

## Testing, treatment and infection control recommendations for providers managing patients with confirmed or suspected avian influenza

The U.S. Department of Agriculture (USDA) reported highly pathogenic avian influenza (HPAI) detected in a wild bird in North Dakota. This is the first detection of HPAI (H5 virus) in the state in 2022. This [virus has been spreading](#) in wild birds and domestic poultry in the U.S. Recent detections of highly pathogenic avian influenza A (H5N1 viruses) (“H5N1 bird flu”) in U.S. wild birds and poultry pose a low risk to the health of the general public; however, rare human infections are possible. Human infections can occur in people with job-related or recreational exposures involving contact with infected birds or contaminated environments.

### Recommendations for Testing

Patients with **new-onset of influenza-like illness or acute respiratory infection that have had recent exposure**<sup>1</sup> (within 10 days of illness onset) with confirmed or potentially-infected (i.e., sick or dead birds) birds<sup>2</sup> or their environment should be tested for avian influenza. Clinicians should consider a range of signs and symptoms when evaluating individuals with exposure. Signs and symptoms can include:

- Fever
- Feeling feverish
- Chills
- Cough
- Sore throat
- Runny nose
- Stuffy nose
- Eye tearing, redness, irritation
- Sneezing
- Difficulty breathing
- Shortness of breath
- Fatigue
- Muscle or body aches
- Headaches
- Nausea
- Vomiting
- Diarrhea
- Seizures
- Rash

Commercially available influenza diagnostic tests may not detect avian influenza, therefore **testing needs to be coordinated with the North Dakota Department of Health** (NDDoH). The NDDoH will coordinate with clinicians to provide testing of symptomatic individuals being monitored by the NDDoH due to an exposure with providers. However, since individuals may present on their own, clinicians will need to recognize and initiate the

report of suspect case(s) to the NDDoH, by **immediately calling 800-472-2180 or 701-220-0819** (after hours). Patients with a positive influenza A result and negative H1 and H3 on a commercially available molecular panel must also be reported immediately to the NDDoH.

Specimens should be collected as soon as possible following illness onset and placed in 1-3 ml of viral transport media refrigerated within 3 days of collection. The following specimen sources are acceptable:

- Nasopharyngeal swab, nasal aspirate or wash, nasal swab, or throat swab.
- If the patient has lower respiratory tract illness, a lower respiratory tract specimen (e.g., bronchoalveolar lavage fluid, bronchial aspirates, bronchial washes, endotracheal aspirates, endotracheal washes, tracheal aspirates, and lung tissue) are acceptable. Place the sample into viral transport medium. Screw the cap on tightly.

The NDDoH specimen submission form should include all required patient information. The test order should include both influenza PCR and respiratory panel PCR. Additional questions regarding laboratory testing can be directed to 701-328-6272.

### **Recommendations for Infection Control**

For patients presenting for medical care or evaluation who have illness consistent with influenza-like illness or acute respiratory infection and recent exposure to potentially-infected birds, **standard, contact, and airborne precautions are recommended**. For additional guidance on infection control precautions for patients who may be infected with avian influenza, please refer to guidance for infections with novel influenza A viruses associated with severe disease found at [www.cdc.gov/flu/avianflu/novel-flu-infection-control.htm](http://www.cdc.gov/flu/avianflu/novel-flu-infection-control.htm).

### **Recommendations for Antiviral Treatment and Chemoprophylaxis**

Treatment of patients meeting exposure criteria who develop symptoms compatible with influenza-like illness or acute respiratory infection should be evaluated for empiric initiation of influenza antiviral treatment with a neuraminidase inhibitor as soon as possible. Clinical benefit is greatest when antiviral treatment is administered early, especially within 48 hours of illness onset. **Antiviral treatment should not be delayed while waiting for laboratory testing results**. For detailed guidance, please see [Interim Guidance of the Use of Antiviral Medications for the Treatment of Human Infection with Novel Influenza A Viruses Associated with Severe Human Disease](#).

Chemoprophylaxis is **not routinely recommended** for patients meeting exposure criteria while involved in depopulation, disposal, or cleaning and disinfection activities. Decisions to initiate antiviral **chemoprophylaxis should be based on clinical judgment** with

consideration given to the type of exposure and if the exposed patient is at high risk for complications from influenza (e.g., immunocompromised). At this time, there have not been any associated H5 human infections identified in the U.S. There have been detections of seasonal influenza in some symptomatic exposed individuals, illustrating the importance of routine seasonal influenza vaccination.

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 (once daily). If exposure was time-limited and not ongoing, five days of medication (one dose twice daily) from the last known exposure is recommended. For more information see [CDC's Interim Guidance on Influenza Antiviral Chemoprophylaxis](#) of persons exposed to birds with avian influenza A viruses associated with severe human disease or with the potential to cause severe human disease. For specific dosage recommendations for treatment by age group, please see [Influenza Antiviral Medications: Summary for Clinicians](#).

More information about avian influenza for clinicians and laboratories can be found at [www.cdc.gov/flu/avianflu/healthprofessionals.htm](http://www.cdc.gov/flu/avianflu/healthprofessionals.htm) or by calling the NDDoH at 800-472-2180 or 701-328-2378.

## References

<sup>1</sup>Exposure, especially unprotected exposure (e.g., without use of respiratory protection and eye protection) may include: direct contact with birds (e.g., handling, slaughtering, defeathering, butchering, preparation for consumption); or direct contact with surfaces contaminated with feces or bird parts (carcasses, internal organs, etc.); or prolonged close exposure to birds.

<sup>2</sup>Bird exposure includes the following categories:

- a) Domestic poultry (e.g., sick or dead chickens or turkeys)
- b) Captive birds of prey (e.g., sick, dead, or well-appearing falcons that have had contact with wild aquatic birds)
- c) Wild aquatic birds (e.g., sick, dead, or well-appearing ducks, geese, swans).

---

### Categories of Health Alert Network messages:

**Health Alert** Requires immediate action or attention; highest level of importance

**Health Advisory** May not require immediate action; provides important information for a specific incident or situation

**Health Update** Unlikely to require immediate action; provides updated information regarding an incident or situation

**HAN Info Service** Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations##

