

EPI Update for Friday, June 10, 2005
Center For Acute Disease Epidemiology
Iowa Department of Public Health

Items for this week's EPI Update include:

- **New Test Available for Enteroviruses**
- **Whatever Happened to SARS?**
- **Zoonoses Notes: Bites and Bird Brains**
- **Meetings**

New Test Available for Enteroviruses - Enterovirus Season is Here!

Enteroviruses one of the most common causes of meningitis and/or encephalitis (M/E) in Iowa. These infections are far more common than arboviral infections, including West Nile Virus.

Aseptic (viral) meningitis is associated with an estimated 25,000-50,000 hospitalizations each year in the United States. About 90% of cases of viral meningitis are caused by members of a group of viruses known as enteroviruses, such as coxsackieviruses and echoviruses. Enterovirus infections are associated with diverse clinical manifestations ranging from mild febrile illness to severe and potentially fatal syndromes. These infections often produce a rash.

The University Hygienic Laboratory (UHL) has confirmed that enteroviruses are currently circulating in Iowa.

Information on testing:

UHL has two methods of testing for enteroviral infection: a rapid molecular test and a virus culture.

- The molecular method is a Reverse-Transcriptase-Polymerase Chain Reaction (RT-PCR). It is a very sensitive test to detect the presence of enteroviral genetic material in cerebral spinal fluid (CSF) specimens ONLY.
- Virus Culture can detect enterovirus in CSF and a variety of other specimen types (such as stool, and nasopharyngeal and throat swabs). Please contact UHL for information on specimen collection and shipping requirements by calling 319-335-4500.

Test request forms can be obtained from our web site

http://www.uhl.uiowa.edu/kitsquotesforms/non_respiratory_slip_noclient.pdf

Information from the Centers for Disease Control and Prevention:

http://www.cdc.gov/ncidod/dvrd/revb/enterovirus/non-polio_entero.htm

Whatever Happened to SARS?

It has been a little more than a year since the last recognized cases of sudden acute respiratory syndrome (SARS), traced to laboratory accidents in Asia were reported, and more than two years since the worldwide epidemic which resulted in over 8000 cases and nearly 800 deaths. The outbreak was first identified in China, and was felt to be the source of the outbreak. According to a story in the New York Times, in the cities that were once the scene of public hysteria, the Chinese public has become unconcerned about SARS. Chinese scientists have concluded that the coronavirus causing the illness jumped from civets, weasel-like animals eaten for food, to humans. This jump between species might have occurred in the open-air markets where the animals were slaughtered and sold. It is still not known why civets were so susceptible to the illness and whether other animals were carriers of the disease. What is known, is that the virus mutated after passing from animals to humans in a way that caused it to spread easily and become more virulent, according to Dr. Kathryn Holmes, a microbiologist and expert on coronaviruses interviewed by the New York Times

According to Dr. Holmes, the highly virulent strain responsible for the 8000 cases has not been seen since June 2003. She credits the “disappearance” of SARS with aggressive public health measures of the World Health Organization and the Chinese Government. These efforts included improving public health surveillance, prohibiting the sale of civets for food, and isolating cases. The rapid spread of SARS throughout the world showed the potential for other illnesses, such as avian flu, to quickly cause a worldwide pandemic. Public health workers are trying to improve the weaknesses in public health surveillance identified during the SARS outbreak. This outbreak could even be used as a model for local public health and hospitals planning how to respond to an outbreak of serious disease.

Zoonoses Notes: Bites and Bird Brains

But my wild pet has been vaccinated!

Occasionally CADE receives calls about an individual who has been bitten at a petting zoo or other location by a wildlife animal, such as a bear, lion cub, or a skunk. Even though these wildlife animals are often raised in captivity, they can be exposed to rabies by contact with a bat or skunk, depending on the type of pen or building they are housed in. With the exception of an oral rabies vaccine (used in baits for raccoon rabies in the Eastern U.S), rabies vaccine has not been approved and licensed for wildlife animals, thus the effect of the vaccine in preventing disease is not known. So even though some owners of wildlife and USDA-licensed exhibitors vaccinate their animals against rabies, the vaccine is not recognized as valid.

The recommendations from the 2005 NASPHV Compendium of Animal Rabies and Control (<http://www.cdc.gov/mmwr/PDF/RR/RR5403.pdf>) or <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5403a1.htm>) regarding wildlife are on page two of this document.

We do know enough about the biology of the disease in dogs, cats and ferrets to be certain that, if the animal is healthy after 10 days of observation, it did not have rabies virus in its saliva, and could not have transmitted the rabies virus to a person. Thus quarantine can NOT be used for any other animals. Iowans should avoid contact with wild animals, and should NOT keep wild animals as pets. For additional information on bites by wild animals, please consult with CADE (515-242-5935).

Keep Those Bird Brains Cool

Now that hot weather is upon us, the University Hygienic Laboratory reminds us that it's important to make sure that birds sent for West Nile Virus testing are shipped with adequate ice packs, especially if they aren't frozen before shipping. Freezing the bird before shipping is preferable. If a bird arrives in a condition not suitable for testing, the laboratory will call the agency that shipped it to discuss proper shipping methods. If you are involved with shipping birds, make sure to check the web site for shipping methods and information on which birds to ship. Only crows and blue jays should be shipped for testing. Remember the crow, which is Iowa's largest songbird, is much bigger than redwing or yellow-headed blackbirds, grackles or starlings. As they say, accept no substitutions. For further information on bird species consult the IDPH web site <http://www.uhl.uiowa.edu/services/diseases/mosquitoborne/wnv/deadbirdsurveillance.html>.

For shipping instructions, consult

<http://www.uhl.uiowa.edu/services/diseases/mosquitoborne/wnv/deadbirdsubmission.html>.

Meetings:

Governor's Conference for Public Health, Barnraising V: Building Iowa as a Health Community

Remember that the deadline for early registration for the Governor's Conference for Public Health, Barnraising V: Building Iowa as a Health Community is July 1. The conference has a strong focus on community projects on a wide range of public health issues. The conference brochure has been mailed, and is available on the web.

Registration materials are available on the same site:

<http://www.idph.state.ia.us/conferences.asp> and click on Barn Raising V.