EPI Update for Friday, June 24, 2005

Center For Acute Disease Epidemiology

Iowa Department of Public Health

Items for this week's EPI Update include:

- **Preventing Heat Related Illness**
- **Milk Does a Body Good….Except When It's Unpasteurized**
- **Hepatitis A Disease Investigation Process: Overview**
- **2004 Reportable Disease Cases**
- **National HIV Testing Day**

Staying Healthy in the Heat
The temperatures and heat indexes are climbing this week. The Iowa Department of Public Health recommends a number of measures to prevent heat related illnesses such as heat stroke, heat exhaustion, heat cramps and sunburn. Foremost among prevention tips is **NEVER** to leave a person or animal in a closed, parked vehicle. When it is very hot, avoid the heat by staying indoors, preferably in an air-conditioned place. If people do not have air conditioning in the home, even a few hours during the day spent in a library or shopping mall can help prevent illness. Electric fans help, but when temperatures are in the high 90's or above, taking a cool shower, bath or moving to air conditioning, are better ways to cool off. In addition people should consume more fluids, but avoid drinks with alcohol, caffeine and large amounts of sugar.

For those who must be out in the heat, it is best to limit activity to the morning and evening hours (don't forget your insect repellant), drink adequate liquids and stay in the shade when possible. Protect the skin from sun exposure by wearing a hat and using a broad-spectrum sunscreen of SPF 15 or higher.

For more prevention information about recognizing heat-related illnesses visit www.bt.cdc.gov/disasters/extremeheat <http://www.bt.cdc.gov/disasters/extremeheat>.

Milk Does a Body Good….Except When It's Unpasteurized!
Consumption of raw milk and raw milk products, like cheese, can be dangerous. Donated milk that had not been pasteurized has been implicated in two large Iowa outbreaks within the last two years. Both outbreaks were due to the pathogen *Campylobacter jejuni.* One glass of milk may contain milk from hundreds of cows, which increases the likelihood of contamination.

Some other pathogens that may also be found in raw milk include:

- *Enterotoxigenic Staphylococcus aureus,*
- *Salmonela* species
- *E. coli* **(Enterohemorrhagic) (Enterotoxigenic)**
- *Listeria monocytogenes*
- *Mycobacterium tuberculosis*
- *Mycobacterium bovis*
- *Brucella species (abortus-cattle and melitensis-goats)*
- *Coxiella burnetii*
- *Yersinia enterocolitica*

In Iowa, it is illegal to sell raw milk, however it is not illegal to donate it. Many charity events collect food and drink donations from local organizations to serve at events. To protect yourself and your loved ones from possible illness, if milk or homemade cheese is served at an event you are attending, make sure to ask if it is pasteurized.

"Drinking raw milk or eating raw milk products is like playing Russian roulette with your health." John F. Sheehan in FDA Consumer Sept/Oct 2004

Hepatitis A Disease Investigation Process: an Overview for Local Public Health
This overview is the first in a three-part series reviewing hepatitis investigation guidelines currently used in Iowa by local and state public health officials.

Background
Individual case reports of hepatitis A require follow-up from local public health officials. A local intervention is integral to containing and preventing the spread of disease. This is accomplished by assessing disease status and identifing people who have had close contact with an infectious person.

Hepatitis A is considered to be primarily a foodborne disease. The transmission route is fecal-oral and many cases result from international travel. Hepatitis A is different from hepatitis B & C in that there is no chronic state. However, up to 15 percent of people infected may have prolonged, relapsing infection for up to a year. Infected persons are usually contagious for up to a week before symptoms appear and most will be noninfectious after the first week of jaundice. The presence of diarrhea greatly enhances the chance of spreading it to another person. HAV infection provides lifelong immunity.

What does local public health do when they receive a hepatitis A disease report?
1. Initial steps
Local public health works to complete the Hepatitis A Case Record form <http://www.idph.state.ia.us/adper/cade_content/epi_manual/hepatitis_a.pdf> by consulting with the person's health care provider and by interviewing the person. This will determine the presence/absence of symptoms and/or the reason to suspect hepatitis A, such as if the patient is a close contact of a person known to have hepatitis A.

2. Defining case status
The case definition for hepatitis A is a person who tests IgM HAV positive AND has clinical symptoms consistent with hepatitis A infection. A person with a positive HAV IgM that is epidemiologically linked to a known positive case would meet the case definition as well. A positive test in the absence of clinical symptoms, or one that is not epi-linked is not considered a case. Symptoms for hepatitis A are low-grade fever, myalgia, mild headache, malaise, nausea and abdominal discomfort. Some individuals may experience diarrhea. Subsequent symptoms may involve jaundice, dark urine and clay-colored stool. The typical course of disease is two to six weeks.

3. Determine potential exposure
After establishing that the person meets the case definition, it is vital to conduct a prompt assessment of contacts exposed so prophylaxis can be provided as **soon as possible** and within 14 days of exposure. For specific guidelines on childcare, school, community residential settings, food handlers and hospitals refer to the Epi Manual <http://www.idph.state.ia.us/adper/cade_content/epi_manual/hepatitis_a.pdf> online. Information on who is considered a close contact is also provided.

4. Prophylaxis of close contacts
A person in close contact with a case should receive immune globulin as post-exposure prophylaxis **as soon as possible, but within 14 days**. If local supplies are not sufficient for prophylaxis of close contacts, contact CADE using the disease reporting hotline at 1-800-362-2736 for assistance.

5. Completing the Investigation
Once local public health conducts a hepatitis A investigation, and delivers the prevention and control steps they will need to complete and submit the case record form to the Iowa Department of Public Health. Just as a reminder, even if the investigation determines that the patient is NOT a case, information should still be reported to CADE.

2004 Reportable Disease Cases
Did you know that in 2004…

- Iowa saw an extremely rare case of infant botulism, a type of which has only been documented 5 times worldwide
- Cases of pertussis reached levels nearly 550 percent higher than 2003 levels with a total number of confirmed and probable cases reaching 1006 compared to 166 in 2003

- While the number of people living with HIV is increasing in Iowa, the number of conversions from HIV to AIDS has been declining since 1993. Between 2003 and 2004, the number of AIDS diagnoses declined from 76 to 68, a 10.5 percent decline

- There were 101 more campylobacteriosis cases than in 2003 - a total of 559 cases
- Measles was imported in Iowa resulting in a total of 3 cases

Look for more details about cases of notifiable diseases in 2004 on the Iowa Department of Public Health Web site within the next few weeks.

National HIV Testing Day is June 27.
The National Association of People with AIDS promotes this day in order to encourage people at risk to receive counseling and testing for human immunodeficiency virus infection. The theme of this year's campaign is "Take the Test, Take Control". Sites in Iowa for HIV testing are listed at

<http://www.idph.state.ia.us/common/pdf/disease_prevention_immunization/CTRSites.pdf>.