

## Surveillance Criteria and Testing Guidance for Avian Influenza A in Humans

Protocol for Healthcare Providers and Local Health Departments

August 2023

### Keys steps in screening for Avian Influenza

1. Identify if the person meets **CRITERIA**
2. Ensure appropriate **REPORTING**
3. Refer to **INFECTION CONTROL** recommendations
4. Follow **SPECIMEN COLLECTION AND TRANSPORT** guidelines

### EPIDEMIOLOGIC CRITERIA

Persons with recent exposure (within 10 days) to avian influenza A viruses through one of the following:

- **Exposure to A(H5), A(H7), or A(H9) virus infected birds** is defined as follows:
  - Close exposure (within 2 meters) to birds, with confirmed avian influenza A virus infection by A(H5), A(H7), or A(H9) viruses. Bird exposures can include, but are not limited to handling, slaughtering, defeathering, butchering, culling, or preparation of birds for consumption; **OR**
  - Direct contact with surfaces contaminated with feces or bird parts (e.g., carcasses, internal organs) from infected birds; **OR**
  - Visiting a live poultry market with confirmed bird infections or associated with a case of human infection with avian influenza A virus.
- **Exposure to an infected person** – Close (within 2 meters) unprotected (without use of respiratory and eye protection) exposure to a person who is a confirmed, probable, or symptomatic suspected case of human infection with avian influenza A virus (e.g. in a household or healthcare facility).
- **Laboratory exposure** – Unprotected (without use of respiratory and eye protection) exposure to avian influenza A virus in a laboratory.

### CLINICAL CRITERIA

Persons with signs and symptoms consistent with acute or lower respiratory tract infection or conjunctivitis, or complications of acute respiratory illness without an identified cause. Examples include but are not limited to:

- Mild flu-like illness (cough, sore throat, fever or feeling feverish, rhinorrhea, fatigue, myalgia, arthralgia, headache) or conjunctivitis (red eye, discharge from eye)
- Moderate to severe illness: shortness of breath or difficulty breathing, altered mental status, seizures
- Complications: pneumonia, respiratory failure, acute respiratory distress syndrome, multi-organ failure, meningoencephalitis

### PUBLIC HEALTH RESPONSE CRITERIA

Asymptomatic persons whom public health authorities, in consultation with CDC, determine that testing is needed in order to assess the clinical spectrum of infection with avian influenza A virus as part of public health investigations.

## **CASE DEFINITIONS**

### **Confirmed Case**

Avian influenza A virus infection in a person that is confirmed by CDC's Influenza Division Laboratory or a CDC designated laboratory using methods mutually agreed upon by CDC and the Council of State and Territorial Epidemiologists (CSTE).

### **Suspected Case (also called Case Under Investigation)**

A person meeting criteria for avian influenza A virus infection stated previously and for whom confirmatory laboratory test results are unknown or pending.

### **Probable Case**

A person meeting criteria for avian influenza A virus infection above and for whom laboratory test results do not provide a sufficient level of detail to confirm HPAI A H5 virus infection.

## **REPORTING & AVIAN INFLUENZA SCREENING FORM**

### **Healthcare Providers**

Cases meeting the above criteria should be reported **IMMEDIATELY** to the local health department (LHD) where the patient resides. If patient residence is unknown, report to your own local health department. Contact information for local health departments is available at: [www.localhealth.nj.gov](http://www.localhealth.nj.gov).

If LHD personnel are unavailable, healthcare providers should report the suspected case to the New Jersey Department of Health, Communicable Disease Service (CDS) at 609-826-5964, Monday through Friday 8:00 AM - 5:00 PM. On weekends, evenings, and holidays, CDS can be reached at (609) 392-2020.

### **Local Health Departments**

When a local health department receives a report of a suspect case, information should be communicated **IMMEDIATELY** to CDS at 609-826-5964, Monday through Friday 8:00 AM - 5:00 PM. On weekends, evenings and holidays, CDS can be reached at (609) 392-2020.

The healthcare provider or local health department should complete the AVIAN INFLUENZA SCREENING FORM (<http://www.state.nj.us/health/forms/cds-25.dot>). Completed forms should be faxed to CDS at 609-826-5972. This form will be reviewed by CDS who will make the final determination if the case meets criteria and if a specimen is required for testing.

**Testing will only be performed on persons who meet the Epidemiologic AND either Clinical OR Public Health Response criteria listed previously.**

## **INFECTION CONTROL**

Standard, contact, and airborne precautions are recommended for management of patients with suspect or confirmed novel influenza A virus infection, which is different from that outlined for patients with seasonal influenza. For additional guidance on infection control precautions please see <https://www.cdc.gov/flu/avianflu/novel-flu-infection-control.htm>

### Contact Management:

- Close contacts (e.g., household, sexual) of suspect cases should be identified. Close contacts with compatible signs and symptoms should be treated as suspect cases. Asymptomatic close contacts should be advised to stay home and use respiratory hygiene precautions until the case-patient's H5 test result is available.
- Each hospital should keep a logbook of all hospital personnel and visitors exposed to the suspect case until the test result is available.
- Healthcare providers should advise asymptomatic close contacts to notify their healthcare provider if they develop fever or respiratory symptoms (cough, sore throat, shortness of breath).

