

Key Messages for Health Care Providers Regarding Avian Influenza(H7N9) Virus Infections, June 14, 2013

On April 1, 2013, the World Health Organization (WHO) first reported 3 human infections with a new avian influenza A (H7N9) virus in China. Since then, additional cases have been <u>reported</u> Most reported cases have severe respiratory illness and some have died. The new H7N9 virus has not been detected in people or birds in the United States.

Washington State Influenza Reporting Requirements

Health care providers and hospitals are required to immediately report suspected human infections with avian influenza A (H7N9) virus to the <u>local health jurisdiction</u> where the patient resides. This includes patients who meet both the clinical and exposure criteria described below:

- Clinical criteria: Patients with new-onset severe acute respiratory infection <u>requiring</u> <u>hospitalization</u> AND for whom no alternative infectious etiology is identified.
- Exposure criteria:
 - Recent travel (within 10 days of illness onset) to areas where human cases of H7N9 have become infected or where avian influenza A (H7N9) viruses are circulating in animals*; OR
 - Recent close contact (within 10 days of illness onset) with confirmed human H7N9 cases. Close contact includes coming within about 6 feet of a confirmed case while the case was ill (beginning 1 day prior to illness onset and through resolution of illness). Includes healthcare personnel caring for, and family members of, a confirmed case, persons who lived/stayed overnight with a confirmed case and others with similar close contact.

^{*}As of June 3, 2013, China was the only country where H7N9 viruses were known to be circulating in animals or where human cases have become infected.

Laboratories are required to immediately report lab-confirmed infections due to an unsubtypeable or novel (new or emerging non-seasonal) influenza virus to the <u>local health</u> jurisdiction where the patient resides.

Diagnostic Testing

- Patients meeting the above criteria should be considered for influenza A (H7N9) virus testing by reverse-transcription polymerase chain reaction (RT-PCR) methods.
- Testing for influenza A (H7N9) virus infection can be performed at the Washington State Public Health Laboratories (WA PHL). WA PHL uses CDC-developed RT-PCR assays to detect this novel virus.
- Using appropriate infection control precautions (see below), healthcare providers should obtain a nasopharyngeal swab or aspirate from patients meeting the above criteria, place

the swab or aspirate in viral transport medium, and contact their <u>local health jurisdiction</u> to request testing at WA PHL. Additional instructions for collecting and submitting specimens to WA PHL are available at:

http://www.doh.wa.gov/Portals/1/Documents/5100/speccollecttrans.pdf

• Commercially available rapid influenza diagnostic tests (RIDTs) may not detect avian or variant influenza A viruses in respiratory specimens. Therefore, a negative rapid influenza diagnostic test result does not exclude infection with influenza viruses.

Infection Control In Healthcare Settings (<u>Interim Guidance for Infection Control Within</u> <u>Healthcare Settings When Caring for Patients with Confirmed, Probable, or Cases Under</u> <u>Investigation of Avian Influenza A(H7N9) Virus Infection</u>)

- A higher level of infection control measures is recommended for suspected cases of influenza A (H7N9) influenza than for seasonal influenza.
- Healthcare facilities should immediately implement airborne, contact and standard precautions with eye protection for <u>confirmed</u>, <u>probable</u>, <u>and H7N9 cases under</u> <u>investigation</u>. Healthcare personnel caring for these patients should wear gloves, gowns, eye protection and an N95 or higher respirator for all patient care activities.
- Healthcare providers should perform hand hygiene before and after all patient contact, contact with potentially infectious material, and before putting on and upon removal of personal protective equipment, including gloves.

Symptoms of Influenza A H7N9 (H7N9: Frequently Asked Questions)

- Symptoms of influenza A (H7N9) virus influenza have started with high fever and cough. Many of the reported cases have progressed to serious illness including severe pneumonia, acute respiratory distress syndrome (ARDS), septic shock, and multi-organ failure leading to death.
- A small minority of reported cases have had mild illness.

Use of Antiviral Medications for H7N9 Influenza (<u>Interim Guidance on the Use of Antiviral</u> <u>Agents for Treatment of Human Infections with Avian Influenza A (H7N9)</u>

- Because of the potential severity of illness associated with H7N9 virus infection, it is recommended that all <u>confirmed cases</u>, <u>probable cases</u>, <u>and H7N9 cases under investigation</u> receive antiviral treatment with a neuraminidase inhibitor as early as possible.
- Treatment should be initiated even if it is more than 48 hours after onset of illness.
- Laboratory testing and initiation of antiviral treatment should occur simultaneously; treatment should not be delayed for laboratory confirmation of influenza or H7N9 infection.

- For hospitalized patients and patients with severe or complicated illness, treatment with oral <u>oseltamivir</u> (and not inhaled zanamivir) is recommended because of the lack of data for inhaled zanamivir in patients with severe influenza illness.
- Recommended duration of treatment for uncomplicated illness is 5 days.
- The optimal duration and dose of therapy are uncertain in severe or complicated influenza. Pending further data, longer courses of treatment (e.g., 10 days of treatment) should be considered for severely ill hospitalized H7N9 patients.
- Clinical judgment and virologic testing of lower respiratory tract specimens by rRT-PCR should guide decisions to consider treatment regimens longer than 5 days for patients with severe and prolonged illness. Longer treatment regimens might be necessary in immunosuppressed persons who may have prolonged viral replication and also are at risk of developing antiviral-resistant virus.

Vaccination

• There is currently no vaccine available to protect against avian influenza A (H7N9) virus. However, CDC is developing an H7N9 vaccine candidate virus that could be used to make a vaccine in the event that it is needed.