Updated Clinical Recommendations Regarding Influenza A (H5N1) – June 2024

As of June 12, 2024, two human cases of influenza A (H5N1) have been identified in Michigan. Clinicians should be aware that this illness is circulating in bovine and poultry species in the state, and they should consider the possibility of influenza A (H5N1) virus infection in persons showing signs or symptoms of conjunctivitis and/or respiratory illness who have relevant exposure history.

The Michigan Department of Agriculture and Rural Development (MDARD) has identified commercial dairy and poultry farms that have recently tested positive for H5N1in Allegan, Barry, Calhoun, Clinton, Gratiot, Ingham, Ionia, Isabella, Montcalm, Newaygo, and Ottawa counties. For the most up-to-date information, please see MDARD - Avian Influenza (Bird Flu). The Michigan Department of Health and Human Services (MDHHS), MDARD, and Local Health Departments (LHDs) are working on a coordinated response. Identification of impacted farms is ongoing, and risk should not be considered limited to those geographies.

MDHHS encourages healthcare providers to be vigilant for patients presenting with conjunctivitis and/or respiratory symptoms, especially those who report exposure to cattle or poultry, or who have consumed raw milk. Patients that present with these symptoms and exposures should be tested for novel influenza infection at the MDHHS Bureau of Laboratories (BOL).

While there is no vaccine available for influenza A (H5N1), the seasonal influenza vaccine can protect populations at risk of exposure to H5N1 by reducing the risk of co-infection between seasonal and avian strains. Antiviral drugs, such as Tamiflu can be effective in treating novel influenza infection. Early treatment works best and may be especially important for people with a high-risk condition.

Recommendations for Clinicians

- Clinicians should consider the possibility of influenza A (H5N1) virus infection in people showing signs or symptoms of acute respiratory illness or conjunctivitis and who have relevant exposure history outlined in Highly Pathogenic Avian Influenza A(H5N1) Virus in Animals: Interim Recommendations for Prevention, Monitoring, and Public Health Investigations.
    - Examples of symptoms include but are not limited to:
        - Mild illness: (e.g., cough, sore throat, eye redness or eye discharge such as conjunctivitis, fever or feeling feverish, rhinorrhea, fatigue, myalgia, arthralgia, and headache).
        - Moderate to severe illness: (e.g., shortness of breath or difficulty breathing, altered mental status, and seizures).
        - Complications: (e.g., pneumonia, respiratory failure, acute respiratory distress syndrome, multi-organ failure (respiratory and kidney failure), sepsis, and meningoencephalitis).
- If signs and symptoms compatible with avian influenza A (H5N1) virus infection are present:
    1. Isolate patient and follow infection control recommendations, including using personal protective equipment (PPE).
    2. Initiate empiric antiviral treatment as soon as possible. Do not delay treatment while awaiting laboratory results.
    3. **Notify state and local health departments to arrange testing for influenza A (H5N1) virus.**
    4. Collect respiratory specimens from the patient to test for influenza A (H5N1) virus at the state health department. If the exposed person has conjunctivitis, with or without

respiratory symptoms, both a conjunctival swab and a nasopharyngeal swab should be collected for testing.

5. Encourage patients to isolate at home away from their household members and not go to work or school until it is determined they do not have influenza A (H5N1) virus infection.

- Starting empiric antiviral treatment with oral or enterically administered oseltamivir (twice daily for five days) is recommended regardless of time since onset of symptoms. Antiviral treatment should not be delayed while waiting for laboratory test results.

To collect and submit specimens to MDHHS Bureau of Laboratories (BOL):

For individuals with **respiratory symptoms** who meet clinical and epidemiological criteria for influenza A (H5N1), the preferred specimens for testing at the BOL are nasopharyngeal (NP) and oropharyngeal (OP) collection with each swab (NP + OP) put into different tubes of viral transport media (VTM). If only one specimen type can be collected, prioritize the NP swab in VTM.

For individuals with **conjunctivitis (with or without respiratory symptoms)** who meet clinical and epidemiological criteria for influenza A(H5N1) two specimens are requested, a nasopharyngeal (NP) swab and a conjunctival swab, each in their own tube of VTM. If both NP and conjunctival swabs are sent, testing can be conducted at the BOL. If only a conjunctival swab is sent, it will be forwarded to CDC for testing, which would lead to a delay in results.

For all specimens, a viral respiratory test requisition MDHHS-6097 must be completed, including submitter information, and accompany specimens being sent to the BOL. Please ensure that each specimen tube is labeled with two unique patient identifiers (last name, first name and date of birth), the date of collection, and the type of specimen collected. After collection, specimens should be sent on frozen cold packs to the BOL. If specimens will not arrive to the BOL within 72 hours of their collection specimens should be frozen and sent on dry ice. Additional information regarding the collection, packaging, and shipping of specimens to the BOL can be found in the Virus Isolation Specimen Submission Instructions DCH-0772.

Clinical laboratories using a commercially available influenza diagnostic assay that includes influenza A virus subtype determination should contact the BOL to facilitate transport and additional testing of any specimen being tested for influenza A (H5N1), regardless of the test result.

If you have any questions, please contact MDHHS. During business hours (Mon-Fri 8AM-5PM), MDHHS can be reached at (517) 335-8165. To contact MDHHS after hours or on holidays, call (517) 335-9030.