

AVIAN AND NOVEL INFLUENZA QUICKSHEET

SYMPTOMS

Symptoms vary from mild to severe, but usually start with normal flu-like symptoms, including:

- Runny nose
- Cough
- Sore throat
- High grade Fever - over 100.4°F or 38°C
- Headache
- Muscle ache
- Conjunctivitis
- Malaise
- Diarrhea
- Vomiting
- Respiratory difficulties

PREVENTION

- Avoid any contact with infected birds and patients, as well as their secretions
- Patients need to be isolated to prevent the spread of infection
- Family members may be prescribed antiviral medications for prevention
- Do not touch dead birds, or those that are suspected to be infected, with bare hands
- Dispose the carcass of dead birds using gloves and plastic carry bags into a trash can
- Avoid travelling to places with reported incidences of bird flu
- Consult your doctor if you have flu-like symptoms within 10 days of handling birds or travelling to areas with the flu outbreak

ADDITIONAL INFORMATION ON NOVEL INFLUENZA

- [Information on Avian Influenza \(CDC\)](#).
- [Information on Viruses of Special Concern \(CDC\)](#).
- [Avian Influenza: Information for Health Professionals and Laboratorians \(CDC\)](#).
- [USDA APHIS | 2022-2023 Detections of Highly Pathogenic Avian Influenza in Wild Birds](#)
- [USDA APHIS | Defend the Flock Program](#)
- [HPAI Survey \(arcgis.com\)](#).



Kentucky Public Health
Prevent. Promote. Protect.

ETIOLOGIC AGENT

*Influenza Type A Virus
(Virus Subtypes H5, H7, and H9 are known to infect people)*

VECTOR

*Wild Birds
(Domestic Poultry)*

TRANSMISSION

Spreads from infected birds to humans; human-to-human spread is noted only in people in close contact with infected persons.

- *Infection can spread via feces of infected birds, or secretions from the nose, mouth, or eyes of infected birds and humans*
- *In rare cases, the Infection can spread from infected person to another person through sneezing and coughing*
- *The infection can also spread from under cooked poultry from infected birds*

INCUBATION PERIOD

(3-5 days)

AVIAN FLU QUICKSHEET

CASE DEFINITIONS

PROBABLE CASE

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

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).

LABORATORY CRITERIA

Testing should be performed on persons who meet Epidemiologic criteria **AND** either Clinical **OR** Public Health Response criteria.

PUBLIC HEALTH 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.

EPIDEMIOLOGIC CRITERIA

Within 10 days of illness onset:

Exposure to birds infected with avian influenza virus is defined as follows:

- Close exposure (within six feet) to birds with confirmed or suspected avian influenza A virus infection. Bird exposures can include, but are not limited to: handling, slaughtering, defeathering, butchering, culling, or preparing birds for consumption; OR
- Direct contact with surfaces contaminated with feces or bird parts (e.g., carcasses, internal organs) from infected birds; OR
- Inhaling droplets or dust containing virus from bird saliva, mucous, or feces; 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 six feet) 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 novel or 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.

Human Infectious Period: Until further data are available, the infectious period should be considered to be from 1 day before symptom onset until resolution of illness.

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
- Less common signs and symptoms include diarrhea, nausea, or vomiting. Fever may not always be present.



AVIAN FLU QUICKSHEET

CONTACT DEFINITION & MONITORING

CLOSE CONTACT

Close contacts are defined as persons within approximately 6 feet or within the room or care area of a confirmed or probable novel influenza A case-patient for a prolonged period of time, or who had direct contact with infectious secretions while the case-patient was likely to be infectious (beginning 1 day prior to illness onset and continuing until resolution of illness).

CONTACT RISK LEVEL

Highest-risk exposure groups (*recognized risk of transmission*)

- Household or close family member contacts with unprotected, prolonged close contact to a confirmed or probable case.

Moderate-risk exposure groups (*unknown risk of transmission*)

- Health care personnel with unprotected close contact with a confirmed or probable case or nonhousehold members with prolonged unprotected close contact with a confirmed or probable case outside of a healthcare facility.

Low-risk exposure groups (*transmission unlikely*)

- Others who have had social contact of a short duration with a confirmed or probable case in a non-hospital setting (e.g., in a community or workplace environment).

MONITORING

Persons with Bird Exposure: All persons with direct contact to avian influenza subtypes should be monitored. At a minimum, passive monitoring should be conducted. **Active monitoring should be implemented when exposure is to subtypes of influenza known to infect and cause severe illness in humans (e.g., Asian-origin H5N1, H7N9 or other avian influenza strain known to infect and cause severe illness in humans) or when recommended by the CDC or KDPH.**

- Passive monitoring: Contact each exposed person at the beginning of their monitoring period to inform them of the monitoring process, symptoms of concern, and when and how to contact the local health department (LHD) if symptoms develop, including after hours and on weekends; and contact the exposed worker at the end of their monitoring period to confirm no symptoms developed. LHDs may choose to implement more frequent contact with the exposed workers.
- Active monitoring: Contact each exposed person for assessment of symptoms at least once daily until 10 days after their last known exposure, or at a frequency recommended by CDC and/or CDPH. The initial contact at the beginning of their monitoring period should inform them of what to expect during the monitoring process, symptoms of concern, and when and how to contact the LHD if symptoms develop, including after hours and on weekends.
- Close contacts of persons with a probable or confirmed avian influenza virus should be monitored daily through 10 days after the last known exposure to a confirmed or probable novel influenza case.



