

EPI Update for Friday, August 3, 2007
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Hepatitis A prevention and control**
- **Iowa Disease Surveillance System update**
- **World Breastfeeding Week August 1-7,2007**
- **Caffeine in breast milk**

Hepatitis A prevention and control

Recently there has been a cluster of hepatitis A cases in Central Iowa, and CADE is using this opportunity to educate providers regarding hepatitis A prevention and control.

Hepatitis A is a vaccine-preventable disease and vaccination is recommended for the following:

- All children 12-23 months of age
- International travelers to high or intermediate risk countries
- Men who have sex with men
- Persons who use illegal drugs
- Persons with chronic liver disease
- Persons with occupational risk
- Persons with clotting factor disorders

Children 1-18 years of age should receive a single primary dose of the pediatric formulation followed by a booster dose 6-12 months later. Adults 19 years of age and older should receive one dose of the adult formulation followed by a booster 6-12 months later.

Protection might not be complete until four weeks after vaccination, for optimal protection, persons traveling to high risk countries less than four weeks after the initial dose should also receive immune globulin (IG) (0.02 ml/kg) at a different anatomic injection site.

When administered intramuscularly before exposure to hepatitis A virus, or within two weeks after exposure, IG is 80 percent to 90 percent effective in preventing hepatitis A disease. A single intramuscular dose of 0.02 ml/kg of IG confers protection for less than three months; 0.06 ml/kg protects for three to five months.

IG should be given to exposed persons who have not previously received hepatitis A vaccine as soon as possible, but not more than two weeks after the exposure. Recipients may include persons who had close contact (household or sexual) with a person who has hepatitis A disease; staff and attendees at child

care centers where a hepatitis A case has been recognized; and persons in certain common-source exposure situations (e.g., patrons of a food establishment with an HAV-infected food handler, if the risk of transmission is determined to be high). Persons who have received one dose of hepatitis A vaccine at least one month before an HAV exposure do not need IG.

IG can interfere with the response to live injected vaccines (e.g., measles, mumps, rubella (MMR), and varicella vaccines). Live vaccines that were given less than two weeks before IG administration can be affected; immunization records should be checked for dates of MMR and varicella administration. Live vaccines that were administered less than two weeks prior to receipt of IG should be re-administered. Administration of live vaccines should be delayed for at least three months after administration of IG.

Iowa Disease Surveillance System update

The Iowa Disease Surveillance System (IDSS) is a newly developed system that is intended to streamline and enhance communication and collaboration among laboratory, hospital, and public health (local and state) personnel related to infectious disease reporting and surveillance throughout Iowa.

The statewide training sessions scheduled for July and August of 2007 are winding down. Those attending a training session have been able to use a training version of the application. This is an earlier version of IDSS than the one that will be installed in a few weeks. The training version communicates via the Internet and interfaces with a central database incorporating the complex security features that will be present in the final production version.

Despite some setup issues specific to various training locations, overall feedback about IDSS has been positive. Much that has been learned will be useful for statewide implementation at hospitals and local public health agencies. Local IDSS users at hospitals and local public health agencies will receive notification when IDSS is available for installation.

Those hospitals and local public health agencies that participated in the pilot continue to use IDSS exclusively for disease reporting to CADE.

World Breastfeeding Week (August 1-7)

World Breastfeeding Week (WBW) is from August 1 through August 7. The theme for this year is the "Power of One". For information about WBW activities and the many benefits of breastfeeding (including protection against infectious disease), visit the La Leche League website at www.llusa.org/wbw/.

Caffeine in breast milk

Excessive caffeine can cause poor eating, sleeping, and jitters in infants. Caffeine is excreted in breast milk and a nursing mother should be aware of how much caffeine she can safely consume. Studies show that drinking two or fewer

cups of coffee a day while nursing should not adversely affect infants. Two cups of plain, brewed coffee contains approximately 270mg of caffeine. The following is a list of beverages and their estimated caffeine content:

- 1 oz shot of espresso=30-50mg
- 1 8oz cup of instant coffee=90mg
- 1 Starbucks' Coffee Grande (16oz)=259mg
- 1 8oz cup of black tea=40-70mg
- 1 can of Mountain Dew=55mg
- 1 8.5oz can of Red Bull=80mg

Caffeine elimination in infants is much slower because of immature renal and/or hepatic function. An infant younger than six months will eliminate approximately half of any caffeine consumed three to four days after consumption. About 86 percent of caffeine will be eliminated after six days. By nine months most infants are able to rid their bodies of caffeine as efficiently as an adult. Nursing mothers should avoid more than two cups of coffee per day or the equivalent amount of caffeine.

For more information on the content of caffeine in beverages, visit www.mayoclinic.com/health/caffeine/AN01211.

Have a healthy and happy week!

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