

EPI Update for Friday, July 15, 2005
Center For Acute Disease Epidemiology
Iowa Department of Public Health

Items for this week's EPI Update include:

- **Perinatal Hepatitis B Program**
- **FDA Health Alert - It's not just unpasteurized milk that can make you ill**
- **Test Your Epi Skills: Answers**
- **Meetings**

Perinatal Hepatitis B Program

Hepatitis B disease investigation process: an overview for local public health

All pregnant women should be routinely tested for hepatitis B surface antigen (HBsAg) during an early prenatal visit in each pregnancy. If the woman is found to be positive, they should be retested at least six months later to determine acute or chronic infection. Prenatal serological specimens can be submitted to the University Hygienic Laboratory (UHL) for anyone who is unable to pay for this service or to any laboratory performing a standard test for HBsAg. An HBsAg-positive specimen must be reported to the Iowa Department of Public Health, Center for Acute Disease Epidemiology by written report or telephone, 1-800-362-2736.

Serology reports are forwarded to the maternal hepatitis B program from the Center for Acute Disease Epidemiology within the Iowa Department of Public Health for follow up. When a female, positive for hepatitis B is found to be pregnant, the delivery hospital is notified that the newborn is at risk for transmission of hepatitis B virus and that hepatitis B immune globulin and hepatitis B vaccine should be administered within 12 hours of birth. Between 10 and 85 percent of infants born to HbsAg positive mothers will become infected. An infant that is infected during the birthing process has a 90 percent chance of becoming a chronic carrier. The infant should receive subsequent vaccinations at 1 month and 6 months of age. Breast-feeding is not contraindicated. Post serology should be conducted 3-9 months after the third hepatitis B vaccine dose has been administered to assure the infant has a protective antibody level. More than 90 percent of perinatal infections can be prevented through appropriate use of immune globulin and vaccination. Any household contact without a history of hepatitis B vaccination should be tested and vaccinated if found to be susceptible.

The "Iowa Perinatal Hepatitis B Recommended Policies and Procedures" are available and contain the following information:

- Hospital Policy and Procedure Recommendations
- Follow-Up of Household and/or Sexual Contacts
- Intervention Guidelines for Exposed Infants
- Screening of Pregnant Women

[Perinatal Hepatitis B Recommended Policies and Procedures](#)

http://www.idph.state.ia.us/common/pdf/immunization/hep_b_perinatal_testing_policy.pdf Web site

For more information on viral hepatitis, visit the [Iowa Department of Public Health Hepatitis Program Web site](#) <<http://www.idph.state.ia.us/adper/hepatitis.asp>>

FDA Health Alert - Unpasteurized Orange Juice - It's not just unpasteurized milk that can make you ill

Unpasteurized orange juice has been associated with an outbreak of human disease caused by *Salmonella Typhimurium*. As of July 8th there had been 15 cases of illness with a matching strain of *Salmonella* linked to these juices consumed from mid-May to June. None have occurred in Iowa, but Iowans need to realize that unpasteurized fruit juices can be contaminated with bacteria and cause illness, especially in vulnerable young children and people who are immuno-compromised. Orange, apple (and ciders) and mixed fruit juice have all been implicated in outbreaks, some with large number of people affected and some with severe illnesses resulting in death. Juices found in refrigerator sections of the grocery stores, or on ice, are often unpasteurized, whereas those found on regular store shelves are always pasteurized.

These products often do not bear a warning label that the juice is unpasteurized. While such warning labels sometimes appear on unpasteurized juice products, it is not required. Consumers should not assume that juices are safe to consume simply because they do not bear the "unpasteurized" warning label. Besides *Salmonella*, unpasteurized juices can contain other pathogenic enteric organisms such as *E. Coli* 0157:H7 and *Cryptosporidium*.

Unpasteurized juices should never be served to young children, the elderly or those who are immuno-compromised.

Test Your Epi Skills: Answers

The Epi 5:

1. What does the term "double-blind" mean?

Answer: "Blinding" is a technique used to reduce bias, usually in clinical trials. It refers to the practice of keeping a patient from knowing whether they are taking

the study drug or a placebo. A “Double-blind” trial keeps both the dispensing physician and the patient from knowing whether the patient is receiving the study drug to further reduce bias. A study can even be “Triple Blind,” which means that those who are analyzing the results are also not told which patients received the study drug and which received the placebo. There is a key that links the blinded drug assignments to the patients. It is broken at the end of the trial, or earlier if there are reasons that the trial might need to be stopped, such as bad side effects of treatment.

2. In a foodborne outbreak involving norovirus is food considered a reservoir or a vehicle?

Answer: A vehicle. Since, norovirus is not native to any food in this example the food simply acts as a mode of transmitting the virus from its reservoir (ill food worker) to a susceptible host(s).

3. Based on the outbreak described in question #2 would you expect the suspected food item(s) to be served hot or cold?

Answer: This question doesn't have a “correct” answer. Typically foodborne outbreaks of norovirus have involved raw, undercooked or ready-to-eat food items; however, contamination of the suspect food can occur after heating during plating or serving. Contamination of the food contact surfaces (plates, utensils, glassware) can also occur. Norovirus has a very low infective dose (just a few viral particles) and can easily be transmitted from one person to another at large gatherings, even when a particular food item is not contaminated.

4. If a vehicle is identified in an outbreak is transmission considered direct or indirect?

Answer: Indirect

5. Who was responsible for the “Don't Spit on the Sidewalk” campaign? And what was its health benefit?

Answer: The “Don't Spit on the Sidewalk” campaign was developed by Dr. Samuel Crumbine, a pioneer in the field of public health, when he was secretary of the State Board of Health of Kansas. The campaign focused on controlling the spread of tuberculosis and included a campaign for a ban on public expectoration. He had a Kansas brick maker print his slogan "Don't spit on the sidewalk" on every third brick that was manufactured for sidewalk use. For additional information on Dr. Crumbine's efforts: <http://mph.kumc.edu/crumbine.html>

Meetings:

Please save the date for your region's Fall EPI Update Conference. More details, including registration information, will be out soon. This meeting occurs every fall, and it is targeted to public health nurses, infection control practitioners, and other health care professionals working in infectious disease control.

