitalized patients presenting with respiratory illness and/or conjunctivitis including asking about their occupation, animal exposure, and raw milk consumption.
- Report any A(H5N1) suspected cases, including any positive H5 subtyped results, to the Minnesota Department of Health (MDH) at 651-201-5414 or 1-877-676-5414 while patients are still present to ensure proper specimen collection and submission.

Background

Avian influenza A viruses circulate naturally among wild aquatic birds worldwide and have been the cause of outbreaks in poultry, dairy cattle, and other animals in the United States (U.S.). Since 2022, avian influenza A(H5N1) viruses caused infections in domestic poultry, dairy cattle, and other mammals in many countries, including the U.S. Following the first detection of the virus in Minnesota (MN) in the spring of 2022, commercial poultry operations, backyard poultry flocks, dairy cattle herds, goats exposed to positive backyard poultry, companion animals, and wild birds and mammals in MN have tested positive for avian influenza A(H5N1).

The risk to the general public remains low, and the risk of infection is limited to people in direct contact with infected animals or their environment. Those working with infected birds and animals should take precautions to mitigate their risk, including wearing personal protective equipment (PPE) when working with infected animals. Milk of infected cattle has been shown to have high levels of virus; raw milk should not be consumed. FDA testing has shown that pasteurization inactivates H5N1 virus in milk, and there is no risk from the commercial milk supply.

State and federal agencies are collaborating with the poultry and dairy industries to minimize the impact of avian influenza A(H5N1). In MN, these efforts are being led by the Minnesota Board of Animal Health and Minnesota Department of Agriculture. MDH partners with these animal health agencies to provide guidance to poultry and dairy workers and responders on personal protective equipment (PPE) recommendations and other workplace precautions while handling affected animals. MDH monitors workers who could be exposed to H5N1 avian influenza, provides testing as recommended, and makes recommendations regarding antivirals.

If a poultry or dairy worker, flock or herd owner, or other person who had close contact with infected animals develops symptoms or is recommended for testing, MDH will help arrange testing and discuss antiviral treatment. This may include MDH reaching out to area health care providers to help with specimen collection and patient evaluation.

Laboratory testing for hospitalized patients

CDC released a HAN Jan. 16, 2025, recommending the accelerated subtyping of influenza A specimens among hospitalized patients who test positive for influenza A. This guidance does not reflect an increased concern for or risk of human cases. Acceleration of subtyping specifically aims to prevent delays in identifying human infections with A(H5N1) viruses, support optimal patient care, and facilitate timely infection control and case investigation. Subtyping for hospitalized patients can be performed in-house, where available, or sent to a commercial clinical laboratory.

Subtyping of influenza A positive patients should ideally occur within 24 hours of hospital admission. Influenza A- positive specimens that can be subtyped to H3 or 2009H1N1 do not need to be forwarded to MDH-PHL or a commercial laboratory for further characterization.

When assessing a patient or obtaining a specimen from a patient who has symptoms and a history of exposure to sick birds or animals:

- Use infection control as recommended for COVID-19, including N95 respirators or higher, eye protection, gowns, and gloves (Interim Guidance for Infection Control Within Healthcare Settings: https://www.cdc.gov/bird-flu/hcp/novel-flu-infection-control/).
- Collect preferred specimens including an upper respiratory swab, generally a nasopharyngeal swab. If conjunctivitis is present, a conjunctival swab should also be submitted. Swabs must be acceptable for viral specimens and should be made of a

synthetic material (e.g., Dacron) with a plastic or aluminum shaft, and should be put into tubes containing viral or universal transport media.
- After submission to MDH-PHL, testing will be performed at the MDH-PHL and confirmed, if needed, at CDC.

Season influenza is at increased levels and circulating widely in Minnesota

Continue to encourage respiratory illness prevention strategies for you and your patients: hand washing with soap and water or alcohol-based sanitizers; covering your cough; staying home when sick; staying up to date on seasonal influenza vaccination; and considering wearing a mask, particularly in crowded public indoor settings.

Seasonal influenza vaccine is used to provide protection against seasonal influenza and decrease the opportunity for someone to become dually infected with seasonal influenza and influenza A (H5N1) viruses and increase the opportunity for viral reassortment.

For more information

- MDH: Influenza (www.mdhflu.com)
- MDH: Novel Influenza A (https://www.health.state.mn.us/diseases/flu/current/novel.html)
- MDH Weekly Influenza & Respiratory Activity (https://www.health.state.mn.us/diseases/flu/stats/index.html)
- CDC: H5N1 Bird Flu: Current Situation Summary (https://www.cdc.gov/bird-flu/situation-summary/index.html)
- CDC: Laboratory Information for Collection of Respiratory Specimens for Influenza Virus Testing (https://www.cdc.gov/flu/hcp/info-collection/index.html)
- BAH: Highly Pathogenic Avian Influenza Response (https://www.bah.state.mn.us/hpai)
- USDA: Detections of Highly Pathogenic Avian Influenza (https://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections)
- FDA: Investigation of Avian Influenze A (H5N1) Virus in Dairy Cattle (https://www.fda.gov/food/alerts-advisories-safety-information/investigation-avian-influenza-h5n1-virus-dairy-cattle)

A copy of this HAN is available at: MDH Health Alert Network (http://www.health.state.mn.us/han)
The content of this message is intended for public health and health care personnel and response partners who have a need to know the information to perform their duties.