

Novel Influenza A(H5N1) Virus, Illinois, 2024: Health Advisory to Clinicians for Early Detection of Human Infections

Summary and Action Items

IDPH is issuing a health advisory to alert clinicians to the fact that several IL residents have come into contact with sick or dead waterfowl that are infected with the Novel H5N1 “bird flu” strain of influenza recently. Some residents have developed symptoms consistent with influenza infection, necessitating rapid early identification, isolation, and treatment. The purpose of this Health Alert is to:

1. Bring awareness to the possibility that people with “flu like symptoms” or respiratory illness may not just be seasonal respiratory viruses but the highly pathogenic avian influenza “bird flu” strain that has implications for both the public at large and health care personnel as well.
2. Request that clinicians consider screening those showing signs or symptoms of acute respiratory illness or conjunctivitis for any [relevant exposure history](#) including exposure to agriculture or sick/dead waterfowl.
3. If suspicious for HPAI then conduct testing and consider empiric treatment as outlined in CDC’s [Brief Summary for Clinicians](#).
4. Isolate the patient and notify [your local health department](#) immediately.

Background

There are several counties in Northern IL that have reported die-offs of waterfowl including ducks and geese in the past week. In addition, some large commercial poultry flocks in Central and Southern IL have recently tested positive for H5N1 virus and are in the process of de-population. Residents in IL who have been in contact with these birds without appropriate PPE (personal protective equipment) are at high risk of developing Novel influenza A due to H5N1. There have been no deaths related to human infections of Novel Flu A (H5N1) reported in the US with this current outbreak. Like seasonal influenza, however, serious illness, resulting in hospitalization and death, is possible.

Symptoms of Novel or Bird Flu

Common symptoms are similar to seasonal respiratory infections including seasonal influenza:

- Uncomplicated upper respiratory tract signs and symptoms with or without fever, including influenza-like illness (ILI) [fever $\geq 100^{\circ}\text{F}$ plus cough or sore throat]
- Fever (temperature of 100°F [37.8°C] or greater) or feeling feverish
- Cough, sore throat, runny or stuffy nose, muscle or body aches, headaches, fatigue
- Eye redness (or conjunctivitis)
- Shortness of breath or difficulty breathing.
- Less common signs and symptoms are diarrhea, nausea, or vomiting.
- It is important to note that infection with influenza viruses, including novel influenza A viruses, does not always cause fever. Fever may not occur in infected persons of any age, particularly in persons aged 65 years and older or people with immunosuppression. The absence of fever should not supersede clinical judgment when evaluating a patient for illness compatible with novel influenza A virus infection.

Infection Prevention and Control

Illinois Department of Public Health

Standard, contact and airborne precautions, including the use of eye protection, are recommended when evaluating patients for infection with novel influenza A viruses.

If an airborne infection isolation room (AIIR) is not available, isolate the patient in a private room. Health care personnel should wear recommended personal protective equipment (PPE) when providing patient care. For more information on recommended infection prevention and control measures, please visit [Infection Control Within Healthcare Settings for Patients with Novel Influenza A Viruses](#). [Note: these recommendations are different than those for seasonal influenza which are standard and droplet precautions.]

Diagnosis

Respiratory specimens should be collected for molecular testing (**RT-PCR for influenza A viruses**), including novel influenza A viruses.

For outpatients: upper respiratory tract specimens such as a nasopharyngeal swab and a nasal swab combined with an oropharyngeal swab (e.g., two swabs combined into one viral transport media vial) should be collected and sent to the IDPH Regional Lab [per these instructions](#) only after approval and confirmation via [your local health department](#).

If the person has conjunctivitis (with or without respiratory symptoms), **both a conjunctival swab and nasopharyngeal swab should be collected separately.**

Patients who are severely ill : Both upper and lower respiratory tract specimens (e.g., an endotracheal aspirate, bronchoalveolar lavage fluid in intubated patients, or induced sputum) collected for influenza testing.

Rapid influenza (non molecular) diagnostic tests are not a reliable indicator of novel influenza A virus infection, and the results should not be used to guide infection control or antiviral treatment decisions.

Both commercially available rapid influenza diagnostic tests and most available influenza molecular assays do not distinguish between infection with seasonal influenza A viruses and novel influenza A viruses.

