

CORRECTION – SWAB TYPE

MLS: Laboratory Update #1

Human Swine Influenza A

April 25, 2009

****Please forward this to all appropriate personnel within your institution****

This is an advisory message from the Minnesota Department of Health (MDH) and the Minnesota Laboratory System (MLS). This message is being sent to MLS laboratory contacts serving Minnesota residents. You are not required to reply to this message.

WHAT LABORATORIANS NEED TO KNOW

Laboratory Safety

BSL-2 facilities, practices, and procedures are recommended when testing potential influenza virus specimens (rapid and/or viral culture) and should be handled entirely in a biological safety cabinet.

[Biosafety in Microbiological and Biomedical Laboratories – 5th Ed.

http://www.cdc.gov/od/ohs/biosfty/bmbl5/BMBL_5th_Edition.pdf]

Specimen Submission

Please Send Positive Influenza A Samples

The following has been edited from previous MLS Alert to clarify instructions for specimen submission: MDH-PHL needs your help to assess the influenza A subtype(s) in our communities. Therefore, when your laboratory obtains a positive rapid influenza A specimen, including PCR (or culture-positive), please send an appropriate sample to MDH-PHL – please see appropriate sample types below.

What sample type to submit to MDH-PHL [CORRECTION]

The previous update stated that “non-dacron” swabs should be used, this is an ERROR, the specimen of choice is a “dacron” or other synthetic swab. We apologized for the confusion.

- Preferred primary specimen is a combination throat/nasopharyngeal swab (dacron/synthetic); other acceptable specimens include: nasopharyngeal swab (dacron/synthetic), or nasal wash or aspirate.
- When influenza A is detected in your laboratory by RAPID TESTING methods, please send an aliquot (1-2 ml) of the original suspension (not exposed to test kit reagents) in viral transport media, viral maintenance media, or sterile diluent; or if an additional original specimen is available, that is preferable.
- When influenza A is detected in your laboratory by VIRAL CULTURE, please send the actively growing viral culture tube with 2 ml of viral maintenance media.

How to submit a specimen to MDH-PHL

- For transport use cold packs to keep specimen $\leq 4^{\circ}$ C
- No lab fee sticker is required
- Write project number "493" on the submission form (upper right-hand corner)
- The MDH Laboratory form can be found at:
<http://www.health.state.mn.us/divs/phl/clin/specimensubmission.pdf>

BACKGROUND

On 4/23/09 an MLS Laboratory Advisory stated, "Consider influenza and obtain specimens for patients with respiratory symptoms who have traveled recently to or had contact with ill persons from San Diego or Imperial Counties, California or San Antonio, Texas". Today, based on information from CDC, MDH

is adding Mexico to this list. Additional clarification, this is for patients whose exposure is within 7 days prior to the onset of illness.

The U.S. Centers for Disease Control and Prevention (CDC) has recently updated the number of cases of swine influenza A (H1N1) to 8 cases. Six cases occurred in southern California and 2 cases in San Antonio, Texas. All 8 cases were identified through routine influenza surveillance. Seven cases had self-limited febrile respiratory illness and were seen on an out-patient basis only. One case was hospitalized, but for other reasons. Three were adults and 5 were children. None had significant exposure to swine. All 8 had viruses with identical genetic sequences that contain a unique combination of gene segments previously not seen in humans or swine in the U.S. The viruses that were tested were found to be resistant to amantadine and rimantadine, and sensitive to oseltamivir and zanamivir.

Clinicians in Minnesota evaluating patients with respiratory symptoms who have traveled recently (< 7 days) to or had contact with ill persons from San Diego or Imperial Counties in California, San Antonio, Texas or Mexico should consider swine influenza in the differential diagnosis and obtain a respiratory specimen for testing at MDH. If you are evaluating a patient with this exposure history and these clinical symptoms, please call MDH at 651-201-5414 or 1-877-676-5414 (corrected phone numbers) for consultation and specimen submission. Staff will be available 24/7.

Increased Surveillance in Hospitalized Patients

MDH is requesting that clinicians obtain respiratory specimens from **all patients hospitalized** with influenza-like illness (ILI) and submit those specimens to MDH-PHL for influenza testing. ILI is defined as a fever ($\geq 100^{\circ}\text{F}$) and cough and/or sore throat in the absence of a known cause other than influenza.

Although seasonal influenza activity in Minnesota has been waning, MDH is requesting that clinicians consider swine influenza and seasonal influenza in the differential diagnosis for any patient hospitalized with ILI, obtain a respiratory specimen and submit that specimen to MDH-PHL for influenza testing. MDH-PHL has the ability to perform RT-PCR for influenza and to subtype influenza A viruses enhancing our ability to identify novel influenza strains. RT-PCR is a non-diagnostic test and used for surveillance purposes only so results will not be available to submitting clinicians. However, viral culture results will be available to clinicians as long as specimen volume to MDH-PHL remains manageable. Please note that MDH will only perform influenza testing and will not perform any additional respiratory testing as part of your clinical evaluation. If you identify any patient hospitalized with ILI please contact MDH at 651-201-5414 or 1-877-676-5414.

INFECTION CONTROL

Infection control recommendations remain unchanged at this time are posted on the CDC website at: <http://www.cdc.gov/flu/swine/recommendations.htm>

Hospitalized patients suspected of having swine influenza should be placed in airborne precautions. Non-hospitalized patients suspected of having swine influenza should be evaluated in a private room and instructed to wear a surgical mask when leaving the room. Healthcare workers must use appropriate PPE when caring for these patients including collecting specimens.

QUESTIONS

If you have questions regarding specimen collection, please call Susan Fuller (Virology Laboratory Unit Leader) at 651-201-5255.

ADDITIONAL INFORMATION

We will continue to update you as information becomes available. Please visit the MLS website at www.health.state.mn.us/mls for continuing updates under "Disease specific information"- "Influenza".

An MMWR is expected to be posted tonight on the CDC website. We recommend that you continue to check the CDC website at: www.cdc.gov/flu/swine/index.htm and the new MDH Swine Influenza site at: www.health.state.mn.us/divs/idepc/diseases/flu/swine/index.html

Thank you for your continued vigilance in this matter.

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