EPI Update for Friday, December 19, 2008
Center for Acute Disease Epidemiology
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Pertussis activity continues in Iowa**
- **Recreational water illnesses in the winter?**
- ***Salmonella* Enteritidis cluster associated with overseas travel**
- **The Epidemiology of Christmas Fever**
- **Happy holidays from the CADE staff**
- **Meeting announcements and training opportunities**

Pertussis activity continues in Iowa

While Iowa is experiencing an increase in pertussis (whooping cough), most coughs this time of year are due to VIRAL infections, not *Bordetella pertussis*. Symptoms of early pertussis may be difficult to distinguish from other respiratory infections, but include a cough that gradually becomes paroxysmal and may last 1-2 months. Paroxysms may be followed by a characteristic inspiratory whoop, and may induce vomiting. However, infants under 6 months, vaccinated children, adolescents, and adults often do not have the typical whoop or cough paroxysm. Any person presenting with symptoms consistent with pertussis (or in an outbreak situation) should be tested.

Testing is NOT of value for asymptomatic individuals (regardless of contact with a case or if there is an outbreak), people who have had symptoms of pertussis, or who have been coughing for more than 30 days. Pertussis and influenza can be tested off of the same specimen. The University of Iowa Hygienic Laboratory performs PCR testing for pertussis and the best specimen for testing is a Dacron or rayon posterior nasopharyngeal swab or nasal wash/aspirate. *Note: Inappropriate testing can lead to false-positive and/or clinically insignificant results.* Details are available at www.uhl.uiowa.edu/kitsquotesforms/clinicaltestmenu.pdf
After public health investigations of reported cases of pertussis, letters are often sent to persons who may have been exposed. These letters should explain whether prophylactic treatment is indicated. Prophylaxis of asymptomatic persons is recommended when the exposed person had significant contact with the patient with pertussis during the infectious period, regardless of vaccination status. Adult and adolescent vaccines containing pertussis are available, but as with all vaccines, they are not 100 percent effective. For vaccine recommendation for Tdap of adolescents and adults visit www.cdc.gov/mmwr/preview/mmwrhtml/mm5739a4.htm. For more information on pertussis, visit www.idph.state.ia.us/adper/pertussis.asp.

Recreational water illnesses in the winter?

Holiday travel often includes hotel stays; keep in mind the six "PLEAs" for healthy swimming to avoid getting or spreading waterborne illnesses like Shigella, Cryptosporidiosis and Giardia when using pool and spa facilities.

- **Please** don't swim when you have diarrhea. You can spread germs in the water and make other people sick. This is especially important for kids in diapers.
- **Please** don't swallow the pool water. In fact, avoid getting water in your mouth.
- **Please** practice good hygiene. Take a shower before swimming and wash your hands after using the toilet or changing diapers. Germs on your body end up in the water.
- **Please** take your kids on bathroom breaks or check diapers often. Waiting to hear "I have to go" may mean that it's too late.
- **Please** change diapers in a bathroom or a diaper-changing area and not at poolside. Germs can spread to surfaces and objects in and around the pool and cause illness.
- **Please** wash your child thoroughly (especially the rear end) with soap and water before swimming. Everyone has invisible amounts of fecal matter on their bottoms that end up in the pool.

If a fecal accident does occur while in or around the pool, notify the hotel staff immediately so they can take action to properly clean the pool and protect other swimmers. More information on healthy swimming is available from the CDC at www.cdc.gov/healthyswimming/.

Salmonella Enteritidis cluster associated with overseas travel

IDPH and the CDC have been investigating a cluster of *Salmonella* Enteritidis infections in 19 people who have traveled outside the United States during their incubation period. Most became ill while overseas or immediately following their return to the United States. Iowa has one case that is included in this cluster. No specific exposure has been identified, but the CDC is continuing their investigation. We will update you as more information becomes available.

The Epidemiology of Christmas Fever

Christmas Fever is a disease, though its annual appearance and widespread incidence make it seem a normal seasonal condition.

The disease appeared suddenly in the Near East about 2,000 years ago. Early outbreaks were sporadic and localized. Early spread was around the Mediterranean, becoming regular and epidemic. Later it spread into Europe, and then the rest of the world brought the disease to its present pandemic proportions.

As new populations were affected, mutations apparently occurred in the original virus. In some cases, the mutant viruses have remained relatively population specific (e.g. Pinata syndrome in sections of the Mediterranean subgroup), but in many cases the original mutant viruses have proved stronger than the original strain and have become worldwide. In this connection it should be noted that concurrent infection with more than one strain of the Christmas virus is not unusual.

Description of the Disease

Identification: An acute illness, usually febrile, varying in early symptomatology, but usually with compulsive buying and almost always characteristic color fixations in the red-green spectrum. Presumptive diagnosis may be made when the above are observed alone or in conjunction with sub-clinical signs such as eating large amounts of

candy. If the patient is seen during the acute stage, a marked tendency to sing will be observed. A predisposition to buy trees will also be noted. Radical changes in behavior in some cases may be observed in the direction of volubility. Depression is rarely noted. Clinical cases exceed inapparent infections at least several hundred-fold.

Etiologic Agent: Christmas virus.

Source and reservoir of infection: Department stores have been implicated as possible sources. Man is the only known reservoir.

Mode of transmission: Unknown; presumably by contact with an infected person or with articles associated with the season, such as conifers and tinsel.

Incubation period: Usually short.

Period of communicability: Throughout infection.

Susceptibility and resistance: Susceptibility is general. No artificial immunization available. Naturally acquired immunity is of short duration, usually less than one year. Repeat infections are the rule.

Occurrence: Western world distribution, isolated cases in eastern hemisphere, annual pandemic. In the northern hemisphere, the annual epidemic occurs in winter; in the southern hemisphere, in the summer.

Control Measures:

General:• Whenever practicable, avoid crowding in shops and stores. General resistance should be conserved.

Control of the• infected individual, contacts, and environment:

- o Report to local health authority: Class 5.
- o Isolation: None. Children should not attend school during acute or convalescent stages.
- o Concurrent disinfection: None.
- o Terminal disinfection: Thorough cleaning of dwelling and proper disposal of all colorful waste and conifer remnants.
- o Quarantine: Of unproved value.
- o Immunization: None effective. Scrooge-type narratives may be tried.
- o Investigation of contacts: Unprofitable.

Laboratory Services: No practical laboratory test known. Blood alcohol determination may occasionally be helpful.

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Happy holidays from the CADE staff

The staff from the Center for Acute Disease Epidemiology would like to take this opportunity to wish you and yours a safe, healthy and happy holiday season. There will be no Friday Epi Update next week. We will publish one on Monday, December 29th to cover the two week holiday period.

Meeting announcements and training opportunities
None.

Have healthy and happy holiday weeks!
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