

EPI Update for Friday, August 25, 2006
Center for Acute Disease Epidemiology
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Hepatitis A testing**
- **Two doses of MMR needed to prevent mumps reappearance on Iowa college campuses**
- **Eating exotic seafood dishes? – Beware of Paragonimiasis!**
- ***Neisseria meningitidis*, serogroup Y cluster in northwest Iowa**
- **Meeting announcements**

Hepatitis A testing

Three possible hepatitis A cases were recently reported from the same county to the IDPH Center for Acute Disease Epidemiology (CADE). In all three cases, the patients had a positive total IgM/IgG laboratory result for hepatitis A. None were symptomatic but were tested for hepatitis A as part of a chronic hepatitis panel. After consultation with each patient's physician about history and symptoms, none were determined to be true cases.

Total IgM/IgG tests do not distinguish between acute infection and immunity. This test should not be used to diagnose acute hepatitis A.

When diagnosing chronic hepatitis, consider the following:

- Testing for hepatitis A is not appropriate for an asymptomatic patient with only abnormal serum alanine aminotransferase (ALT) concentrations. If clinical symptoms of hepatitis A are present in addition to elevated ALT concentrations, then testing for hepatitis A with an IgM test is appropriate.

Testing for hepatitis A is appropriate:

- If a patient presents with symptoms of fever, malaise, anorexia, nausea, abdominal discomfort, and later in the course of infection, jaundice;

AND

- Persons For persons who have been exposed to settings where HAV transmission is suspected (such as travelers outside the U.S.).

Public health investigation of acute hepatitis A cases is performed; but however, since it takes extensive time and effort on behalf of public health and health care providers, only true cases should be reported. This can be insured by appropriate initial testing.

To view the most recent Centers for Disease Control and Prevention's (CDC) Morbidity and Mortality Weekly Report (MMWR) article on hepatitis A testing, "Positive Test Results for Acute Hepatitis A Virus Infection Among Persons With No Recent History of Acute Hepatitis --- United States, 2002—2004," visit www.cdc.gov/mmwr/preview/mmwrhtml/mm5418a1.htm.

Two doses of MMR needed to prevent mumps reappearance on Iowa college campuses

This week, IDPH reminded Iowans about the recommendations to ensure that all college students returning to school this fall receive two doses of MMR (measles, mumps and rubella) vaccine. This recommendation is supported by the CDC and the American College Health Association. As Iowa college students return to school, it's possible that mumps will reappear on college campuses and in their communities if this prevention effort is not taken.

Vaccination with two doses of MMR is the single best defense against mumps and is 90 to 95 percent effective in protecting against mumps for life. Of all people with mumps reported to IDPH during the spring mumps outbreak, approximately 25 percent were students enrolled in colleges in Iowa and students were the source of mumps spread to Iowa communities.

Students, and other 18-to-46 year-olds, can still receive free or low-cost MMR vaccinations from their local public health department. Contact information for local public health departments can be found at www.idph.state.ia.us/adper/mumps.

The full press release can be found on IDPH's home page at www.idph.state.ia.us.

Eating exotic seafood dishes? – Beware of Paragonimiasis!

Whether you travel abroad or eat an "exotic" food prepared with seafood imported from another country, make sure the seafood is fully cooked! Otherwise you may get more than you bargained for with your meal.

The Orange County Health Care Agency in California recently reported two cases of paragonimiasis (a lung fluke) in persons who ate live (yes LIVE), imported freshwater crabs in a restaurant in Santa Ana, CA. Paragonimiasis is caused by a parasite known as *Paragonimus westerman* which is present in more than 50 species of crustaceans (i.e. freshwater crabs, crayfish, etc.). Some examples of typical "localexotic" (local for the country that is) seafood dishes that may contain infected crustaceans, include "raw crab soaked in soy sauce" (*ke-jang*, -a Korean dish), "raw drunken crabs and raw grass carp" (a Chinese dish) and some raw Thai seafood dishes (*lab-pla* and *plasom*).

The complete life cycle for this parasite is rather complex – ; typically the parasite eggs are “deposited” in freshwater bodies from infected humans or animals that defecate in the water. Then the eggs develop into a miracidium (a free-swimming, ciliated larva), which enters an aquatic snail. Then over a period of several weeks, the miracidium changes into a cercariae (a tadpole-shaped worm). The cercariae are then released into the freshwater environment and attaches, penetrates, and encysts as a metacercariae (tailless encysted late larva) in a susceptible secondary intermediate host such as freshwater crabs. If a human or animal eats a raw freshwater crab, they become infected, and later can shed the parasite eggs in their stool, thus starting the life cycle over again.

Although being infected with lung flukes can be a serious illness in humans, the parasite is not spread directly from person-to-person. Symptoms of lung fluke infection include cough, difficulty breathing, diarrhea, abdominal pain, fever, and hives. In many people, onset of symptoms may not occur until 6-10 weeks after ingestion of raw, undercooked, salted or pickled crab. The lung fluke can also migrate from the lungs to other organs, and in some cases the infection can last for years. Medication (praziquantel or bithionol) is available to treat the infection.

So if you or someone you know has eaten raw or undercooked freshwater crab in the U.S. or another country while traveling, and developed any of the symptoms detailed above, contact your health care provider to discuss the possibility of whether you might be infected with paragonimus infection.

CDC has information on Paragonimiasis available at www.dpd.cdc.gov/dpdx/HTML/Paragonimiasis.htm.

California has a fact sheet and information for health care professionals available online at www.ochealthinfo.com/epi/paragonimus.htm.

The Journal of Emerging Infectious Diseases also has a very good article on paragonimus and other “seafood” parasites published in October 2005 at www.cdc.gov/ncidod/eid/vol11no10/pdfs/05-0614.pdf

***Neisseria meningitidis*, serogroup Y cluster in northwest Iowa**

Northwest Iowa has experienced a slight increase in *Neisseria meningitidis*, serogroup Y this year. A total of four cases have been reported from four counties during the last 5 months. Three of these cases occurred in residents over 80 years of age living in different long term care facilities. Cases presented with meningitis, pneumonia and/or septicemia. This situation is considered a cluster (an unusual grouping of disease events) and is not considered an outbreak. CADE currently recommends continuing normal surveillance; however, be aware of this increase in *N. meningitides*, and as a potential cause of pneumonia, septicemia and meningitis. Prevention measures such as hand washing and cough etiquette should, as always, be stressed.

Meeting Announcements:

Fall Epidemiology Updates

The agenda and registration information for the Fall Epidemiology Updates has been posted to the IDPH Web site. Please visit [//www.idph.state.ia.us/conferences.asp](http://www.idph.state.ia.us/conferences.asp) to view the conference brochure.

Have a healthy and happy week!

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