

# For Health Professionals

## Health Alerts

### Health Advisory #96 - Avian Influenza A (H5N1) Surveillance - August 20, 2004

Please distribute immediately to the Infection Control Department, Emergency Department, Employee Health Service, Infectious Disease Department, Director of Nursing, Medical Director, Laboratory Service, and all patient care areas.

#### BACKGROUND

On August 12, 2004, the Vietnamese Ministry of Health officially reported to the World Health Organization (WHO) three human deaths from confirmed avian influenza H5 infection. Additional tests are needed to determine whether the virus belongs to the same H5N1 strain that caused 22 cases (15 deaths) in Vietnam and 12 cases (8 deaths) in Thailand earlier this year. Cambodia, China, Indonesia, Japan, Laos, South Korea, Thailand, and Vietnam were previously affected by widespread H5N1 outbreaks in poultry during early 2004. At that time, more than 100 million birds either died from the disease or were culled (killed) in efforts to contain the outbreaks. Human cases (34 in all) were reported only in Thailand and Vietnam. The last case, at that time, officially confirmed and reported to the WHO by Vietnam occurred in February 2004. Beginning in late June 2004, however, new lethal outbreaks of highly pathogenic avian influenza A (H5N1) among poultry were reported to the World Organization for Animal Health (OIE) by China, Indonesia, Thailand, and Vietnam. The deaths reported by Vietnam on August 12 are the first reported human cases associated with this second wave of H5N1 infection among poultry. CDC is in communication with WHO and will continue to monitor the situation.

#### RECOMMENDATIONS

##### 1. Surveillance and Reporting

All patients who present to health care settings with fever and respiratory symptoms should be questioned regarding their recent travel history to a country with documented H5N1 avian influenza in poultry and/or humans, exposure to live poultry while in an H5N1-affected country, and/or exposure to another ill person who traveled to an H5N1-affected country.

At this time, CDC recommends enhanced surveillance efforts by state and local health departments, hospitals, and clinicians to rapidly identify an importation of influenza A (H5N1). As part of these recommendations, the Erie County Department of Health (ECDOH) requests that hospitals and clinicians perform surveillance to identify patients who meet the criteria below and immediately report any potential case of influenza A (H5N1) to the Health Department at (716) 858-7697 (Monday – Friday, 8:30 AM – 4:00 PM) or (716) 898-3696 (evenings, weekends, and holidays).

##### a. Surveillance Criteria for Influenza A (H5N1):

Patients who meet both of the following criteria should be reported to the ECDOH and tested for influenza A (H5N1).

- Hospitalized with unexplained radiographically confirmed pneumonia, acute respiratory distress syndrome (ARDS), or severe respiratory illness, AND
- Travel to a country with documented H5N1 avian influenza in poultry and/or humans (e.g., China, Indonesia, Thailand and Vietnam) within 10 days from onset of symptoms, or contact with an ill person with a history of recent travel to one of these areas.

For a regularly updated listing of H5N1 affected countries, visit the Web site of the World Organization of Animal Health (OIE) at [http://www.oie.int/eng/en\\_index.htm](http://www.oie.int/eng/en_index.htm) and the WHO Web site at <http://www.who.int/en/>.

Hospitalized or ambulatory patients with milder illness meeting the criteria below should be reported to the ECDOH. Testing for influenza A (H5N1) should be considered on a case-by-case basis.

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

#### b. Reporting Requirements:

For patients meeting any of the above surveillance criteria: Immediately report any suspect influenza A (H5N1) cases to the ECDOH at (716) 858-7697 (Monday – Friday, 8:30 AM – 4:00 PM) or (716) 898-3696 (evenings, weekends, and holidays).

## 2. Infection Control Precautions

All patients who present to healthcare settings with respiratory symptoms and fever should immediately be placed on Standard Respiratory Precautions (also referred to by CDC as “respiratory hygiene/cough etiquette”) as outlined in Attachment 1 to help limit the transmission of respiratory pathogens in healthcare settings. A table summarizing the recommended infection control precautions below are available in Attachment 2.

