

EPI Update for Friday, January 26, 2007
Center for Acute Disease Epidemiology
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Potential hepatitis A exposure**
- **Recent rapid influenza test article highlights early season inaccuracy**
- **Nail salon investigation**
- **Cover your cough – now available in 9 languages**
- **Meeting announcements and training opportunities**

Potential hepatitis A exposure

IDPH has received information from the Illinois Department of Public Health that persons who dined at Houlihan's restaurant at 1332 Commons Drive in Geneva, Illinois between Monday, January 8 and Friday, January 19 at after 6:00 p.m. may have been exposed to hepatitis A. This includes some attendees of the Midwestern Synchronized Team Skating Championships.

A food worker at the restaurant was diagnosed with hepatitis A. Persons who ate at the restaurant may have been exposed to this disease, and are being urged to contact their local health care provider or local public health department. They can assist in assessing the need for immunoglobulin (IG) prophylaxis. IG is not a vaccine but can help reduce the risk of getting hepatitis A. It also reduces the risk of having serious disease and can be effective if received within 14 days of possible exposure. If an exposed person has already received the hepatitis A vaccine, they will not need to receive IG.

Eating food or drinking beverages contaminated with fecal matter from an infected person, who has not properly washed their hands after using the restroom, is the typical way in which hepatitis A is spread. Symptoms include nausea, loss of appetite, vomiting, fatigue, fever, abdominal pain, dark colored urine, light or whitish-colored bowel movements and jaundice (a yellow color to skin or eyes). Symptoms usually develop about a month after exposure, but can appear anywhere from 15 to 50 days after exposure.

For more information about this exposure:

- Call a special hotline at 630-444-3300; or
- Visit the Kane County Health Department Web site at www.kanehealth.com/health_alerts.htm.

Recent rapid influenza test article highlights early season inaccuracy

A recent article in the journal *Pediatrics* evaluated the use of various rapid influenza tests used during the flu season. The results revealed that when influenza prevalence is low (5 percent in the patient population), the tests were

unable to distinguish between a true influenza infection and a false positive result. However, once the prevalence of influenza reached 20 percent, the tests accurately confirmed influenza infection 85 percent of the time. Throughout the influenza season, the specificity of the test remained around 98 percent. See the example below:

The rapid influenza test usually has the following attributes: overall sensitivity (probability of a positive result given the case has disease) is 63 percent; AND the overall specificity (probability of a negative result given the case does not have disease) is 97 percent.

Thus, when prevalence is low (influenza cases account for 1 out of every 1,000 patients seen by a health care provider) and 1,000 patients are screened with the test:

- True positives will be 1 out of every 1,000 patients.
- False positives will be 10 out of every 1,000 patients.
- The test will accurately determine that a patient has the flu only 9 percent of the time. (Positive predictive value = 1 true positive/11 total positives.)

Thus, when prevalence is high (influenza cases account for 10 out of every 100 patients seen by a health care provider) and 100 patients are screened patients with the test:

- True positives will be 1 out of every 10 patients.
- False positives will be 0.1 out of every 10 patients.
- The test will accurately determine that a patient has the flu 99 percent of the time. (Positive predictive value = 10 true positives/10.1 total positives.)

Health care providers should be knowledgeable of the level of influenza activity in their area in order to appropriately use rapid tests as diagnostic tools. For more information on current Iowa influenza activity, go to www.idph.state.ia.us/adper/iisn.asp. Confirmatory testing (DFA, culture or PCR) is also valuable in determining the presence of flu and the distribution of flu strains throughout the state.

You may view the entire article at pediatrics.aappublications.org/cgi/content/full/119/1/e6.

Nail salon investigation

The IDPH Center for Acute Disease Epidemiology (CADE) and the Bureau of Professional Licensure are investigating cases of nail salon infections with *Mycobacterium fortuitum* (*M. fortuitum*). This is a type of rapidly growing mycobacteria (RGM) and is classified as (an atypical) mycobacteria, which encompasses all mycobacteria outside of *Mycobacterium tuberculosis*.

The bacterium is not spread from person to person. Rather, humans acquire it from the environment. Once humans have been infected with *M. fortuitum*, it can become harmful. *M. fortuitum* causes soft-tissue and skeletal infections due to direct inoculation of contaminated materials via injections, surgery and penetrating trauma.

If *M. fortuitum* gets into one's body and causes harm, treatment is available. At least two antibiotics are needed to treat *M. fortuitum* because drug resistance against one is common. The infections caused by *M. fortuitum* tend to be recurrent and can be resistant to treatment.

IDPH conducted a site visit and is currently working with the salon owners on infection control measures and disinfectant of their nail whirlpool spa.

Cover your cough – now available in 9 languages

Stop the spread of germs that make you and others sick!

Serious respiratory illnesses like influenza, respiratory syncytial virus (RSV), whooping cough and severe acute respiratory syndrome (SARS) are spread by:

- Coughing or sneezing; and
- Contaminated hands.

To help stop the spread of germs:

- Cover your mouth and nose with a tissue when you cough or sneeze;
- Put used tissue in the waste basket; or
- Cough or sneeze into your upper sleeve (not your hands) if you don't have a tissue.

Clean your hands after coughing or sneezing by:

- Washing with soap and water; or
- Cleaning with an alcohol-based cleaner if soap and water are not available.

These recommendations are now available in 9 languages. They can be viewed at www.cdc.gov/flu/protect/covercough.htm.

Meeting announcements and training opportunities

Save the date:

The 2007 Iowa Public Health Conference will be held April 3 & 4 in Ames. The theme for this year's conference is "New Directions for Public Health." The conference brochure may be downloaded at

www.iowapha.org/Conference_Events/conference_events.html.

Have a healthy and happy week!

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