

EPI Update for Friday, October 26, 2007
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **MRSA concerns provide opportunity for education**
- ***Cryptosporidium* update**
- **Child care exclusion criteria for *Cryptosporidium* cases**
- ***Enterobacter sakazakii* – a rare cause of infant illness**
- **Test your knowledge: Chronology of a rare disease investigation**
- **Meeting announcements and training opportunities**

MRSA concerns provide opportunity for education

CADE has received numerous calls regarding methicillin resistant *Staphylococcus aureus* (MRSA). As the public hears about cases in their area, people want to know what MRSA is, how it is spread and how to prevent it. Thus, this is an excellent time to talk to patients and the public about how bacteria can develop antibiotic resistance. Remind them that antibiotics are not needed for viral infections and of the importance of taking all of their antibiotics exactly as prescribed.

Also, health care practitioners should educate patients with an MRSA infection about the actual risk of it spreading to family, friends, and co-workers, and how to prevent it. Remind people to wash their hands regularly, and to cover their mouth and nose with a tissue or their elbow when they sneeze or cough.

When talking about MRSA, it is important to emphasize the difference between invasive MRSA infections and simple skin and soft tissue infections (SSTs). Infections with MRSA are considered invasive when they involve the blood, urine and spinal fluid. In Iowa, surveillance is only performed on invasive MRSA infections. Skin infections are not reportable to public health unless an outbreak is occurring.

If they can be covered, SSTs should not prevent people from returning to work or school. As long as the skin lesions are adequately covered, the risk of spread to other people is low. Also, these infections are more common than invasive infections and do not always need antibiotic treatment.

***Cryptosporidium* update**

A record 553 confirmed *Cryptosporidium* cases have been reported in 2007. In addition, there have been 335 epi-linked cases (ill individuals who have not been tested but who are linked to confirmed cases) for a total of 888 *Cryptosporidium* cases this year. This outbreak appears to have peaked in the week after Labor Day. Although the number of individuals with swimming pool exposures has declined, the number of individuals exposed in child care settings remains high. For more information, visit www.idph.state.ia.us/adper/common/pdf/cade/crypto_report.pdf.

Child care exclusion criteria for *Cryptosporidium* cases

Children diagnosed with *Cryptosporidium* should remain out of child care and/or school until diarrhea resolves. We recommend that negative stool tests are not required for re-entry into child care facilities. The only diseases that require negative stool tests are *E. coli* 0157:H7, *Salmonella typhi*, and *Shigella*. Specific exclusion criteria for these diseases can be found in the EPI Manual chapters. For more information, visit www.idph.state.ia.us/idph_universalhelp/main.aspx?system=IdphEpiManual.

***Enterobacter sakazakii* – a rare cause of infant illness**

Two infants with *Enterobacter sakazakii* septicemia have been recently reported. *Enterobacter sakazakii* is a gram-negative bacillus and can cause bloodstream and central nervous system infections. *E. sakazakii* kills 40 to 80 percent of infected infants. Premature infants are thought to be at greater risk than full term infants, other children, or adults. Infant infections with *E. sakazakii* have been associated with contaminated powdered infant formula, but other environmental sources of contamination are possible. Investigations were performed in both cases, but no source of infection was found. Further study of risk factors is needed.

For more detailed information, see Bowen AB, Braden CR. Invasive *Enterobacter sakazakii* disease in infants. Emerg Infect Dis. [serial on the Internet] cited October 19, 2007 2006 Aug. This publication is available at www.cdc.gov/ncidod/EID/vol12no08/05-1509.htm.

If your facility identifies *Enterobacter sakazakii* as a cause of invasive disease, please contact Judy Goddard at (800) 362-2736.

Test your knowledge: Chronology of a rare disease investigation

This is the second article in a 3-part series.

Answer to: What *disease do you think this infant acquired?* The infant had intestinal botulism (formerly called infant botulism)

Part II

Shortly after being admitted to the hospital, the infant's stool and serum were tested for botulism. The specimens were sent to the Centers for Disease Control

and Prevention (CDC). The Infant Botulism Treatment and Prevention Program in California (the U.S. infant botulism referral center) was consulted and the decision was made to administer Baby BIG® (Botulism Immune Globulin Intravenous). The following week, laboratory tests indicated the presence of botulinum toxin type A produced by *Clostridium botulinum*.

Question: *What laboratory tests were performed on the stool and serum?*

(Answer will be in next week's update)

- A. The presence of botulism toxins
- B. The presence of *Clostridium* bacteria

The investigation revealed several potential sources of exposure.

Question: *Which of these are potential sources of infection for infant botulism?*

(Answer will be in next week's update.)

- A. The mother frequently made honey and peanut butter sandwiches for herself and her son.
- B. The family had recently traveled to a Western U.S. state.
- C. Workers were grating the soil surrounding the home they visited three weeks prior to the onset of illness.
- D. The infant's grandfather had given the infant a sip of lemonade.
- E. The infant's grandfather had also given the infant a small taste of Jell-o.

Meeting announcements and training opportunities

3rd Annual UHL Professional Forums

Region 1: Nov. 14, DMACC Campus, Ankeny

Region 2: Nov. 8, North Iowa Community College, Mason City

Region 3: Nov. 7, Iowa Lakeside Laboratory, Milford

Region 4: Nov. 13, Cass County Community Center, Atlantic

Region 5: Nov. 28, Jefferson County Hospital, Fairfield

Region 6: Nov. 27, Northeast Iowa Community College, Dubuque

Vaccine University

Next month, the Immunization Program staff will be traveling throughout the state to 16 sites to present the latest information regarding the Vaccine for Children (VFC) Program, vaccine storage and handling, and Iowa's Immunization Law. This conference is designed to be of interest to pharmacists, nurses, certified medical assistants, medical assistants, office and support staff, administrative staff, medical and nursing students, and anyone who is responsible for vaccine storage and handling or administration.

This conference is offered free of charge and will include course materials and continuing education credits for nurses, pharmacists, and CMAs who are members of the American Association of Medical Assistants (AAMA).

For more information, call (515) 309-3315 or visit www.idph.state.ia.us/adper/common/pdf/immunization/immunization_university.pdf for location of the sites. To register online, go to www.trainingresources.org.

Have a healthy and happy week!

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800-362-2736