AVIAN FLU QUICKSHEET

SPECIMEN COLLECTION & RECOMMENDATIONS

SPECIMEN COLLECTION AND TESTING

Polymerase chain reaction (PCR) testing is available at some local public health laboratories, the Viral and Rickettsial Disease Laboratory (VRDL) at KDPH, and CDC. Laboratories should NOT attempt to perform viral culture on specimens from patients with suspected or laboratory-confirmed novel influenza infection.

To increase the likelihood of detecting a novel influenza A infection, specimens for viral testing should be obtained as soon as possible after illness onset, ideally within 7 days of illness onset; however, specimens should be tested for novel influenza A virus even if obtained after 7 days from illness onset. Preferred respiratory specimens include:

- Upper respiratory tract clinical specimens, including a nasopharyngeal swab (NPS), throat swabs (TS), nasal swabs (NS), nasal aspirates (NA), nasal washes (NW) and dual nasopharyngeal/throat swabs (NPS/TS). Use only Dacron-tipped swabs in a standard container with 2-3 ml of viral transport media (VTM). Cotton or calcium alginate swabs are not acceptable for PCR testing; do not use wooden shaft swabs.
- Patients with severe respiratory disease also should have lower respiratory tract specimens collected including an endotracheal aspirate (EA), bronchoalveolar lavage (BAL), or sputum.
- For severely ill persons, multiple respiratory tract specimens from different sites should be obtained to increase the potential for HPAI A(H5N1) virus detection.

ISOLATION (NON-HOSPITALIZED):

Persons who are suspected or confirmed to be infected with a novel or avian influenza A virus should be instructed to:

- Isolate at home in a single room with a closed door.
- Have a single designated caregiver who is wearing a well-fitted facemask (ideally an N95 respirator), eye protection, gloves, and clothes that cover exposed skin that are removed and laundered after providing care.
- Wear a facemask when the caregiver is in the room.
- Isolate until novel or avian influenza has been ruled out or, if a confirmed case of novel or avian influenza, until symptoms are improving (afebrile for at least 24 hours) and are no longer determined to pose an infectious risk based on consultation with KDPH.

For persons who are hospitalized (or in another healthcare setting) with illness due to suspected or laboratory-confirmed infection with a novel or avian influenza A virus, refer to the “Recommendations for Infection Control” section below.

RECOMMENDATIONS FOR INFECTION CONTROL

Standard, contact, and airborne precautions are required for patients presenting for medical care or evaluation who have illness consistent with influenza and recent exposure to potentially infected birds. For additional guidance on infection control precautions for patients who might be infected with novel or avian influenza virus, please refer to [guidance for infections with novel influenza A viruses associated with severe disease](#).



AVIAN FLU QUICKSHEET

TREATMENT

RECOMMENDATIONS FOR INFLUENZA ANTIVIRAL TREATMENT

- **Treating Symptomatic Persons with Bird Exposure:** Persons with potential exposure to avian influenza who develop signs and symptoms compatible with influenza should receive empiric initiation of influenza antiviral treatment with a neuraminidase inhibitor, oseltamivir or zanamivir, or the cap-dependent endonuclease inhibitor, baloxavir, as soon as possible. Clinical benefit is greatest when antiviral treatment is administered early, especially within 48 hours of illness onset. If a person suspected to have avian influenza is referred to a medical setting, the medical setting should be alerted ahead of time so appropriate infection control measures can be taken.
- **Hospitalized patients** who are confirmed, probable, or suspected cases of human infection with a novel or avian influenza virus, regardless of time since illness onset, are recommended to initiate antiviral treatment with oral or enterically administered oseltamivir as soon as possible. Antiviral treatment should not be delayed while waiting for laboratory testing results.
- **For detailed guidance on dosing and treatment duration**, please see [Interim Guidance on the Use of Antiviral Medications for Treatment of Human Infections with Novel Influenza A Viruses Associated with Severe Human Disease | Avian Influenza \(Flu\). \(cdc.gov\)](#).

RECOMMENDATIONS FOR INFLUENZA ANTIVIRAL CHEMOPROPHYLAXIS

- **Chemoprophylaxis:** Chemoprophylaxis with influenza antiviral medications can be considered for any person exposed to avian influenza. Decisions to initiate post-exposure antiviral chemoprophylaxis should be based on clinical judgment, with consideration given to the type of exposure, duration of exposure, time since exposure, known infection status of the birds the person was exposed to, and whether the exposed person is at higher risk for complications from seasonal influenza. Chemoprophylaxis is not routinely recommended for personnel who used proper PPE while handling sick or potentially infected birds or decontaminating infected environments (including animal disposal).
- **If antiviral chemoprophylaxis is initiated, treatment dosing for the neuraminidase inhibitors oseltamivir or zanamivir (one dose twice daily) is recommended instead of the typical antiviral chemoprophylaxis regimen.** For specific dosage recommendations for treatment by age group, please see [Influenza Antiviral Medications: Summary for Clinicians](#). Physicians should consult the manufacturer's package insert for dosing, limitations of populations studied, contraindications, and adverse effects. If exposure was time-limited and not ongoing, five days of medication (one dose twice daily) from the last known exposure is recommended.
- **Post-exposure prophylaxis of close contacts** of a person with novel or avian influenza virus infection is recommended with oseltamivir twice daily (treatment dosing) instead of the once daily pre-exposure prophylaxis dosing. For detailed guidance, please see [Interim Guidance on Follow-up of Close Contacts of Persons Infected with Novel Influenza A Viruses and Use of Antiviral Medications for Chemoprophylaxis](#).

