

Health Update:

Update 2: Swine Influenza

April 28, 2009

This document will be updated as new information becomes available. The current version can always be viewed at <http://www.dhss.mo.gov>

The Missouri Department of Health & Senior Services (DHSS) is now using 4 types of documents to provide important information to medical and public health professionals, and to other interested persons:

Health Alerts convey information of the highest level of importance which warrants immediate action or attention from Missouri health providers, emergency responders, public health agencies, and/or the public.

Health Advisories provide important information for a specific incident or situation, including that impacting neighboring states; may not require immediate action.

Health Guidances contain comprehensive information pertaining to a particular disease or condition, and include recommendations, guidelines, etc. endorsed by DHSS.

Health Updates provide new or updated information on an incident or situation; can also provide information to update a previously sent Health Alert, Health Advisory, or Health Guidance; unlikely to require immediate action.

Health Update
April 28, 2009

**IMPORTANT
SWINE INFLUENZA
INFORMATION – MUST
BE SHARED WITH ALL
MEDICAL STAFF**

**FROM: MARGARET T. DONNELLY
DIRECTOR**

SUBJECT: Update 2: Swine Influenza

This document provides updated information on swine influenza, including revised recommendations for submission of influenza specimens to the Missouri State Public Health Laboratory (MSPHL) from patients who meet specified criteria.

Current information on swine influenza from the Missouri Department of Health and Senior Services (DHSS) is available at:
http://www.dhss.mo.gov/BT_Response/SwineFlu09.html.

At the present time, 64 human cases of laboratory-confirmed swine influenza A (H1N1) virus infection have been identified in the United States. Ten cases have been reported from California, 2 cases from Kansas, 45 cases from New York City, 1 case from Ohio, and 6 cases from Texas. Five of those cases have been hospitalized; no deaths have been reported. Prompted by the growing outbreak, the World Health Organization (WHO) raised the Pandemic Alert Level to Phase 4, and the United States government declared a Public Health Emergency.

No cases have, to date, been reported from Missouri. As enhanced surveillance efforts continue, both in Missouri and nationally, it is anticipated that significantly more cases will be identified.

Human cases of swine influenza A (H1N1) virus infection continue to increase internationally, particularly in Mexico.

DHSS is conducting enhanced surveillance for possible swine influenza cases in humans. As part of this effort, MSPHL is performing polymerase chain reaction (PCR) testing for swine influenza virus on specimens from patients **who meet the following epidemiologic criteria:**

Person with a febrile influenza-like-illness (ILI)

WHO

a) Traveled to Mexico within 7 days preceding their illness

OR

b) Had contact with person with febrile illness who was in Mexico at some time during the 7 days preceding their illness

OR

c) Had contact within the past 7 days with a person who has confirmed swine influenza

OR

d) Lives in, or in the past 7 days has traveled to, the immediate area of a confirmed swine influenza case

Before any specimen is sent to MSPHL for testing, DHSS staff must first be consulted for sample submission by calling 800-392-0272.

If you are one of the DHSS-approved sentinel surveillance providers, consultation with DHSS prior to sending specimens is not required.

Office of the Director
912 Wildwood
P.O. Box 570
Jefferson City, MO 65102
Telephone: (800) 392-0272
Fax: (573) 751-6041
Web site: <http://www.dhss.mo.gov>

In order to enhance surveillance, clinicians in **hospital intensive care units and emergency departments** **should** submit specimens from any of their patients meeting the above-described epidemiologic criteria to MSPHL.

Other medical providers, including those in ambulatory or hospital settings, are encouraged to send specimens from suspect cases who meet the epidemiological criteria to MSPHL.

DHSS continues to urge the existing network of Missouri influenza sentinel surveillance providers to submit specimens to MSPHL from outpatients who meet the definition for influenza-like illness, suspect or confirmed influenza, bacterial pneumonia, or febrile lower respiratory illness.

Commercially available rapid influenza antigen tests have unknown sensitivity and specificity to detect human infection with swine influenza A (H1N1) virus in clinical specimens, and have suboptimal sensitivity to detect seasonal influenza viruses. Therefore, a negative rapid test could be a false negative, and should not be assumed a final diagnostic test for swine influenza infection.