Testing for other potential causes of acute respiratory illness (e.g., SARS-CoV-2) should also be considered depending upon the [local epidemiology of circulating respiratory viruses](#).

Treatment

Initiation of [antiviral treatment](#) with oral oseltamivir (twice daily x 5 days) is recommended as soon as possible even for those with only suspected infection with a novel influenza A virus. **Antiviral treatment should not be delayed while waiting for laboratory test results. Treatment should be initiated even if more than 48 hours have elapsed since illness onset and regardless of illness severity** (outpatients or hospitalized patients).

Post Exposure Prophylaxis or Chemoprophylaxis for Exposed Persons

[Chemoprophylaxis](#) should be offered to those with “close exposure” i.e. recent exposure (within 10 days) and being within approximately 6 feet of birds or other animals with confirmed novel influenza A virus infection by A(H5) or A(H7) viruses OR to a suspect or confirmed human case of Novel Flu A

Exposed persons should monitor themselves daily for signs and symptoms of new illness for 10 days after the last known exposure.

Post-exposure prophylaxis (PEP) with influenza antiviral medications **can be considered** for exposed persons. Decisions to initiate post-exposure antiviral chemoprophylaxis should be based on clinical judgment, with consideration given to the type of exposure (e.g. without use of respiratory and eye protection), duration of exposure, time since exposure (e.g. less than 2 days), known infection status of

the birds or other animals the person was exposed to, and whether the exposed person is at [higher risk for complications from seasonal influenza](#).

- If PEP is initiated, antiviral post-exposure prophylaxis **should begin as soon as possible (ideally within 48 hours) after the first exposure.**
- **Oral oseltamivir at treatment dosing frequency (one dose twice daily) is recommended** instead of the typical antiviral chemoprophylaxis regimen (*once* daily) for seasonal influenza. All human infections with Novel influenza A(H5N1) virus in the U.S. have been with viruses susceptible to oseltamivir.
- **Antiviral post-exposure prophylaxis with oseltamivir (twice daily) should be continued for 5 or 10 days.** If the exposure was time-limited and not ongoing, the recommended duration is 5 days from the last known exposure. If the exposure is likely to be ongoing, a duration of 10 days is recommended because of the potential for prolonged infectiousness from the infected animal(s).
- Specific dosage recommendations for treatment by age group are available at [Recommended Dosage and Duration of Influenza Antiviral](#).
- This recommendation for oral oseltamivir with twice daily antiviral post-exposure prophylaxis dosing is based on [CDC's guidelines](#) from data in animals that support higher chemoprophylaxis dosing for avian influenza A(H5N1) virus infection, and on the desire to reduce the potential for development of antiviral resistance while receiving once daily chemoprophylaxis if infection occurred.
- To support post-exposure prophylaxis with oseltamivir using twice daily dosing for novel influenza A viruses associated with severe human disease, including influenza A(H5N1) virus, CDC issued [Emergency Use Instructions \(EUI\) for oseltamivir](#).

Chemoprophylaxis is not routinely recommended for personnel involved in culling non-infected or likely non-infected bird populations. Chemoprophylaxis is also not recommended as a control measure for personnel involved in handling sick birds or decontaminating affected environments (including animal disposal) who used proper personal protective equipment.

Contact

Additional questions about Novel Flu A (H5N1) can be directed to your local health department or the Respiratory Surveillance Program at DPH.Respiratory@Illinois.gov.

Additional Resources

[Interim Guidance for Infection Control Within Healthcare Settings When Caring for Confirmed Cases, Probable Cases, and Cases Under Investigation for Infection with Novel Influenza A Viruses Associated with Severe Disease](#)

[Clinician Brief: Evaluating and Managing Patients Exposed to Animals or Persons Infected with Novel Influenza A Viruses of Public Health Concern](#)

[Considerations for Veterinarians: Evaluating and Handling of Cats Potentially Exposed to Highly Pathogenic Avian Influenza A\(H5N1\) Virus | Bird Flu | CDC](#)

Target Audience

Infectious Disease Physicians, Veterinarians, Family Practice and Internal Medicine Physicians, Pediatricians, Geriatric Physicians, Nurse Practitioners, Physician Assistants, Hospital Emergency Departments, Infection Control Preventionists, Local Health Departments, Schools, and Daycares

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