

EPI Update for Friday, August 6, 2010

Center for Acute Disease Epidemiology (CADE)

Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Blastomycosis infections in Iowa**
- **Influenza update**
- **Iowa State Fair health tips**
- **Pool safety reminder**
- **Meeting announcements and training opportunities**

Blastomycosis infections in Iowa

Both human and canine blastomycosis have been identified in Iowa recently, including one death. Blastomycosis is caused by a fungus, *Blastomyces dermatitidis* which is endemic in parts of Southeast, South central, and Midwestern states, particularly along the Mississippi and Ohio Rivers and their tributaries, and along the Great Lakes. The fungus can be found in moist soil enriched with decomposing organic debris, often in wooded areas along waterways. Infection occurs when contaminated soil is disturbed and airborne conidia (spores) are inhaled. Dogs with blastomycosis are often the "canary in the mines" for predicting human cases.

About 50 percent of those infected are symptomatic and can present with flu-like symptoms including fever, chills, productive cough, myalgia, arthralgia, night sweats and pleuritic chest pain. Infections can be both acute and chronic, and skin lesions can occur. Blastomycosis infections often present as pneumonia, so history of riverbank exposures can be helpful. Highest incidence of disease appears to occur in northern Wisconsin.

Influenza update

In the U.S. between late June and July, 2010, the number of seasonal influenza A (H3) cases increased slightly compared with previous months. Between June 20 and July 23, 2010, CDC identified A (H3) in 12 states, including Iowa. In early July, two small outbreaks of A (H3) were detected in non-bordering eastern Iowa counties.

The first outbreak consisted of four of 13 members of a college sports team becoming ill. Three of the four tested positive for influenza A by rapid tests and two of the three were further tested and found to be positive for influenza A (H3) by PCR.

The second involved nine of 12 children in a child care setting, and one parent reporting influenza-like illness; two were rapid test positive for influenza A and one was PCR positive for influenza A (H3). None of the patients had a history of recent travel and no epidemiological links were identified between the two outbreaks.

SHL's tests determined that Iowa's strain is A (H3). Further antigenic characterization is being conducted by CDC, which will most likely identify the A (H3N2) Perth strain, as this strain is circulating in the world. Influenza A (H3N2) Perth and H1N1 will both be in this year's seasonal flu vaccine.

Today in Iowa, when evaluating a patient with respiratory illness, influenza should be considered. Point of care rapid tests capable of detecting influenza A and B virus have

limited sensitivity and false negative results are common, especially when the incidence of disease is low. Neuraminidase inhibitors oseltamivir (Tamiflu®) and zanamivir (Relenza®) are currently recommended for use and prompt empiric treatment for the following patients with suspect influenza is recommended:

- Illness requiring hospitalization,
- Progressive, severe, or complicated illness, regardless of previous health status, and/or
- Patients at increased risk for severe disease.

Persons at high risk for influenza complications include people aged 65 years and older, young children, pregnant women, people with chronic health conditions (e.g. diabetes, heart condition), and people on immunosuppressive medications.

Iowa State Fair health tips

Tens of thousands of Iowans and out-of-state visitors will soon arrive in Des Moines for the Iowa State Fair. Though the Fair has countless opportunities for entertainment, there are important health and safety considerations to keep in mind when attending the State Fair.

- **Remember sun safety.** Wear light-weight, loose clothing, hats, and sunglasses and cover exposed parts of the body with sunscreen (SPF 30 with UVA/UVB block)
- **Stay hydrated.** Be sure to drink fluids consistently throughout the fair visit.
- **Remember hand hygiene.** It is very important to wash hands with soap and water after any contact with an animal or animal enclosures. Alcohol-based sanitizer is not effective against all diseases that may be carried by animals, nor should it be used when hands are visibly soiled.
- **Stay home when ill.** Visiting the fair when ill increases the possibility of spreading diseases to others. So if sick, delay your visit until you are well.
- **Have fun!**

Pool safety reminder

Cryptosporidium activity usually peaks in July or August. The disease is spread by putting something in the mouth that has been contaminated; for example, swallowing contaminated pool water. Symptoms of illness include abdominal cramps, severe, watery diarrhea, and loss of appetite. Young children may have asymptomatic infections. Symptoms last about one to two weeks and the disease has an incubation period that averages seven days. Person-to-person spread in a household and in child care settings is common.

People ill with crypto should not use "kiddie" pools, swimming pools, beaches, or any other recreational water while having symptoms, and for at least two weeks after their diarrhea ends, since people can still spread the organism even after symptoms resolve.

For more information, visit www.cdc.gov/crypto/.

Meeting announcements and training opportunities

None

We wish everyone a healthy week!

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