

Health Advisory: Avian Influenza Testing in Minnesota

Minnesota Department of Health, Thurs, May 2 11:00 CDT 2024

Action Steps

Local and tribal health department: Please forward to hospitals, clinics, urgent care centers, emergency departments, travel clinics, and convenience clinics in your jurisdiction.

Hospitals, clinics and other facilities: Please forward to pediatricians, occupational health and employee health leadership, infection preventionists, infectious disease physicians, emergency department staff, hospitalists, primary care clinicians, pharmacists, and all other health care providers who might see patients with respiratory illness.

Health care providers:

- Contact Minnesota Department of Health (MDH) at 651-201-5414 or 1-877-676-5414 for patients presenting with respiratory illness and/or conjunctivitis who report having close contact with sick poultry, dairy cattle, or other animals suspected or known to have tested positive for highly pathogenic avian influenza (HPAI H5N1), their environments, or unpasteurized animal products (such as raw milk).
- Take a comprehensive patient history for patients presenting with respiratory illness and/or conjunctivitis including asking about their occupation, animal exposure and raw milk consumption.
- Keep in mind the risk of HPAI to the general public is low. It is an occupational risk and limited to people who have direct contact with infected animals. Remember that seasonal influenza is still circulating and the most likely cause of influenza-like illness.
- Review information on HPAI H5N1, please refer to [MDH: Novel Avian Influenza A \(https://www.health.state.mn.us/diseases/flu/current/novel.html\)](https://www.health.state.mn.us/diseases/flu/current/novel.html).
- Be aware of corresponding MLS notification on specimen collection, submission, and testing through [MDH-PHL \(www.health.state.mn.us/diseases/idlab/mls/index.html\)](http://www.health.state.mn.us/diseases/idlab/mls/index.html)

Background

Avian influenza A viruses circulate naturally among wild aquatic birds worldwide, and most recently highly pathogenic avian influenza (HPAI) A(H5N1) has been reported in dairy cattle.

Avian influenza A viruses can infect domestic poultry, as well as other birds and mammals. Since 2021, an HPAI H5N1 virus outbreak has caused infections in domestic poultry and sporadic infections in mammals in many countries, including the United States. Following the first detection of the virus in Minnesota in the spring of 2022, commercial poultry operations, backyard poultry flocks, goats exposed to positive backyard poultry, and wild birds and mammals in Minnesota have tested positive for HPAI H5N1. The risk to the general public is low, and the risk of infection is limited to people in direct contact with infected animals. Numerous state and federal agencies are working in concert with the poultry industry to minimize the impact of this HPAI outbreak. In Minnesota, these efforts are being led by the Minnesota Board of Animal Health and Minnesota Department of Agriculture. MDH works closely with these animal health agencies to provide guidance to poultry workers and responders on personal protective equipment recommendations and other workplace precautions while handling affected

animals. MDH also monitors workers who could be exposed to HPAI H5N1, provides testing for workers who develop symptoms, and makes recommendations regarding antivirals.

In March 2024, a multi-state outbreak of HPAI H5N1 infections in dairy cattle was reported, marking the first time this H5N1 avian influenza virus had been detected in cattle. On April 1, the Centers for Disease Control and Prevention (CDC) reported a case of H5N1 avian influenza in a dairy cow worker in Texas with conjunctivitis, and who had exposure to dairy cows that were presumed to be infected. A previous H5N1 infection was reported in the U.S. in 2022 in a poultry worker in Colorado who experienced fatigue after working with infected birds. To date, there have been no impacted dairy farms or human cases identified in Minnesota. MDH plans to monitor dairy workers, provide testing, and make recommendations on antivirals should the virus be detected in Minnesota dairy herds or in persons who work with dairy herds. Those working with infected birds and animals should take precautions to mitigate their risk, including wearing personal protective equipment when working with infected animals. Milk of infected cattle has been shown to have high levels of virus, and raw milk should not be consumed. FDA testing has shown that pasteurization inactivates H5N1 virus in milk, and there is not a risk from the commercial milk supply.

Seasonal influenza is still circulating. 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 and increase the opportunity for viral reassortment.

Laboratory Testing for Suspect Avian Influenza

- If a poultry or dairy worker, flock or herd owner, or other person who had close contact with infected animals develops symptoms, 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.
- If you have suspicion of avian influenza, please call MDH at 651-201-5414 or 1-877-676-5414 to discuss need for HPAI testing and specimen collection.
 - Please take a comprehensive patient history for patients, including any close contact with poultry, cattle, or other farm animals or their environments, and any consumption or handling of unpasteurized animal products (such as raw milk).
- 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.
- Preferred specimens include an upper respiratory swab, generally a nasopharyngeal swab. If conjunctivitis is present, a conjunctival swab should 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 transport media.
- Testing will be performed at the MDH Public Health Laboratory (MDH-PHL) and confirmed, if needed, at CDC.

For More Information

- [MDH: Influenza \(mdhflu.com\)](http://mdhflu.com)
- [MDH: Novel Influenza A \(https://www.health.state.mn.us/diseases/flu/current/novel.html\)](https://www.health.state.mn.us/diseases/flu/current/novel.html)
- [MDH Weekly Influenza & Respiratory Activity \(https://www.health.state.mn.us/diseases/flu/stats/index.html\)](https://www.health.state.mn.us/diseases/flu/stats/index.html)
- [CDC: H5N1 Bird Flu: Current Situation Summary \(https://www.cdc.gov/flu/avianflu/avian-flu-summary.htm\)](https://www.cdc.gov/flu/avianflu/avian-flu-summary.htm)
- [CDC: Information for Clinicians on Influenza Virus Testing \(https://www.cdc.gov/flu/professionals/diagnosis/index.htm\)](https://www.cdc.gov/flu/professionals/diagnosis/index.htm)
- [BAH: Highly Pathogenic Avian Influenza Response \(https://www.bah.state.mn.us/hpai/\)](https://www.bah.state.mn.us/hpai/)
- [USDA: Detections of Highly Pathogenic Avian Influenza \(https://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections\)](https://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections)
- [FDA: Updates on Highly Pathogenic Avian Influenza \(HPAI\) \(https://www.fda.gov/food/alerts-advisories-safety-information/updates-highly-pathogenic-avian-influenza-hpai\)](https://www.fda.gov/food/alerts-advisories-safety-information/updates-highly-pathogenic-avian-influenza-hpai)

A copy of this HAN is available at: [MDH Health Alert Network \(https://www.health.state.mn.us/han\)](https://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.