The following isolation precautions should be implemented for all hospitalized patients diagnosed with or under evaluation for influenza A (H5N1) as follows:

#### Standard Precautions:

- Mask and eye protection or face shield should be used during procedures or activities that are likely to generate splashes or sprays of blood, body fluids, secretions or excretions.
- Gloves and gowns should be used to prevent exposure to blood and other potentially infectious fluids.
- 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 three feet of the patient.

Airborne Precautions:

- Place the patient in an airborne infection 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 CDC's Guidelines for Isolation Precautions in Hospitals, <http://www.cdc.gov/ncidod/hip/isolat/isolat.htm>.

These precautions should be continued for 14 days after onset of symptoms or until either an alternative diagnosis is established or diagnostic test results indicate that the patient is not infected with influenza A virus. Patients managed as outpatients or hospitalized patients discharged before 14 days should be isolated in the home setting following the same principles as previously outlined for the home isolation of SARS (described in the NYSDOH Preparedness Guidance Document for SARS, [http://www.health.state.ny.us/nysdoh/sars/preparedness\\_guidance/index.html](http://www.health.state.ny.us/nysdoh/sars/preparedness_guidance/index.html)).

### 3. Diagnostic Laboratory Testing for Influenza A (H5N1):

Upon recommendation by the ECDOH or NYSDOH Regional Epidemiologist to submit specimens for laboratory testing, the healthcare provider should collect specimens for testing as described in Attachment 3. Prior to submitting these specimens to the NYSDOH, the hospital or laboratory should telephone the Wadsworth Center at either of the following numbers to discuss submission of the specimens: (518) 862-4320 or (518) 869-4559.

### 4. Travel Advice and Other Recommendations:

At this time, CDC has issued precautions for travel to countries that are reporting outbreaks of avian influenza A (H5N1) in humans and animals.

The CDC information is located at <http://www.cdc.gov/travel/other/h5n1apr2004.htm>.

CDC does not recommend that the general public avoid travel to any of the countries affected by avian influenza A (H5N1). However, CDC does recommend that travelers to countries experiencing outbreaks of this disease in poultry should avoid areas with live poultry, such as live animal markets and poultry farms. Large amounts of the virus are known to be excreted in the droppings from infected birds.

For further details about the reported cases of influenza A (H5N1), see the WHO Web site [www.who.int/en/](http://www.who.int/en/).

Additional information about influenza is available on the CDC Web site at [www.cdc.gov/flu/](http://www.cdc.gov/flu/)

## AVIAN INFLUENZA A (H5N1) SURVEILLANCE ATTACHMENT 1

### Standard Respiratory Precautions for Healthcare Settings

1. Provide surgical masks to all patients with symptoms of a respiratory illness. Provide instructions on the proper use and disposal of masks.
2. For patients who cannot wear a surgical mask, provide tissues and instructions on when to use them (i.e., when coughing, sneezing, or controlling nasal secretions), how and where to dispose of them, and the importance of hand hygiene after handling this material.
3. Provide hand hygiene materials in waiting room areas, and encourage patients with respiratory symptoms to perform hand hygiene.
4. Designate an area in waiting rooms where patients with respiratory symptoms can be segregated (ideally by at least 3 feet) from other patients who do not have respiratory symptoms.
5. Place patients with respiratory symptoms in a private room or cubicle as soon as possible for further evaluation.
6. Implement use of surgical or procedure masks by healthcare personnel during the evaluation of patients with respiratory symptoms.
7. Consider the installation of Plexiglas barriers at the point of triage or registration to protect healthcare personnel from contact with respiratory droplets.
8. If no barriers are present, instruct registration and triage staff to remain at least 3 feet from unmasked patients and to consider wearing surgical masks during respiratory infection season.
9. Continue to use droplet precautions to manage patients with respiratory symptoms until it is determined that the cause of symptoms is not an infectious agent that requires precautions beyond standard precautions.