Because the virus is not currently believed to be highly pathogenic, specimen collection protocols are the same as for seasonal influenza. The following should be collected as soon as possible after illness onset: nasopharyngeal swab/aspirate or nasal wash/aspirate. If these specimens cannot be collected, a combined nasal swab with an oropharyngeal swab is acceptable. For patients who are intubated, an endotracheal aspirate should also be collected.

If using a nasopharyngeal swab, use only the supplied Dacron / flocked swab or equivalent. Place it in a refrigerator (not a freezer), and then (following consultation with DHSS as described on the preceding page) send to MSPHL for testing. The Attachment to this Health Update contains detailed instructions for obtaining and submitting seasonal influenza specimens (as well as specimens from persons suspected of being infected with swine influenza virus).

All medical providers should immediately report any observed clusters or outbreaks of febrile influenza-like-illness to the local public health agency (LPHA), or to DHSS at 800-392-0272 (24 hours a day - 7 days a week). All LPHAs are encouraged to perform enhanced, expedited investigations of any such clusters or outbreaks reported in their jurisdictions.

The Centers for Disease Control and Prevention (CDC) has issued a number of guidance documents related to swine influenza, including recommendations on infection control and the use of antiviral medications. These documents are available at <http://www.cdc.gov/swineflu/guidance/>.

Questions should be directed to the LPHA, or to DHSS's Bureau of Communicable Disease Control and Prevention at 573/751-6113, or 866-628-9891.

Attachment
Missouri State Public Health Laboratory
COLLECTION AND SUBMISSION OF SEASONAL INFLUENZA
SPECIMENS

Upon receipt of the virus shipping containers, place freeze pillows in freezer and keep frozen until specimens are packaged. Store TPB in a refrigerator (4-8°C) until ready to use.

COLLECTION OF SPECIMEN

Swab: Use only the supplied Dacron / flocked swab or equivalent. Collect appropriate specimen for Influenza testing. Do not use wood shafted or cotton swabs for specimen collection. Break off swab tip into a vial of transport medium (TPB). Securely fasten the screw cap on the specimen tube. Keep the specimen cold (4-8°C), pending shipment.

Tryptose Phosphate Broth (TPB) is the virus transport media to be used for Influenza testing and is supplied by the Department of Health. Commercially available viral (not bacterial) transport medium may also be used.

NOTE: After a swab is used, place it into the vial of transport medium and break off the swab tip low enough to allow the cap of the media tube to be tightly secured. If the swab is too long for the cap to fit tightly, the media will leak out and we will not be able to test the specimen. **MAKE SURE ALL SPECIMENS ARE LABELED WITH THE PATIENT'S NAME. ANY SPECIMENS RECEIVED WITHOUT PATIENT NAMES WILL BE DISCARDED WITHOUT TESTING.**

For interim guidance see: <http://www.cdc.gov/swineflu/specimencollection.htm>.

Temporary Storage of Specimens for Virus Culture

Specimens should be shipped to the State Laboratory as soon as possible. In order to ensure accuracy, relevance, and validity of testing and reports, specimens that are not received within 7 days of collection will not be tested unless the specimen has been kept at -70° C and shipped on dry ice. During temporary storage, remember that freezing and thawing can be detrimental to virus survival. It is best to keep specimens at refrigerator temperature during temporary storage. At warmer temperatures virus survival is diminished.

PACKING FOR SHIPMENT OF SPECIMENS FOR VIRUS CULTURE

Place refrigerant pillows in Styrofoam box. Pillows must be frozen when box is packed for shipment to maintain specimens at proper temperature. Place specimens in safety container provided in Styrofoam container with freezer pillows. Close lid on Styrofoam box and place completed form on top of Styrofoam box. Place Styrofoam box inside cardboard box and tape shut. **DO NOT USE ICE MADE WITH WATER WHEN SHIPPING SPECIMENS FOR TESTING.**

Shipment of Specimens for Virus Culture Testing

Determine method of shipment (mail or courier) that will get specimens to the Laboratory in the shortest length of time. If possible, select the method of shipment so that the specimens will not arrive in Jefferson City on Saturday, Sunday, or a holiday. **DO NOT SHIP CLINICAL SPECIMENS BY UPS. PLEASE USE THESE KITS FOR SEASONAL INFLUENZA SURVEILLANCE SPECIMENS ONLY.**

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Phone# 573-751-3334
Fax # 573-526-2754

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