EPI Update for Friday, February 24, 2006 Center for Acute Disease Epidemiology Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- Iowa mumps cases rise significantly among vaccinated individuals
- Influenza update
- Implementing the Environmental Health Specialist Network (EHS-Net) in Iowa
- CDC advisory committee recommends new vaccine to prevent rotavirus
- Another reason to keep your pet's rabies vaccinations current
- Meeting announcement

Iowa mumps cases rise significantly among vaccinated individuals

A total of 21 mumps cases have been reported to IDPH in the last six months, with 17 cases reported in the last two months. In previous years, Iowa has experienced an average of only seven cases a year, most of which were imported from other countries.

It is important to note that 90 percent of the investigated cases have had at least one measles, mumps, rubella (MMR) vaccination. Therefore we recommend health care providers do not rule out mumps in vaccinated patients presenting with glandular swelling for 2 days or more. It is also very important to conduct appropriate and timely testing. As stated in recent Friday updates, three tests are available through the University Hygienic Laboratory (UHL): the parotid gland swab for viral culture testing; clean-catch urine for viral isolation; and serologic tests. Ideally it would be best to have all three types of specimens submitted for testing, however, at least the parotid gland swab specimen should be submitted. Contact UHL to order test kits or obtain shipping instructions at (319) 335-4277 or (319) 335-4500.

<u>All</u> suspected cases of mumps should be reported to IDPH, whether or not laboratory results have been received. IDPH is working with several sentinel surveillance sites throughout the state and the CDC to help better assess the situation.

Influenza update

Seasonal Influenza: Iowa and the United States

Reports of confirmed cases of influenza in Iowa increased significantly this week, with cases concentrated in the counties in and around Des Moines including Polk, Dallas, Warren and Story counties. The Iowa Activity Level was not increased to "widespread" because the central region of Iowa was the only region with an increase in cases, sentinel reports of influenza-like illness (ILI) and school absenteeism. This does, however, indicate that Iowa has not reached the peak of influenza season.

There was one confirmed case of influenza B reported this week. Nationally, approximately 3 percent of influenza cases are attributed to the B strain. Iowa is similar, with 2 percent of reported cases positive for influenza B.

Iowa and surrounding states are beginning to receive reports of increased ILI activity in children. The usual signs of influenza include fever, cough, headache, muscle aches and fatigue. Potential complications of influenza include primary viral pneumonia, secondary bacterial pneumonia, croup, exacerbation of chronic pulmonary diseases, central nervous complications, toxic shock syndrome and Reye's syndrome. Remember since Iowa has not yet seen its peak of influenza – it is not too late to vaccinate children and adults. The Immunization Program has influenza vaccine remaining that may be used for all populations. This vaccine may be distributed to all Vaccines for Children Program providers while supplies remain. Please contact the Immunization Program at 1-800-831-6293 to place an order.

Avian influenza

The occurrence of the disease in India, reported on Feb. 18, is part of a recent pattern of rapid geographical spread of the virus in wild and domestic birds. India is one of 13 countries that have reported their first cases of H5N1 infection in birds since the beginning of February. (The 13 countries, listed in order of reporting, are Iraq, Nigeria, Azerbaijan, Bulgaria, Greece, Italy, Slovenia, Iran, Austria, Germany, Egypt, India and France.) As of Feb. 20, the World Health Organization (WHO) has reported 170 cases and 92 deaths in seven countries. For more information, visit the WHO Web site at http://www.who.int/csr/disease/avian_influenza/en/index.html.

ACIP expands the recommended ages for child vaccination for influenza

In its meeting in Atlanta recently, the Advisory Committee on Immunization Practices (ACIP) to the Centers for Disease Control and Prevention (CDC) voted to recommend an expansion of routine influenza vaccination for children. With the expansion, the recommended influenza vaccination age will be from 6 months to up to 5 years old. The previous recommendation was for children 6 months to 23 months old. The new recommendation expands that recommendation to also cover children from 2 years to up to 5 years old. For more information, go to www.cdc.gov/od/oc/media/pressrel/r060223.htm.

