EPI Update for Friday January 21, 2005
Center For Acute Disease Epidemiology
Iowa Department of Public Health

Items for this week’s EPI Update include:

- A Case that Makes Your Skin Crawl … Literally
- Syphilis in Scott County
- Avian Influenza Update – CDC Screening Guidelines
- Cruising Tips
- Rapid Screening Tests
- Meeting Announcements and Training Opportunities

A Case that Makes Your Skin Crawl…Literally

An Iowan, after returning from Belize, developed an area of irritated skin, with the sensation of something moving inside. He placed a salve on it, and later several pear shaped whitish larva emerged. These have been sent for identification, but this is most likely, furuncular myiasis caused by *Dermatobia hominis*, or the Human Botfly.

In furuncular myiasis the larvae penetrate intact living skin but cannot penetrate beyond the subcutaneous tissue developing into an expanding boil-like lesion. In the tropical Americas, furuncular myiasis is due to *Dermatobia hominis*, the human botfly. The adult female fly physically captures a mosquito and then glues her eggs to the abdomen of the carrier mosquito. When the mosquito next feeds on a human or animal the eggs drop off, hatch and a larva inside burrows through the skin. Botfly lesions are almost always single, and the point of the furuncle is characterized by a small punctum through which the larva must obtain oxygen. Occlusion of the respiratory punctum such as with paraffin or petroleum jelly often causes the pear-shaped larva to come out and is curative. Surgical excision under local anesthesia is necessary for refractory cases.

A case study with pictures from the Gorgas Course in Clinical Tropical Medicine, Lima, Peru can be found at:

http://info.dom.uab.edu/gorgas/2005cases/050228.html

Syphilis in Scott County

Four cases of early syphilis (two primary and two secondary) have been identified in Scott County since Christmas. All are men having sex with men, although one reports sex with women as well. Interviews have revealed five named contacts, of whom four have been treated, and the fifth is being sought. There are an additional three unnamed
(i.e. anonymous) contacts. All of the cases report the solicitation of sexual encounters via the internet. Additional cases of early syphilis are being sought.

The public has been notified via the media of the cases and that there may be a relationship to sexual encounters solicited from the internet, and the Scott County Health Department will be further publicizing these cases in the community. Individuals who consider themselves at risk for syphilis have been encouraged to seek evaluation and testing through their primary care providers or the STD clinic at the Scott County Health Department.

An association of early syphilis and solicitation of sex on the internet is well recognized (MMWR 52(50);1229-32). Health departments need to be aware of this association and to consider whether they can use the internet to conduct contact tracing in the event they see such cases.

Avian Influenza Update – CDC Screening Guidelines

Currently, the CDC recommends maintaining enhanced surveillance efforts by state and local health departments, hospitals, and clinicians to identify patients at increased risk for avian influenza A (H5N1) as described in HAN notices issued on February 3, 2004 available at [http://www.cdc.gov/flu/avian/professional/han020302.htm] and August 12, 2004 available at [http://www.cdc.gov/flu/avian/professional/han081304.htm]. Identification of possible imported cases of avian influenza A (H5N1) in clinical settings in the U.S. depends on health-care providers consistently obtaining information on recent international travel and other potential exposures from persons who have certain respiratory symptoms.

IDPH is reporting that a [investigation was performed, including a travel history, laboratory testing and epidemiologic questioning, on a patient who had traveled to Southeast Asia in January, returned in February, and then presented for influenza-like illness about two weeks later, progressing to ARDS. Diagnostic testing conducted at UHL has confirmed the patient is Negative for Influenza A, Influenza B, H1, H3, H5 (so it is not any kind of flu, including avian flu). This situation allowed dry run for public health at the local and state level, the local hospital and the laboratories to become familiar with appropriate investigation of possible avian flu. If you have a patient that might have avian flu (see CDC screening criteria below), please contact us at 800-362-2736, and please notify UHL (1-800-421-4692) before any laboratory testing is done (they will let you know what samples to collect and how to send them to protect your lab personnel from any possible exposures).

CDC Guidelines for enhanced surveillance are as follows:

Testing for avian influenza A (H5N1) is indicated for hospitalized patients with:

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• radiographically confirmed pneumonia, acute respiratory distress syndrome (ARDS), or other severe respiratory illness for which an alternate diagnosis has not been established, AND
• history of travel within 10 days of symptom onset to a country with documented H5N1 avian influenza in poultry and/or humans (for a regularly updated listing of H5N1-affected countries, see the OIE website and the WHO website).

Testing for avian influenza A (H5N1) should be considered on a case-by-case basis in consultation with state and local health departments for hospitalized or ambulatory patients with:

• documented temperature of >38°C (>100.4°F), AND
• one or more of the following: cough, sore throat, shortness of breath, AND
• history of contact with poultry (e.g., visited a poultry farm, a household raising poultry, or a bird market) or a known or suspected human case of influenza A (H5N1) in an H5N1-affected country within 10 days of symptom onset.

Additional information on CDC’s recommendations and guidelines for professionals is available at: http://www.cdc.gov/flu/avian/professional/han020405.htm

Cruising Tips

Each year millions of U.S. citizens enjoy cruise vacations. In 2003, approximately 8.3 million passengers embarked from North American ports for their cruise vacation. Traveling on cruise ships exposes people to new environments and high volumes of people, including other travelers. Although an infrequent occurrence, this exposure creates the risk for illness, either from contaminated food, water or more commonly through person-to-person contact.

With spring break fast approaching and CADE in the process of investigating a possible salmonella outbreak related to a cruise ship, we thought it would be timely to provide some health tips for those who might be taking cruises this spring.

