September 26, 2016 (2 pages – Replaces version posted August 31, 2015)

To:        North Carolina Health Care Providers  
From:   Zack Moore, MD, MPH, Medical Epidemiologist  
Re:    Management of People Exposed to Highly Pathogenic Avian Influenza

The purpose of this memo is to provide guidance regarding monitoring and management of people who are exposed to birds infected with the highly-pathogenic avian influenza A H5 viruses recently identified in the United States. Highly-pathogenic avian influenza (HPAI) A H5 viruses were first identified in birds in the United States in December 2014 and have infected wild birds and poultry in multiple states since that time. No human infections with these viruses have been detected. However, similar avian influenza viruses have infected people in other countries. Some of these human infections have been severe or even fatal. Additional information is located at http://www.cdc.gov/flu/avianflu/h5

Monitoring of Exposed Persons

Although the risk of human infection with these newly-identified HPAI H5 viruses is low, the Centers for Disease Control and Prevention (CDC) recommends that all people exposed to HPAI H5-infected birds should be monitored for signs and symptoms consistent with influenza beginning after their first exposure and for 10 days after their last exposure. Monitoring will be carried out in coordination with state and local public health officials.

Antiviral Chemoprophylaxis

Decisions to initiate antiviral chemoprophylaxis should be based on clinical judgment, with consideration given to the type of exposure and to whether the exposed person is at high risk for complications from influenza. Chemoprophylaxis is not routinely recommended for personnel involved in handling sick birds or decontaminating affected environments who consistently used proper personal protective equipment. 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).

Management of Illness after Exposure

Clinicians caring for patients who develop fever or signs or symptoms of respiratory illness within 10 days after their last exposure to HPAI should immediately contact their local health department or the state Communicable Disease Branch (919-733-3419; available 24/7) to discuss control measures, testing and treatment. Key recommendations are summarized below.

**Infection Prevention:** Standard, contact, and airborne precautions are recommended for patient management; this includes collection of respiratory specimens.

**Laboratory Testing:** Specimens should be obtained for novel influenza A virus testing as soon as possible after illness onset, ideally within 7 days of illness onset. Testing for novel influenza is available at the North Carolina State Laboratory of Public Health and requires consultation and pre-approval from the state Communicable Disease Branch. Specimen submission forms, including information about specimen transport and submission, are available at http://slph.state.nc.us/Forms/3431-Virology-20160818.pdf. Tests for seasonal influenza (including rapid tests) should not be used to rule out HPAI infection.

**Antiviral Treatment:** Empiric treatment with a neuraminidase inhibitor antiviral drug (oral oseltamivir, inhaled zanamivir, or IV peramivir) should be administered immediately according to current guidelines. Antiviral treatment should not be withheld or delayed pending collection of specimens or laboratory testing.