

EPI Update for Friday, April 15, 2005
Center For Acute Disease Epidemiology
Iowa Department of Public Health

Items for this week's EPI Update include:

- **Anniversary of the Polio Vaccine**
- **Mosquitoes in April?**
- **Influenza A(H2N2) Distribution Alert**
- **Swim Healthy!**

Anniversary of the Polio Vaccine

From the Iowa Department of Public Health's historical records:

The 50th anniversary of the Salk Polio Vaccine occurred this month. Many of you are too young to remember the polio scares in the 1950's, so here is a brief history of polio in Iowa. In 1930 (the first year with good numbers on polio) there were 222 cases in Iowa, but by 1952 (Iowa's peak year) 3,564 cases, with 155 immediate deaths, were reported.

A public health nurse's report of polio in a 9year old girl named Susie stated that her "illness began 6 weeks ago with a headache, pain in the legs, slight fever, nausea and pain in the back and neck. This had been preceded by a sore throat which was treated with sulfonamides." After the diagnosis of polio, she was "treated at home with hot packs as the case was considered mild."

An epidemiologic investigation was done to "aid in establishing a specific source for the case. Milk was pasteurized, and the water supply and the disposal system met the inspector's approval. There was no association with a known case or contact and there had been no deviation from normal routine".

The public health nurse stated, "At the time of my first visit Susie's progress was at a standstill. She was still in bed having pain and generalized weakness." The nurse was concerned and had an orthopedist visit who "advised a period of hospitalization for close observation and physical therapy. Susie is there now." The report ends there. We do not know what happened to Susie.

August 23, 1952, the health department's anti-polio recommendations for children included:

- Don't trade pencils or crayola. Keep them away from the mouth.
- Don't swap bites of candy-bars.
- Bubble gum, requiring manipulation of the gum with the fingers after the bubble has been broken, is particularly unhygienic.
- Swimming periods should be short enough not to tire the youngster too much and yet active enough to prevent chilling.

For a great website with more information about the history of polio, go to <http://americanhistory.si.edu/polio>

Mosquitoes in April?

With the warmer weather, many of us have been enjoying the outdoors and can't help to notice a mosquito or two flying around. A recent conversation with Dr. Wayne Rowley, an entomologist at Iowa State University (ISU) provided insight to this. It is typical to see mosquitoes this early in the year because several species of mosquitoes overwinter in areas such as our garages and homes. When the temperature becomes warmer these begin to become active. ISU reports they have not seen any larvae in water, which means even though mosquitoes may be out they are not laying eggs and reproducing. Water temperatures are still too cool. The risk of these mosquitoes giving you diseases like West Nile (WNV) is extremely low.

IDPH has already begun receiving calls regarding the start of our WNV surveillance. The main partners with IDPH on surveillance are the University Hygienic Laboratory and Iowa State University's Department of Entomology along with the help of several local public health departments. Surveillance partners will be meeting next week to map out the upcoming surveillance season. Typically our surveillance season begins the end of May or first week in June but this is all dependent upon the weather. If temperatures remain warm and in the 70's in the upcoming weeks, the WNV surveillance season could get an early start. Surveillance will remain similar to years past and will include human surveillance, mosquito surveying and testing, sentinel chicken testing, and of course (the ever popular) dead bird testing. Stay tuned for specifics on the 2005 WNV surveillance season.

Influenza A(H2N2) Distribution Alert

Out of an abundance of caution, we are alerting you to the following situation. The College of American Pathologist (CAP) proficiency test surveys VR1A-2005, VR4A-2005 and XLC-2005 contained one or more vials of influenza A/H2N2 virus. Viruses of the H2N2 subtype have not circulated since 1967 and persons born after 1968 will have no or only limited immunity against this subtype and therefore a growing segment of the human population may be susceptible to infection by H2N2 viruses. Thus, working with H2N2 viruses could theoretically pose a health risk to laboratory staff born after 1968. A representative H2N2 virus is not contained in current trivalent influenza vaccines. This event has not resulted in any known infection with H2N2. However, IDPH asks that any flu-like illness in laboratorians be reported immediately at 800-362-2736 (if after hours, follow the emergency instructions.)

In the fax from April 9, 2005, CAP asked all laboratories which participated in this proficiency testing to immediately destroy samples containing the H2N2 virus. The recommended destruction process is to incinerate or autoclave with moist heat at 121 degrees C for at least 45-60 minutes at temperature; or autoclave with dry heat at 170

degrees C for at least 1 hour or 160 degrees for at least 2 hours or 121 degrees for at least 16 hours; or incineration. If the autoclave or incinerator is offsite, the vial contents can be killed by adding a liquid disinfectant to the vials (ex. 10% bleach, freshly prepared, or 10% formalin) and hold the vials overnight. This must be done in a biological safety cabinet (BSC) and the technologist must wear gloves. The BSC should be disinfected after use. After holding the vials overnight inside the BSC the material should be sealed in an impervious bag and, if being shipped, conform with all IATA and DOT requirements regarding packaging and labeling. For more information or assistance, contact the University Hygienic Laboratory, 319-335-4500.

Swim Healthy!

As the weather is getting warmer, many of us are getting excited to get out and enjoy some water recreation. Swimming, one of the most popular activities in the country, is a fun, active, and healthy way to spend leisure time. Every year, millions of people visit “recreational water” sites, such as swimming pools, water parks, hot tubs, lakes, rivers, or the ocean.

Over the past century, the use of modern disinfection systems in pools and environmental improvements in our lakes, rivers, and oceans has improved the quality of recreational water. Despite this, there has been an increase over the past decade in the number of outbreaks of illness associated with swimming. The most important rule to remember; **if you have diarrhea, do not go swimming in any body of water!**

For more information on swimming healthy: <http://www.cdc.gov/healthyswimming/>

Meeting Announcement and Training Opportunities

- **New Zoonotic Disease Course**

The University of Iowa's Center for Emerging Infectious Diseases (College of Public Health) and the University Hygienic Laboratory announce a new 5-day summer course in Zoonotic Diseases that will be first offered **May 23-27th 2005 in Iowa City**. The course will introduce students to the epidemiology and control of zoonotic diseases and will emphasize zoonoses endemic to the Midwestern United States. The course is comprised of readings, lectures, field studies, and laboratory exercises. Each day there will be 3 hours of lecture and 3 or more hours of laboratory/field activity (mosquito identification, tick identification, water sampling, visiting a meat processing plant, etc.). If you are not currently enrolled in the College of Public Health you may still be able to take the course by contacting Judy Rowles at the Center for Credit Programs at (319) 335-2577. Details regarding the course can be found in the syllabus which may be reviewed at:

http://www.public-health.uiowa.edu/CEID/MS_Word_files/173157_syllabus_2005.pdf