Human Avian Influenza A(H5N1) Guidance for Hospitals and Healthcare Facilities

Key Messages

- Human Avian Influenza A(H5N1) cases have been identified in the United States. There have been no human or dairy cattle cases reported in the Northeast in 2024 or 2025, but there has been a wastewater detection of H5N1 in Maine. Of note, all cases among dairy workers have had conjunctivitis.
- Healthcare providers should consider Avian Influenza A(H5N1) in people with acute respiratory symptoms and/or conjunctivitis and recent exposure to animals suspected or confirmed to have avian influenza A OR recent consumption of raw milk or raw milk products.
- Healthcare providers should immediately report any suspected human avian influenza A infections to the Rhode Island Department of Health at 401-222-2577 Monday-Friday 8:30 a.m.-4:30 p.m. or 401-276-8046 after hours.
- Testing for avian influenza A is available at the Rhode Island State Health Laboratories (RISHL) and some commercial laboratories.
- If the person has conjunctivitis, with or without respiratory symptoms, both a conjunctival and nasopharyngeal swab should be collected.
- Antiviral treatment is recommended for patients suspected or confirmed to have avian influenza A infection and antiviral prophylaxis is recommended for their close (e.g., household) contacts.
- Healthcare providers should follow standard, contact, and airborne precautions when caring for patients suspected of having avian influenza A infection.

Recommendations

Consider Avian Influenza A Infection

Healthcare providers should consider the possibility of avian influenza A virus infection in a patient with:

- Signs and symptoms consistent with acute respiratory tract infection and/or conjunctivitis;* AND
- History of exposure in the last 10 days to animals suspected or confirmed to have avian influenza A, or who have had exposure to raw milk.

If you encounter patients who work with infected animals or infected animal products, please encourage them to use personal protective equipment and recommend they receive seasonal influenza vaccine during influenza season. Farmers and others managing animals at potential risk for avian influenza A(H5N1) in Rhode Island may complete this order form to request PPE.

**If exposure was consumption of raw milk products and only gastrointestinal symptoms are present, interim recommendations are to test as explained below.*

Specimen Collection and Testing

If a person who meets the exposure criteria above develops symptoms that could be consistent with avian influenza A(H5N1) virus infection within 10 days of exposure, they should be tested.

- If you refer suspect cases to healthcare facilities prepared to accept such patients, please notify the facilities ahead of time so that they can put appropriate precautions in place for a suspect avian influenza A(H5N1) case.
- Healthcare providers who suspect avian influenza A(H5N1) virus infection should immediately contact the Rhode Island Department of Health (RIDOH) at 401-222-2577 Monday-Friday 8:30 a.m.-4:30 p.m. or 401-276-8046 after hours. RIDOH can help determine if testing is warranted, recommend appropriate specimens to collect based on symptomatology, and coordinate testing. If avian influenza A(H5N1) is suspected, please note this in the comments section on the Rhode Island State Health Laboratories (RISHL) requisition form.
    - Influenza testing at most clinical or commercial laboratories can detect influenza A. However, hemagglutinin subtyping must be done to detect avian influenza A(H5N1) in an influenza A positive specimen. While some commercial labs may be able to perform hemagglutinin subtyping, we strongly encourage partners to notify RIDOH immediately if they suspect an avian influenza A(H5N1) case.
- When concern for detecting avian influenza A(H5N1) is high (e.g., symptomatic farm workers exposed to infected animals or symptomatic persons exposed to a confirmed human case), testing should be sent to RISHL for timely public health response
    - RISHL can provide quicker turnaround times.
    - Commercial PCR tests for influenza can be used to rule out influenza A (and therefore H5N1) infection in symptomatic people less likely to be infected with avian influenza A(H5N1) (e.g., symptomatic people with

limited animal exposure, or no known exposure to infected animals or humans).

- Specimens should ideally be collected within 24-72 hours of symptom onset and no later than 7 days after symptom onset.
    - Respiratory specimens for submission to RISHL:
        - Separate oropharyngeal and anterior nares swabs are preferred (combining both swabs into a single transport media tube is acceptable).
        - Nasopharyngeal swabs are acceptable, but to date have had a lower yield for positive test results in cases than oropharyngeal or anterior nares swabs.
        - A conjunctival swab should also be collected from anyone experiencing conjunctivitis. Conjunctival swabs have the highest yield for detection in cases to date.
            - If both eyes are affected, each eye should be swabbed with a separate swab but both swabs should be placed in a single transport media tube.
        - Conjunctival swabs MUST be submitted together with another specimen from the nasopharynx or anterior nares, even if the person does not have respiratory symptoms.
        - If a hospitalized patient is suspected of being infected with avian influenza A (H5N1), testing would involve collecting respiratory specimens like nasopharyngeal swabs, and in severe cases, lower respiratory tract samples like bronchoalveolar lavage (BAL) fluid, and sending them to RISHL for analysis to confirm the presence of the virus; this should be done in conjunction with contacting RIDOH immediately due to the high-risk nature of the infection.
- If the symptomatic person consumed raw dairy products and has gastrointestinal symptoms (with or without respiratory symptoms), stool should also be collected, if possible, and held for potential testing for enteric pathogens, as well as testing for influenza A if it becomes available.
- Specimens should be collected using swabs with synthetic tips (e.g., polyester or Dacron®) and an aluminum or plastic shaft.
    - Swabs with cotton tips and wooden shafts are NOT recommended.
    - Specimens collected with swabs made of calcium alginate are NOT acceptable.
- Specimens should be refrigerated or frozen after collection. Refrigerated specimens should be transported to RISHL on cold packs. Frozen specimens should be transported on dry ice.
- The following information should be obtained for suspected human cases and should be provided to the RISHL at the time the specimen is shipped:
    - Basic demographic information

