EPI Update for Friday, August 5, 2005

Center for Acute Disease Epidemiology

Iowa Department of Public Health

Respiratory Illness From Exposure to Backyard Hot Tub and Pool

Seven people who attended a party at a backyard hot tub and pool in eastern Iowa reported respiratory symptoms accompanied by fever and body aches approximately 36 to 48 hours after the party. Initial information indicated that no guests had been sick before the party. Thinking it might have been something circulating in the water of the hot tub, the owner of the pool contacted the local public health agency. Several attendees were diagnosed clinically with bronchitis and treated with antibiotics; however, no blood or sputum specimens were sent for laboratory testing and all recovered in a few days. Testing of water from the spa and pool showed no coliform bacteria or *Pseudomona aeruginosa*, indicating good water quality in both venues. During the course of investigation, a further possible case was discovered who had contact with one of the party guests but was not present when the hot tub was in use. The evidence in this outbreak suggests that one of the guests may have been contagious with a respiratory illness during the event.

This episode reminds us that close attention to pool maintenance, water quality chemistries, and monitoring are critical for prevention of recreational waterborne illness. It would have been helpful to investigators in this situation if the owner of the pool had recently tested their pool water and had the documentation available. Even though microbiological monitoring is not required for private pools and spas, it is a good public health measure to periodically test for total coliform bacteria and/or *Pseudomonas aeruginosa* in private pool or spa water to make sure that the maintenance and chemistry procedures are correct. The Hygienic Laboratory has a pool testing program, which includes sample collection containers and instructions for both swimming pool and whirlpools. Free brochures describing this program that include a tear-off postcard for ordering a kit are available by calling UHL at 800-421-4692. There is an $11 charge to test pool water for coliform bacteria and a $20 charge to test spa water for both coliform bacteria and *Pseudomonas aeruginosa.*

Testing for total coliform bacteria is still the main bacterial indicator test and it is required monthly for public swimming pools. Both the total coliform bacteria and *Pseudomonas aeruginosa* tests are required monthly on public spas. The presence of these indicators in pool water indicates a possible deficiency in one or more of the following areas: water chemistries (disinfectant residual or pH), water clarity, filter cleanliness, swimmer adherence to showering rules, or proper collection technique to name a few. See the following Web site for IDPH Swimming Pool and Spa regulations, which were recently revised earlier this spring:

- <http://www.idph.state.ia.us/eh/pdf/env/swimming_pool_rules_05032005.pdf>
- <http://www.idph.state.ia.us/eh/pdf/env/spa_rules_05032005.pdf>

WANTED: Physicians for Influenza Surveillance……
Influenza Sentinel Provider Surveillance- Overview
The Iowa Dept. of Public Health (IDPH) and the University Hygienic Laboratory (UHL) are currently recruiting healthcare providers to participate in the 2005-06 Iowa Influenza Sentinel Provider Surveillance Network. Data from sentinel providers are *absolutely critical for monitoring the impact of influenza* and, in combination with other influenza surveillance data, can be used to *guide prevention and control activities, future vaccine strain selection,* and patient care.

What is required to be a sentinel provider? Sentinel providers report on a weekly basis the total number of patient visits per week and number of patient visits for influenza-like illness by age group to a web-based reporting center sponsored by the CDC. They are also asked to submit specimens from a subset of patients to UHL for virus isolation and strain sub-typing **free of charge. The results are reported back to the physician.**

If you choose to become a sentinel provider, CADE will work with your office to determine an efficient way of capturing the necessary data, including providing tally sheets or patient assessment forms.

How are my efforts recognized? Sentinel providers receive feedback on the data submitted, summaries of state and national influenza data throughout the season, and a **free subscription** to CDC's *Morbidity and Mortality Weekly Report* and *Emerging Infectious Diseases Journal*.

How do you sign up to be sentinel provider? Providers of any specialty (e.g., family practice, internal medicine, pediatrics) in any type of practice (e.g., private practice, public health clinic, emergency room, university student health center) are eligible to participate. If interested contact **Meghan Harris** at IDPH by telephone at **515-281-7134** or via email at mharris@idph.state.ia.us <mailto:mharris@idph.state.ia.us> as soon as possible.