### TREATMENT AND CHEMOPROPHYLAXIS

Initiation of antiviral treatment is recommended as soon as possible for any patient with suspected or confirmed infection with an avian influenza A virus. This includes patients who are confirmed, suspect or probable, even if more than 48 hours has elapsed since illness onset and regardless of illness severity. **Antiviral treatment should not be delayed while waiting for laboratory test results.** If molecular testing is negative for novel avian influenza A virus infection and other influenza viruses, but influenza virus infection is still suspected in a patient who is severely ill, antiviral treatment should be continued and additional respiratory specimens should be collected for repeat influenza testing. For patients who are not hospitalized, if molecular testing is negative for avian influenza A virus and other influenza viruses, antiviral treatment can be discontinued. For more information on treatment recommendations, please visit <https://www.cdc.gov/flu/avianflu/clinicians-evaluating-patients.htm>

Chemoprophylaxis 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 the person was exposed to, and to whether the exposed person is at higher risk for complications from seasonal influenza. Physicians should consult the manufacturer's package insert for dosing, limitations of populations studied, contraindications, and adverse effects. Chemoprophylaxis is not routinely recommended for personnel involved in culling non-infected or likely non-infected bird populations as a control measure for personnel involved in handling sick birds or decontaminating affected environments (including animal disposal) who used proper personal protective equipment. More information can be found at <https://www.cdc.gov/flu/avianflu/novel-av-chemoprophylaxis-guidance.htm>

### COLLECTION AND TRANSPORT OF CLINICAL SPECIMENS

PHEL can conduct Real-time reverse transcription polymerase chain reaction (RT-PCR) testing for Avian Influenza A H5 Asian lineage. Confirmatory testing can only be performed by the Centers for Disease Control and Prevention and may take several days. The timeframe in which testing is conducted will be determined on a case-by-case basis. **No specimen will be tested by PHEL until the case has been reviewed by the CDS.** NOTE: If PHEL receives a specimen without CDS review and approval number, PHEL will hold the specimen and contact CDS.

Appropriate infection control procedures should be followed when collecting samples. Additional guidance can be found here: <https://www.cdc.gov/flu/avianflu/severe-potential.htm>. Specimens should be obtained for testing as soon as possible after illness onset and ideally within 7 days of illness onset. A nasal swab, nasopharyngeal swab, nasal aspirate or wash, oropharyngeal swab or two swabs combined into one viral

transport media vial (e.g., a nasal or nasopharyngeal swab combined with an oropharyngeal swab) are all acceptable specimens. For patients with severe lower respiratory tract illness, a lower respiratory tract specimen (e.g., an endotracheal aspirate or bronchoalveolar lavage fluid) should be collected (these specimens have a higher yield for detecting HPAI A(H5N1)). Specimens should be placed into sterile viral transport media and immediately placed on refrigerant gel-packs or at 4°C (refrigerator) for transport to the laboratory. When submitting specimens to PHEL the SRD-1 form that can be found at <http://www.state.nj.us/health/forms/srd-1.pdf> should be filled out for each specimen. For additional guidelines refer to: [https://www.nj.gov/health/cd/documents/collection\\_transport\\_clinical\\_spec.pdf](https://www.nj.gov/health/cd/documents/collection_transport_clinical_spec.pdf).

For fatal cases associated with possible avian influenza infection, autopsy and collection of appropriate postmortem specimens should be performed. Information on fatal cases should be communicated IMMEDIATELY to the CDS at 609-826-5964, Monday through Friday 8:00 AM - 5:00 PM. On weekends, evenings, and holidays, CDS can be reached at (609) 392-2020.

### **Shipping**

Local health departments and hospitals may be asked to assist in transporting specimens to PHEL on suspect cases. Each report will be evaluated individually to determine the immediacy in which the specimen should be transported and tested. Commercial carriers can be used to ship samples, and these should be handled as Biologic Substance, Category B. Information on shipping regulations for these carriers can be found at <http://www.iata.org/Pages/default.aspx> or <http://phmsa.dot.gov/hazmat> .

### **RESOURCES**

New Jersey Department of Health: Avian Influenza  
[https://www.nj.gov/health/cd/topics/novel\\_flu.shtml](https://www.nj.gov/health/cd/topics/novel_flu.shtml)

New Jersey Department of Agriculture: Animal Health  
<https://www.nj.gov/agriculture/divisions/ah/>

Public Health and Environmental Laboratories  
<https://nj.gov/health/phel/>

CDC: Avian Influenza  
<https://www.cdc.gov/flu/avianflu/index.htm>

CDC: Avian Influenza; Current Situation  
<https://www.cdc.gov/flu/avianflu/avian-flu-summary.htm>

CDC: Information for Specific Groups  
<https://www.cdc.gov/flu/avianflu/groups.htm>

USDA Animal and Plant Health Inspection Service: 2022 Avian Flu Confirmations  
<https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/hpai-2022>

World Health Organization: Avian Influenza  
[https://www.who.int/health-topics/influenza-avian-and-other-zoonotic#tab=tab\\_1](https://www.who.int/health-topics/influenza-avian-and-other-zoonotic#tab=tab_1)