

For Clinicians: Evaluating and Managing Patients Exposed to Birds Infected with Avian Influenza Viruses of Public Health Concern

This document summarizes important clinical information related to avian influenza viruses of public health concern and CDC’s recommendations for patient evaluation, treatment, and testing.

Background

Avian influenza viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry and other bird and animal species. Outbreaks of avian influenza happen in birds (including domestic poultry) from time to time. Some of these avian influenza viruses are more lethal to poultry (highly pathogenic), while others cause no illness or only mild illness in poultry. Some avian influenza (AI) viruses have caused rare, sporadic infections in people. These viruses have resulted in human illness ranging from mild to severe. These AI viruses are of public health concern because they can cause infection resulting in illness in people and also because of their pandemic potential. People who are exposed to birds infected with AI viruses or associated contaminated environments may become infected with these viruses. In particular, people involved in poultry outbreak response activities and others with exposures to infected birds or contaminated surfaces may be at risk of AI virus infection. CDC recommends that people with these exposures monitor their health for any signs and symptoms for 10 days after their exposure and to call their health department if they develop illness. Health departments may ask responders to seek care and/or testing for influenza A virus infection, including specific testing for avian influenza viruses.

Summary Recommendations

	AI-compatible signs/symptoms present (recommended actions)	NO AI-compatible signs/symptoms (recommended actions)
Patients recently exposed to AI virus-infected birds or contaminated surfaces	<ol style="list-style-type: none"> 1. Isolate patient and follow infection control recommendations below. 2. Initiate antiviral treatment. 3. Notify state/local health department. 	<ol style="list-style-type: none"> 1. Follow standard health care facility infection control practices/protocols. 2. Investigate other potential causes of the patient’s signs and symptoms. 3. Contact state/local health department with any questions or concerns.

Signs/Symptoms of AI virus infection in humans may include uncomplicated upper respiratory tract signs and symptoms also referred to as 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) difficulty breathing. Also possible but less common are diarrhea, nausea, vomiting, and seizures. It is important to remember that infection with influenza viruses, including AI viruses, does not always cause fever. Fever may not occur in infected persons of any age, including those younger than 5 years of age, 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 avian influenza virus infection. For more information on signs and symptoms, please visit [HPAI A H5 Virus Background and Clinical Illness](#).

Infection prevention and control recommendations: Standard Precautions, plus Contact and Airborne Precautions are recommended when evaluating patients for infection with AI 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. These recommendations are consistent with existing infection control guidance for care of patients who may be infected with a novel influenza A virus associated with severe disease. For more information on recommended infection prevention and control measures, please visit [Infection Control Within Healthcare Settings for Patients with Novel Influenza A Viruses](#).

Laboratory testing recommendations: If signs or symptoms consistent with infection with AI virus are present in a patient with recent exposure to infected birds or contaminated environments, respiratory specimens should be collected for molecular testing (RT-PCR) for influenza viruses, including influenza A virus sub-type specific testing for the associated AI outbreak. For outpatients, upper respiratory tract specimens should be collected. Patients who are severely ill should have both upper and lower respiratory tract specimens collected. For information on specimen collection, infection control when collecting specimens and diagnostic testing, please visit [Specimen Collection and Testing for Patients with Novel Influenza A Viruses with Potential to Cause Severe Disease in Humans](#). Rapid influenza diagnostic tests are not a reliable indicator of AI virus infection and the results should not be used to guide infection control or antiviral treatment decisions.

Treatment recommendations: Initiation of antiviral treatment with a neuraminidase inhibitor is recommended as early as possible for any patient with suspected or confirmed infection with an AI virus. This includes patients who are [confirmed cases, probable cases, or cases under investigation](#), even if more than 48 hours has elapsed since illness onset and regardless of illness severity. Treatment with oral or enterically administered oseltamivir is recommended.

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 testing. For patients who are not hospitalized, if molecular testing is negative for avian influenza virus and other influenza viruses, neuraminidase inhibitor treatment can be discontinued. For more information on treatment recommendations, please visit [Use of Antiviral Medications for Treatment of Human Infections with Novel Influenza A Viruses](#).

More information on CDC's web site:

[Avian Influenza Guidance](#)

* [Overview of H5 Viruses in the United States](#)

* [Information about avian influenza H7N8 viruses in the United States](#)