Vaccine Coverage Rates Continue To Improve
The National Immunization Survey reports that U.S. children are getting vaccinated at record high rates, with 81 percent of toddlers 19 months to three years old receiving the full recommended series. This exceeds the Healthy People 2010 goal. This is up from 79.4 percent in 2003. Iowa's 2004 rate was 86.1 percent. (The full recommended series consists of four doses of diphtheria, tetanus and pertussis (DTaP) vaccine, three or more doses of polio vaccine, one or more doses of measles-containing vaccine, three or more doses of Hib vaccine, and three doses of hepatitis B vaccine.)

The survey also showed that more than 73 percent received at least three doses of the new pneumococcal conjugate vaccine and 87 percent got the varicella vaccine. Since the varicella vaccine introduction chickenpox case reductions have ranged from 70 percent to 87 percent. In outbreaks of chickenpox, unvaccinated children's attack rate has been 67 percent but only 13 percent among those vaccinated and those who do get ill have less severe disease.

Breastfeeding Protects Against Infectious Diseases- World Breastfeeding Week
August 1-7 is the time the United States, along with about 120 other countries, sets aside to celebrate World Breastfeeding Week. The theme this year is Breastfeeding and Family Foods: Loving and Healthy. <http://www.waba.org.my/>

Despite the negative consequences for the baby of not breastfeeding, the National Immunization Survey done by the CDC found that only 64.7 percent of Iowa babies born in 2003 were breastfed at all. A mere 28.6 percent were receiving any breastmilk at six months of age with only 12.4 percent exclusively breastfed at six months as the American Academy of Pediatrics recommends. These numbers are below the Healthy People 2010 objectives of having 75 percent of mothers initiating breastfeeding and 50 percent still breastfeeding at six months.

Breast milk contains antibodies to help protect infants from bacteria and viruses. Recent studies show that babies who are not exclusively breastfed for six months are more likely to develop a wide range of infectious diseases including ear infections, diarrhea, respiratory illnesses, and they are hospitalized more. Also, infants who are not breastfed have a 21 percent higher postneonatal infant mortality rate in the U.S. While breastfeeding exclusively for six months and continuing with complimentary foods until one year provides the best protection, any amount of breast milk the baby receives will be beneficial.

Some studies also suggest that infants who are not breastfed have higher rates of sudden infant death syndrome (SIDS) in the first year of life, and higher rates of type 1 and type 2 diabetes, lymphoma, leukemia, Hodgkin's disease, overweight and obesity, high cholesterol and asthma. More research in these areas is needed (*American Academy of Pediatrics*, 2005).

Breastfeeding not only benefits the baby, but also the mother and society. Mothers who breastfeed are less likely to develop ovarian cancer and premenopausal breast cancer. They also have a lowered risk of osteoporosis. Breastfeeding saves on health care costs. Total medical care costs for the nation are lower for fully breastfed infants than never-breastfed infants since breastfed infants typically need fewer sick care visits, prescriptions, and hospitalizations. Breastfeeding contributes to a more productive workforce, also. Breastfeeding mothers miss less work, as their infants are sick less often. Employer medical costs also are lower and employee productivity is higher. Breastfeeding is better for our environment because there is less trash and plastic waste compared to that produced by formula cans and bottle supplies.

More information about breastfeeding and how you can support breastfeeding mothers and babies can be found on the Iowa Department of Public Health's Web site at <http://www.idph.state.ia.us/wic/breast_feeding_promotion.asp>

or the Office of Women's Health in the U.S. Department of Health and Human Services: <http://www.4woman.gov/Breastfeeding/print-bf.cfm?page=227>

Posters, flyers and even TV and radio ads produced by the Ad Council that promote the health benefits of breastfeeding can be found at: <http://www.adcouncil.org/campaigns/breastfeeding/> on the right side.

Conferences/Meetings

8th Annual HIV/AIDS Conference to be held *Oct. 11, 2005 through Oct. 12, 2005*

http://www.trainingresources.HIV/AIDS Conference Link
<http://www.trainingresources.org/displayconvspecific.cfm?convnbr=1472>