## AVIAN INFLUENZA A (H5N1) SURVEILLANCE ATTACHMENT 2

### Infection Control Recommendations

#### Summary Table

## Infection Control Recommendations

### Clinical Presentation/Diagnosis

### Infection Control Precautions

Any respiratory illness

Standard respiratory precautions which includes droplet precautions and other measures as outlined in attachment 1

Suspect Influenza A (H5N1)  
(hospitalized patients)

Add contact and airborne precautions

### Case Definitions:

#### Suspect Influenza A (H5N1)- Severe Illness

- Patients who require hospitalization for radiographically confirmed pneumonia, acute respiratory distress syndrome (ARDS), or other severe respiratory illness without identifiable etiology AND
- Travel within 10 days of symptoms to a country with documented H5N1 avian influenza in poultry and/or humans (e.g., China, Indonesia, Thailand and Vietnam), or close contact with an ill person with a history of recent travel to one of these areas. For a regularly updated listing of H5N1 affected countries, visit the Web site of the World Organization of Animal Health (OIE) at [http://www.oie.int/eng/en\\_index.htm](http://www.oie.int/eng/en_index.htm) and the WHO Web site at <http://www.who.int/en/>.

#### Suspect Influenza A (H5N1)-Milder Illness

Patients who are hospitalized or are ambulatory with milder illness meeting the following criteria:

- Documented temperature of  $>38^{\circ}\text{C}$  ( $>100.4^{\circ}\text{F}$ ), AND
- one or more of the respiratory symptoms: cough, sore throat, shortness of breath, AND
- history of contact with domestic poultry (e.g. visited a live poultry farm, household raising poultry, or bird market) or contact with an ill person who is known or suspected of having influenza A (H5N1) in an H5N1-affected country within 10 days of symptom onset.

## AVIAN INFLUENZA A (H5N1) SURVEILLANCE ATTACHMENT 3

### Diagnostic Laboratory Testing for Influenza A (H5N1)

Collect two specimen sets for submission to the Wadsworth Center for molecular testing. Each specimen set should consist of one nasal swab and one oropharyngeal (throat) swab contained in one sterile vial containing 2 mL of viral transport medium. Collection guidelines:

- Nasal swabs - Insert swab into nostril parallel to the palate and leave in place for a few seconds to absorb secretions. Repeat for second swab.
- Oropharyngeal swabs – Swab both posterior pharynx and tonsillar areas, avoiding the tongue. Repeat for second swab.

- Use only sterile Dacron or rayon swabs with plastic shafts. Do NOT use calcium alginate or wooden shafted swabs.
- Submit a completed Virus Reference and Surveillance Laboratory patient history form with the specimens. The form is also available on the HPN and HIN at: <https://commerce.health.state.ny.us/hpn/hanweb/flu/virusurvrefhistoryform.pdf>
- Obtain a blood specimen from the suspect case and submit the serum, not the blood sample, along with the respiratory samples. In addition to the patient identifier, label the serum tube with the date and time of collection. Serum samples will be stored for serologic testing when appropriate reagents become available.
- If possible, perform a rapid influenza antigen detection test on a separate specimen using standard BSL2 work practices in a Class II biological safety cabinet. Regardless of the result, specimens should still be referred to the Wadsworth Center as described above.
- Viral culture should not be performed on respiratory specimens from patients who meet the surveillance criteria described above. Highly pathogenic avian influenza A (H5N1) must be worked with under Biosafety Level (BSL) 3+ laboratory conditions. This includes 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.
- It is essential that specimens be sent to the Viral Reference and Surveillance Laboratory at the Wadsworth Center as soon as possible after collection. If shipped within two days of collection, ship with cold packs to keep samples at 4°C. Do not use wet ice. If shipment is delayed >2days, then the specimens should be stored frozen at -70°C and shipped on dry ice.
- It is the shipper's responsibility to ensure that appropriate shipping materials are used. Please contact your carrier for shipping and packaging information. Patient specimens must be shipped as "Diagnostic Specimens."
- All specimens must be shipped "Priority Overnight" and received within 24 hours via chosen carrier. Specimens should ONLY be shipped Sunday - Thursday so that appropriate laboratory personnel can be present to accept and accession specimens Monday - Friday.

Address for courier shipping:

Wadsworth Center, NYSDOH  
 Griffin Laboratory  
 Virus Reference and Surveillance Laboratory  
 5668 State Farm Road (Rt. 155) Slingerlands, NY 12159