Follow these tips to help prevent the spread of illness:

1. Wash your hands!
   • Before and after
     - eating,
     - smoking,
   • After
     - touching your face,
     - going to the bathroom
   • When your hands are dirty.

2. Leave the area if you see someone get sick (vomiting or diarrhea).
   Report to cruise staff, if not already notified. You could become sick if you ingest contaminated particles that travel through the air.
3. Take care of yourself.
Get plenty of rest and drink lots of water. **Proper amounts of sleep**, helps **keep** your immune system in **good shape**. Drinking water helps prevents dehydration.

4. Be considerate of other people’s health.
If you’re ill before taking a cruise, call the cruise line to determine if there are alternative cruising options.

For more information on this article log onto CDC’s website at http://www.cdc.gov/nceh/vsp/pub/CruisingTips/cruisingtips.htm

**Rapid Screening Tests**

There are a growing number of rapid screening tests available for use in the physician office and clinical lab. For example, there are screening tests for Group A Strep, Rotavirus, Respiratory Syncytial virus and Influenza virus. In general, these tests perform well when the disease prevalence is high. However, false positive and false negative results occur therefore, it is best never to rely on the test results alone, always consider the results in light of the patient’s clinical signs and symptoms.

The ability of a screening test to differentiate between someone who has the disease and those who do not depends on the Sensitivity and Specificity performance characteristics of the test:
– Sensitivity is the ability of the test to give a positive result when the person tested truly has the disease.
– Specificity is the ability of the test to give a negative result when the person tested is free of the disease.

When selecting a product, it is useful to review the performance characteristics for that specific test. The performance characteristics stated in the package insert are the results obtained by the manufacturer under the best conditions possible. For further comparison of the product, it is best to look to articles in the peer reviewed literature for performance characteristics. In these articles, the sensitivity and specificity obtained by users under normal conditions will be closer to the results you will get.

**Meeting Announcement and Training Opportunities:**

**Rabies: Replacing Fear with Facts**

A brochure detailing the April 5, 2005 teleconference titled, "Rabies: Replacing Fear with Facts" is attached to this email. The conference is jointly sponsored by the University Hygienic Laboratory, NLTN, Iowa Department of Public Health, Veterinary Diagnostic Lab-ISU, and the CDC.

- The teleconference's primary audience is comprised from physicians and veterinarians who, after the teleconference, will understand: basic rabies epidemiology and infection;
- decision-making regarding animal quarantine vs. euthanasia;
- how to submit appropriate specimens and test request forms to local laboratories;
- testing conducted for rabies at local laboratories; and
- prescribing post-exposure prophylaxis.
Please forward this email and brochure to any individuals you believe may benefit from, or be interested in, attending this teleconference. The University Hygienic Laboratory appreciates your cooperation and interest. For further information please the Hygienic Lab's Training and Outreach Coordinator, Beth Hochstedler, at 319-335-4303.

**Antibacterial Susceptibility Testing 2005**

**A Free Teleconference Series Featuring Janet Hindler**

Attached is a brochure detailing the University of Iowa Hygienic Laboratory's free teleconference series titled, "Antibacterial Susceptibility Testing 2005." The teleconference is cosponsored by the Hygienic Lab, NLTN, the Minnesota Department of Health, the North Dakota Public Health Laboratory, and the Wisconsin State Laboratory of Hygiene. The series targets laboratory scientists working in clinical, public health, and academic environments.

The series' sole presenter, Ms. Janet Hindler, will discuss the Clinical and Laboratory Standards Institute's 2005 antimicrobial susceptibility testing (AST) guidelines and applying the guidelines to the laboratory "bench." After attending the teleconference, participants will understand: implementing current CLSI/NCCLS AST and reporting recommendations; methods for detecting resistance among commonly encountered pathogens that are most important from a clinical and public health perspective; which results obtained from patients' isolates need verification prior to reporting; and AST quality control recommendations.

**Teleconference Series Dates:**
- February 24, 2005
- March 10, 2005
- March 31, 2005
- April 12, 2005

All teleconferences will be held from 12:00pm to 1:30 p.m. Central Standard Time

The Hygienic Laboratory encourages you to notify other individuals who might benefit from, or just find interest in, attending this teleconference series. The University Hygienic Lab appreciates your cooperation and interest. For further information please contact Kyle Kingsley at 319-335-4864 or the Hygienic Lab's Training and Outreach Coordinator, Beth Hochstedler, at 319-335-4303.

**Regional Bioterrorism Conferences in Iowa**

**Region 1**
- April 26 and 27, 2005

Contact Information for the Conference:
- Denyse Gipple
  - Denigipple@grmedical.com
  - 641.236.2339
Region 2
April 20, 2005
Contact Information for the Conference:
Jodi Willemsen
Region 2 Education Coordinator
Bteducation@cghealth.com
641.421.9327

Region 3
April 28, 2005
Contact Information for the Conference:
Deb Bomgaars
Region 3 Education Coordinator
Debb@mtcnet.net
712.737.2971

Region 4
May 5, 2005
Contact Information for the Conference:
Pam Walker
Region 4 Education Coordinator
pwalker@harrisoncountyia.org
712.644.2220

Region 5
April 29, 2005
Contact Information for the Conference:
R. D. Keep
Region 5 Education Coordinator
Ema@mahaskacounty.org
641.672.1209

Region 6
March 2, 2005
Contact Information for the Conference:
Julie Stephens
Region 6 Education Coordinator
Julie.stephens@linncounty.org
319.892.6023

Have a healthy and happy week
Center for Acute Disease Epidemiology