Implementing the Environmental Health Specialist Network (EHS-Net) in Iowa IDPH, in collaboration with Cerro Gordo County Department of Public Health, Iowa Department of Inspections and Appeals, and UHL, will carry out food safety studies with funds awarded from the CDC National Center for Environmental Health. Thus, a network of environmental health specialists is collaborating with epidemiologists and laboratorians to identify and prevent environmental factors contributing to foodborne and waterborne illness and disease outbreaks.

IDPH and its partners will be focusing on the following projects in the coming year:

1. Environmental Surface Sampling Project - This project will be evaluating surface contamination of food contact and non-food contact surfaces in food service establishments inspected by the environmental health specialists with the North Central Iowa Regional Inspection Division. The surface sampling will be completed by the environmental health specialists and then sent to the University Hygienic Laboratory for analysis.

- 2. <u>Tomato-handling Study</u> This study will be identifying the types of tomatoes used in restaurants, describing tomato-handling practices, and exploring tomato-handling practices that either aid or hinder the survival and proliferation/amplification of *Salmonella*.
- 3. <u>Food Safety Surveillance Project</u> Also known as the EHS-Net Outbreak/Non-outbreak project, this project will be systematically collecting information on food handling practices in restaurants. This data will serve as a foundation for the generations of other studies to help identify environmental antecedents of foodborne illness outbreaks.

For more information on this project, contact Carmily Stone, EHS-Net Coordinator, at 515-281-0921 or visit the EHS-Net home page at www.cdc.gov/nceh/ehs/EHSNet/default.htm

CDC advisory committee recommends new vaccine to prevent rotavirus

ACIP recently voted to recommend a newly licensed vaccine to protect against rotavirus, a viral infection that can cause severe diarrhea, vomiting, fever, and dehydration (gastroenteritis) in infants and young children. Each year, rotavirus is responsible for more than 400,000 doctor visits, more than 200,000 emergency room visits, 55,000 to 70,000 hospitalizations, and between 20 and 60 deaths in US children younger than 5 years of age.

The ACIP recommendation is for infants to receive three doses of the oral vaccine at 2, 4, and 6 months of age. Children should receive the first dose of the vaccine by 12 weeks of age and should receive all doses of the vaccine by 32 weeks of age. The vaccine will not prevent diarrhea caused by other viruses, but the vaccine should prevent about 74 percent of all rotavirus cases and about 96 percent of rotavirus cases requiring hospitalization.

The new vaccine, RotaTeq(tm), is the only vaccine approved in the United States for prevention of rotavirus gastroenteritis. An earlier vaccine for Rotavirus infection, Rotashield, was withdrawn from the market in 1999 after it was found to be associated with intussuseption, a type of bowel obstruction. The new vaccine is made differently from the old one, and was not found to be associated with intussuseption in a trial of 70,000 children. More information on the new vaccine can be found at www.cdc.gov

Another reason to keep your pet's rabies vaccinations current

A situation occurred in Indiana: A 10-year old chihuahua named Nacho was struck by a car and bit both the owner and driver of the car following the collision. Sadly, Nacho died hours later due to his injuries and his owners buried him in their backyard. The next day, animal control told the owner she needed to bring Nacho in for a rabies test because the dog had bitten several people. If the owner did not produce the dog, she would face a \$5,000 fine, which is more than the cost for a course of rabies prophylaxis. So the owner reluctantly dug up the dog and brought him in for testing.

The moral of this story is to be aware that testing the animal is the best option for assessing rabies exposure following a bite when the animal has died and cannot be observed for 10 days following the bite. Despite what happened in this story, testing an animal for rabies after it has been buried for any amount of time greatly reduces the likelihood that the rabies test would be accurate. Unlike Indiana, Iowa does not have a fine for owners who do not vaccinate their animals. Some counties DO enforce laws that require non-vaccinated animals to be observed at a veterinary clinic for up to 10 days after biting someone - at the owner's expense. Ouch!

Meeting announcement

The 2006 Public Health Conference, *Strengthening Our Voice – Making Public Health a Priority*, will be held March 27 and 28 at the Scheman Conference Center at Iowa State University. A copy of the brochure can be downloaded from www.idph.state.ia.us/common/pdf/conferences/brochure_032806.pdf.

Have a healthy and happy week
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