

For Health Professionals

Health Alerts

Health Alert Advisory #126 - Update On Avian Influenza A (H5N1) - February 7, 2005

Identification of possible imported cases of avian influenza A (H5N1) in the U.S. clinical setting depends on health-care providers consistently obtaining information on recent international travel and other potential exposures from persons who have certain respiratory symptoms.

Current Situation

Outbreaks of avian influenza A (H5N1) among poultry are ongoing in several countries in Asia, including Thailand (5 cases, 4 deaths), Vietnam (13 cases, 12 deaths), and Cambodia (1 case, 1 death). Reports of sporadically occurring human cases of influenza A (H5N1) continued through January 2005.

As of February 4, 2005, the cumulative number of confirmed human cases of influenza A (H5N1) reported in Asia since January 28, 2004, is 55 cases (with 42 deaths), according to WHO. This total includes the case from Cambodia. The avian influenza A (H5N1) epizootic in Asia poses an important public health threat, and CDC is in communication with WHO and will continue to monitor the situation. The epizootic in Asia is not expected to diminish substantially in the short term, and it is likely that influenza A (H5N1) infection among birds has become endemic to the region and that human infections will continue to occur. So far, no sustained human-to-human transmission of the influenza A (H5N1) virus has been identified, and no influenza A (H5N1) viruses containing both human and avian influenza virus genes, indicative of gene re-assortment, have been detected.

Travel Health Precaution

It is expected that the number of people traveling between the United States and certain parts of Asia will increase around the Lunar New Year, which occurs on February 9 this year. Chinese, Vietnamese, Cambodian, and Korean people celebrate the start of the lunar calendar year. Lunar New Year celebrations last for approximately 15 days in China, 3 days in Vietnam, and typically only 1 day in Cambodia and Korea. On January 26, 2005, CDC issued a Travel Health Precaution notice about avian influenza A (H5N1). This notice is directed at travelers who may be returning from Vietnam to visit family and friends, especially during the upcoming holiday, and who may be at greater risk for exposure to poultry through food preparation or at farms and bird markets where infected poultry may not be readily detected. The notice outlines specific measures for travelers to take before, during, and after travel to Vietnam. CDC has not recommended that the general public avoid travel to any countries affected by influenza A (H5N1).

Enhanced U.S. Surveillance, Diagnostic Evaluation, and Infection Control Precautions for Avian Influenza A (H5N1)

CDC recommends that state and local health departments, hospitals, and clinicians maintain the following enhanced surveillance efforts:

1. Testing for avian influenza A (H5N1) is indicated for hospitalized patients with:

- Radiographically confirmed pneumonia, acute respiratory distress syndrome (ARDS), or other severe respiratory illness for which an alternate diagnosis has not been established, AND
- History of travel within 10 days of symptom onset to a country with documented H5N1 avian influenza in poultry and/or humans (for a regularly updated listing of H5N1-affected countries, see the OIE website and the WHO website).

2. Testing for avian influenza A (H5N1) should be considered on a case-by case basis in consultation with state and local health departments for hospitalized or ambulatory patients with:

- Documented temperature of $>38^{\circ}\text{C}$ ($>100.4^{\circ}\text{F}$), AND
- One or more of the following: cough, sore throat, shortness of breath, AND
- History of contact with poultry (e.g., visited a poultry farm, a household raising poultry, or a bird market) or a known or suspected human case of influenza A (H5N1) in an H5N1-affected country within 10 days of symptom onset.

Laboratory Testing Procedures:

1. Virus Culture -

Highly pathogenic avian influenza A (H5N1) is classified as a select agent, and culturing of clinical specimens for influenza A (H5N1) virus must be conducted under laboratory conditions that meet the requirements for Biosafety Level (BSL) 3 with enhancements. These enhancements include controlled access double-door entry with change room and shower, use of respirators, decontamination of all wastes, and showering out of all personnel. Laboratories working on these viruses must be certified by the U.S. Department of Agriculture. CDC recommends that virus isolation studies be conducted on respiratory specimens from patients who meet the above criteria only if requirements for BSL 3 with enhancements can be met.

2. Polymerase Chain Reaction (PCR) and Commercial Antigen Testing -

Clinical specimens from suspect influenza A (H5N1) cases may be tested by PCR assays under standard BSL 2 conditions in a Class II biological safety cabinet. In addition, commercial antigen detection testing can be conducted under standard BSL 2 conditions used to test for influenza.

3. Specimens That Should Be Sent to CDC -

Specimens from persons meeting the above clinical and epidemiologic criteria should be sent to CDC if:

- The specimen tests positive for influenza A virus by PCR or by antigen detection testing, OR
- PCR assays for influenza are not available at the state public health laboratory.

CDC also will accept specimens from persons meeting the above clinical criteria even if they test negative by influenza rapid diagnostic testing if PCR assays are not available at the state laboratory. This is because the sensitivity of commercially available rapid diagnostic tests for influenza may not always be optimal.

Requests for testing must be coordinated through the state and local health departments (716) 858-7697

Interim Recommendations: Infection Control Precautions for Influenza A (H5N1)

All patients who present to a health-care setting with fever and respiratory symptoms should be managed according to recommendations for Respiratory Hygiene and Cough Etiquette and questioned regarding their recent travel history. Isolation precautions identical to those recommended for SARS should be implemented for all hospitalized patients diagnosed with or under evaluation for influenza A (H5N1) as follows:

- Standard Precautions - pay careful attention to hand hygiene before and after all patient contact
- Contact Precautions - use gloves and gown for all patient contact
- Eye protection - wear when within 3 feet of the patient
- Airborne Precautions
 - Place the patient in an airborne isolation room (i.e., monitored negative air pressure in relation to the surrounding areas with 6 to 12 air changes per hour).
 - Use a fit-tested respirator, at least as protective as a NIOSH-approved N-95 filtering face piece respirator, when entering the room.

For additional information regarding these and other health-care isolation precautions, see the Guidelines for Isolation Precautions in Hospitals:

<http://www.cdc.gov/flu/avian/professional/infect-control.htm>

These precautions should be continued for 14 days after onset of symptoms until an alternative diagnosis is established or until diagnostic test results indicate that the patient is not infected with influenza A virus (see Laboratory Testing Procedures above).

Patients managed as outpatients or hospitalized patients discharged before 14 days should be isolated in the home setting on the basis of principles outlined for the home isolation of SARS patients (see <http://www.cdc.gov/ncidod/sars/guidance/i/pdf/i.pdf>).

Additional Avian Influenza A (H5N1) Information

- For general information about avian influenza see: <http://www.cdc.gov/flu/avian/>

- For information about reported outbreaks of avian influenza A (H5N1) among poultry, see the website of the World Organization of Animal Health (OIE):
<http://www.paho.org/english/AD/DPC/CD/eid-eer-04-mar-2004.htm>
- For information about human influenza A (H5N1) cases, see the WHO website:
http://www.who.int/csr/don/2005_02_02/en/
- For clinical information about human influenza A (H5N1) cases, see:
 - CDC. Cases of influenza A (H5N1) - Thailand, 2004. MMWR 2004;53:100-103.
 - Hien TT, Liem AT, Dung NT, et al. Avian influenza A (H5N1) in 10 patients in Vietnam. New England Journal of Medicine 2004;350:1179-1188.
- For information about travel and avian H5N1 influenza, see the CDC Travelers' Health website: <http://www.cdc.gov/travel/>
- For general information about influenza, see the CDC Influenza website:
<http://www.cdc.gov/flu/>