        - Symptom onset date, date reported to RIDOH, signs and symptoms, disease severity, and specimen collection date
    - Animal and animal product contact history
        - Contact with livestock or poultry
        - Contact with animal products, such as raw milk
        - Contact with wildlife and whether wildlife appeared ill
    - Workplace exposure information (and, if applicable, type of work, e.g., caring for ill animals, work in a milk processing facility)
    - Contact with human avian influenza A(H5N1) cases
    - Seasonal influenza vaccine received
    - Antiviral treatment received
    - Influenza A testing results (including subtyping results), if available
    - Household member information
        - Number and age and whether antiviral postexposure prophylaxis was received
    - PPE use (and, if applicable, type of PPE used)
        - Type of eye protection (goggles or face shield)
        - Type of respiratory protection (medical/surgical mask or N95 or other type of respirator)
    - Any healthcare received for illness

- If specimens are sent to a commercial laboratory, please contact that laboratory about their specimen collection guidance. Specific requirements for acceptable specimens at each laboratory vary.

Treatment

Healthcare providers who suspect avian influenza A(H5N1) virus infection should refer to the CDC's Interim Guidance on the Use of Antiviral Medications for Treatment of Human Infections with Novel Influenza A Viruses Associated with Severe Human Disease and the CDC's Emergency Use Instructions for Oseltamivir.

Antiviral treatment is recommended as soon as possible for patients with suspected or confirmed avian influenza A(H5N1) virus infection. Antiviral treatment should not be delayed while waiting for laboratory test results.

- The standard treatment dose of oseltamivir is 75 mg twice daily for 5 days for adults.
    - Dosage adjustment is needed for children, infants, neonates and for adult patients with renal impairment.
    - Oseltamivir is not recommended for people with end-stage renal disease who are not receiving dialysis.
    - Pending further data, longer courses of treatment (e.g., 10 days) should be considered for severely ill hospitalized patients with novel influenza A

virus infections. For additional information, please see the Emergency Use Instructions (EUI) Fact Sheet for Healthcare Providers.

Chemoprophylaxis

Please contact RIDOH at 401-222-2577 Monday-Friday 8:30 a.m.-4:30 p.m. or 401-276-8046 after hours if considering prophylaxis.

For detailed guidance, please see Interim Guidance on Follow-up of Close Contacts of Persons Infected with Novel Influenza A Viruses, Use of Antiviral Medications for Chemoprophylaxis.

Chemoprophylaxis dosing for avian influenza A(H5N1) is the same as treatment dosing: 75 mg twice daily for adults for 5 days if there has been a time-limited exposure OR 10 days if exposure is ongoing.

- Dosage adjustment is needed for children, infants, neonates, and adult patients with renal impairment.

Prophylaxis is recommended for household contacts of confirmed cases and can be considered in workers to infected or potentially infected cows who have had an unprotected discrete high-risk exposure such as a milk splash to the eye.

- Consideration for prophylaxis should be based on clinical and public health considerations such as type and duration of exposure, time course, infection status of animal or human exposure, and if a person is at increased risk for complications with seasonal influenza.

Healthcare Infection Prevention and Control

- If a person with suspected or confirmed avian influenza A(H5N1) virus infection is referred to a healthcare facility, the healthcare facility should be alerted prior to patient arrival so appropriate infection control measures can be planned and immediately implemented. The ill person should be advised to wear a facemask on arrival.
- If a case is suspected, immediately mask the patient and place them in an airborne infection isolation room (AIIR) with the door closed. While in an AIIR, the patient's mask may be removed.
- If an AIIR is not available, place the patient in a single-patient room with the door closed and have the patient remain masked.
- Use personal protective equipment that includes:
    - Respiratory protection (fit-tested N95 respirator or higher level of protection)
    - Eye protection (goggles or face shield)

    - Gown and gloves
- Use diligent hand hygiene before and after contact with the patient.
- Limit room entry to essential personnel. Limit transport of patient outside their room.
- If a non-AIIR room is used, after the patient leaves, the room should not be reused and unprotected individuals should not enter until sufficient time has elapsed for enough air changes to remove potentially infectious particles, per CDC guidance. For example, in a patient-care area with 6 air exchanges per hour, the time to removal of airborne contaminants with 99.9% efficiency is 69 minutes.
- For additional infection control guidance, such as management of exposed healthcare workers, visitor policies, environmental cleaning, and caution with aerosol-generating procedures, please refer to: CDC 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.

Resources

- CDC Interim Guidance on the Use of Antiviral Medications for Treatment of Human Infections with Novel Influenza A Viruses Associated with Severe Human Disease
- CDC 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
- Interim Guidance on Specimen Collection and Testing for Patients with Suspected Infection with Novel Influenza A Viruses Associated with Severe Disease or with the Potential to Cause Severe Disease in Humans
- Influenza Specimen Collection Reference Guide
- Influenza Specimen Collection Poster
- Conjunctival Swab Specimen Collection for Detection of A(H5) Viruses