

High pathogenic A H5N2 avian influenza has been identified in commercial birds in North Dakota. Avian influenza does not move readily from birds to people, and the identification of cases of novel influenza related to the infected birds is not likely. However, the North Dakota Department of Health (NDDoH) would like to provide the following guidance to clinicians who may see exposed individuals in their facility, or who may receive questions from patients about potential avian influenza exposures.

### **Recommendations for treatment of exposed individuals:**

Definition of and individual potentially exposed to avian influenza: A person who in the last 10 days has:

- Had direct contact with sick or dead birds (or their droppings), or
- Was in an enclosed space with sick or dead birds.

Exposures will most likely occur in people with contact with birds related to an outbreak avian influenza. The personal contacts of exposed individuals are not considered exposed. Treatment or testing is not recommended for these individuals.

**Chemoprophylaxis:** Chemoprophylaxis with influenza antivirals can be administered to anyone that meets the exposure definition. Physicians should enquire into the degree of the exposure (prolonged, brief) and any factors such as age, pregnancy, and/or immunocompromised status that may put someone at special risk for developing complications of influenza.

The dosing recommendation for chemoprophylactic treatment with influenza antivirals is different for a potential avian influenza exposure than for seasonal influenza. When administering chemoprophylaxis to exposed individuals, the dosage for treatment—not chemoprophylaxis—as designated in the package insert should be followed. For Tamiflu, this will mean two daily doses for adults, not one as typically prescribed for influenza chemoprophylaxis, should be administered.

**Novel Influenza testing:** All exposed individuals that begin to exhibit influenza-like illness (ILI) symptoms (fever, cough, sore throat, shortness of breath etc.) within 10 days of their most recent exposure should be tested for avian influenza. If an exposed person has developed symptoms of ILI the North Dakota Department of Health (NDDoH) should be notified immediately at 701.328.2378 (8 am to 5 pm Monday through Friday) or after work hours at 701.220.0819.

Commercial tests created to identify seasonal influenza (including RT-PCR) have not demonstrated the ability to detect novel strains, such as influenza A H5. Specific testing at the public health lab must be completed. The following should be collected **as soon as possible after illness onset:**

- Nasopharyngeal swab, or

- A nasal aspirate wash, or
- Two swabs combined into one viral transport media (VTM) vial, such as a nasal swab combined with an oropharyngeal swab.

If these cannot be collected, a single nasal or oropharyngeal swab may be acceptable. If the patient presents with lower respiratory tract illness an endotracheal aspirate or bronchoalveolar lavage fluid specimen may be preferred. Swab specimens should be collected using swabs with a synthetic tip (swabs with cotton tips and wooden shafts are not recommended), placed in VTM, and held at refrigerator temperatures through arrival at the public health lab.

Clinicians may also consider testing for other pathogens that can cause acute, febrile illness because novel influenza A infections, even in exposed individuals, is rare.

**Infection control:** Standard, contact and airborne precautions should be followed when managing patients presenting with possible infection of novel influenza. This includes during the collection of specimens for testing. Extensive information on infection control practices recommended when caring for confirmed, probable or suspect cases of novel influenza can be found at: <http://www.cdc.gov/flu/avianflu/h7n9-infection-control.htm>.

**Recommendations for treatment of individuals presenting with influenza-like illness with unknown exposure:**

Given that seasonal influenza activity is still ongoing, it is likely that clinicians will see people presenting with ILI symptoms. The North Dakota Department of Health asks clinicians to ask patients presenting with typical influenza-like illness (fever, cough, sore throat) if they have had contact with any dead or sick birds in the previous ten days. Individuals with ILI should be considered potentially exposed to avian influenza if they have had contact with the following types of sick or dead birds in the ten days prior to illness onset:

- Domestic poultry (e.g., chickens, turkeys, ducks)
- Wild aquatic birds (e.g., ducks, geese, swans)
- Captive birds of prey (e.g., falcons)

Patients ill with ILI who have had contact with one of these types of birds should be treated as exposed individuals using the guidelines above.

For any questions, or to notify the division of disease control of a possible case of novel influenza, call 701.328.2378 (8 am to 5 pm Monday through Friday) or after work hours at 701.220.0819.

