

EPI Update for Friday, April 11, 2008
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Measles cases in Wisconsin**
- **Crypto: Why something so little can be such a big deal, part 1**
- **Drug-resistant tuberculosis on the rise globally**
- **AHRQ releases 2007 state snapshots report**
- **National Infant Immunization Week: April 19 – 26, 2008**

Measles cases in Wisconsin

Wisconsin currently has four confirmed cases of measles, three located in Milwaukee and one in Waukesha counties; two have no known source of infection. Measles is a public health emergency. Please be on the lookout for cases in Iowa; if measles is suspected, contact public health immediately! For more information, visit

http://dhfs.wisconsin.gov/immunization/pdf/measles_guide.pdf

Crypto: Why something so little can be such a big deal, part 1

Even though we are still 'enjoying' average *November* weather here in Iowa, it won't be long before we start seeing the sun more and the humidity starts to rise. Many of us will soon be digging the fans out of storage, turning on the air conditioning and heading to the pool, river, or lake. Unfortunately, spending time in the water with other people (or animals) increases our risk of exposure to some unfriendly critters that lab folks call 'protozoan parasites' such as *Cryptosporidium*, which causes Cryptosporidiosis (Crypto).

The name of this parasite comes from the Greek words 'kryptos,' meaning hidden and 'sporos,' meaning seed. Crypto is the leading cause of recreational waterborne gastroenteritis at about 60%, with Shigella and Norovirus tied for a distant second at 8% of all known causes. The incidence of reported Crypto coincides with the summer recreational water season, usually peaks in July or August, and is most linked to water frequented by young children under age 10.

Iowa experienced a 315 percent increase (above a 3-year average) in the number of confirmed Crypto cases during 2007, with a total of 1,008 cases. Of these cases, 50 percent had recreational water exposure and 54 percent were either enrolled in or had children in childcare. So far during 2008, the Center for Acute Disease Epidemiology has received reports of 33 confirmed cases of Crypto – this is nearly double the confirmed cases reported during 2007 by this time. Even though the peak usually occurs in July or August, the incidence of disease usually begins to rise in late May or early June, about the time swimming pools begin to open.

Crypto transmission follows the fecal - oral path and the organism must be ingested to cause illness. Anyone can get Crypto. Once ingested, the organism completes its life cycle and causes illness. Infected individuals can shed over a billion oocysts in their stools per day. *Cryptosporidium* is very resistant to chlorine compared to other organisms that cause similar illness. Crypto is 700,000 times more resistant to chlorine than *E.coli* and 100 times more resistant than *Giardia*. A normal level of chlorine in swimming pools does not kill *Cryptosporidium*.

If Crypto is linked to a swimming pool, there are a number of control methods such as hyper-chlorination, removal of chlorine after hyper-chlorination, and protecting the pool from re-infection after the treatment. The most inexpensive control method is to prevent introduction of Crypto into the pool altogether. Next week, part 2 in this series will focus on prevention.

Source: "Cryptosporidium in Iowa – An Overview of Events in 2007," presented at the Spring 2008 Public Health Conference by Tim Link (City of Dubuque Health Services), Nancy Hall (UHL), Sarah Brend (IDPH), and Michael Magnant (IDPH).

For more information on Crypto, refer to the Epi Manual Crypto Fact Sheet http://www.idph.state.ia.us/idph_universalhelp/main.aspx?system=IdphEpiManual&context=Crypto_Factsheet

Drug-resistant tuberculosis on the rise globally

A recent report published by the World Health Organization (WHO) found multidrug-resistant tuberculosis (MDR-TB) is occurring at the highest rates ever recorded. The data, collected between 2002 and 2006 on 90,000 TB patients in 81 countries, found 5 percent of new TB cases were multidrug-resistant. In addition, MDR-TB was associated with male gender and younger age groups (25-44 years old) in most WHO regions. Iowa has reported one MDR-TB case in 2007. Treatment continues for this patient and contacts.

Treatment for MDR-TB patients and their infected contacts is complicated and the cost is significant. This is due to the necessity for hospitalization in most cases; drugs needed to treat disease and infection, and increased directly observed therapy costs.

The World Health Organization is calling for a "frontal assault" on TB drug-resistance, including an immediate improvement of diagnostic performance worldwide and treatment of all cases until they are cured. Extensively drug-resistant TB (XDR-TB), which is practically untreatable, was found in TB cases from 45 countries.

To view the report, visit <http://www.who.int/mediacentre/news/releases/2008/pr05/en/>.

AHRQ releases 2007 state snapshots report

The Agency for Healthcare Research and Quality (AHRQ) recently released its annual "State Snapshots" report for 2007 with new features providing a broader portrait of state-by-state health care performance. Compared to previous years, the report now allows comparative analysis across states on overall health quality performance and illustrates important challenges states face as they work toward improving quality of care.

To access the 2007 State Snapshots report please visit <http://statesnapshots.ahrq.gov/snaps07>

National Infant Immunization Week: April 19 – 26, 2008

Governor Culver has declared the week of April 19-26, 2008 to be Infant Immunization Week. National Infant Immunization Week (NIIW) is an annual observance to highlight the importance of protecting infants from vaccine-preventable diseases and celebrate the achievements of immunization programs and their partners in promoting healthy communities.

Since 1994, NIIW has served as a call to action for parents, caregivers, and healthcare providers to ensure that infants are fully immunized against 14 vaccine-preventable diseases. For additional information and ideas about how to celebrate Infant Immunization Week in your community, visit <http://www.cdc.gov/vaccines/events/niiw/default.htm>.

Have a healthy and happy week! Hopefully next week's weather will be better.

Center for Acute Disease Epidemiology
Iowa Department of Public Health
800-362-2736