EPI Update for Friday, June 22, 2007
Center for Acute Disease Epidemiology
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **False positive measles IgM test results**
- **Quick facts about meningitis**
- **Special announcement about contacting CADE**
- **Meeting announcements and training opportunities**

False positive measles IgM test results
In the last several weeks, IDPH has received positive measles IgM test results that could not be confirmed. They are therefore believed to be false positive test results. Most of these were performed at commercial laboratories.

If you suspect a patient has measles, consider it a public health emergency. Report it immediately to your local health department or IDPH (800-362-2736) for consultation and instructions on emergency UHL laboratory testing.

The following situations occurred in the last several weeks:

Situation 1
A 40-year-old male went to his physician with a few days' history of rash, fever and chills. He had probably already received one measles vaccine dose. The doctor appropriately thought it might be measles and ordered a measles IgM test. His results were as follows:

- Test 1: IgM positive and IgG negative
- Test 2: IgM indeterminate
- Test 3: IgM positive and IgG equivocal
- Test 4: IgM negative [done at the Centers for Disease Control (CDC)]
- **Conclusion**: This patient did not have measles.

Situation 2
A 5-year-old female went to her doctor with a rash, fever and cough. She had never been vaccinated. The doctor appropriately thought it might be measles and ordered a measles IgM test. Her results were as follows:

- Test 1: IgM indeterminate (blood sample was drawn 24 hrs after rash onset)
- Test 2: IgM indeterminate (blood sample was drawn 72 hrs after rash onset)
- Test 3: IgM negative (done at CDC)
- **Conclusion**: This patient did not have measles.

Situation 3
Three healthy new employees at a medical center, with no recent history of exposure to measles, were mistakenly tested for measles IgM, as well tested appropriately for measles IgG, as part of their pre-employment physical.

- Test 1 on all three: IgM positive and IgG positive
- Test 2 on all three: IgM negative [done at the University Hygienic Lab (UHL)]
- **Conclusion**: These patients did not have measles.

All five patients were placed into isolation for several days (at home) pending the repeated testing results. None had a history of exposure to persons with a measles-like rash, none had traveled out of the country, and none had been exposed to recent international travelers.

Since there is no indigenous measles transmission in the U.S., all measles found today in the U.S. is imported. Thus, it is important to ask about international travel or exposure to international travelers; however this does not exclude the diagnosis. Measles is highly contagious; in fact, you can enter a room that a measles patient left two hours prior, and still be exposed to measles.

Typically, measles should be suspected in any patient with a fever and a rash, and the three C's (cough, coryza or runny nose, and conjunctivitis). When ordering a measles IgM test to confirm the diagnosis of measles, remember that the IgM may not be positive until 3-4 days after rash onset. Meanwhile, if measles is suspected, the patient should be told to go home immediately and stay there while the diagnosis is being confirmed.

To confirm measles, IgM testing should be done as an emergency test and at UHL. Immediately, call your local health department or the state health department for assistance in dealing with a possible measles case.

For more information visit:
www.idph.state.ia.us/adper/common/pdf/epi_manual/measles.pdf

Quick facts about meningococcal meningitis
Recently there has been some media attention on meningitis. There may be some confusion about who may have been exposed when a case of meningococcal meningitis occurs, who needs antibiotic prophylaxis, and whether environmental cleaning is necessary. Below are steps IDPH recommends.

- **Stopping further spread of meningitis**
  It is important that a person with meningitis does not share saliva with anyone until at least 24 hours after antibiotics have been started. If the

patient is hospitalized, droplet precautions should be used while caring for patient.

- **Determining who has been exposed to meningitis**
  Consider these as exposed: any member of the patient's household; anyone who had contact with the patient's saliva; anyone who had household-like contact for at least eight hours with the patient during the seven days prior to the patient becoming ill. This may include close friends, sexual partners, or health professionals performing unprotected mouth-to-mouth resuscitation, intubations, or suctioning. *Neither people who work or go to school with a meningitis patient, or provide routine care for them as a hospital employee should be considered exposed.*

- **Determining who should get antibiotic prophylaxis**
  Everyone who has been exposed (see above) should be given antibiotics. Exposed persons who have previously received meningococcal vaccination should still receive antibiotic prophylaxis. They should receive the antibiotics as soon as possible. However, antibiotics probably do not work if given two weeks after the exposure.

- **Immunization**
  Two vaccines are available to protect against four serogroups (A, C, Y, and W-135) of meningococcal infections. A single dose of meningococcal vaccine is recommended for persons 11-12 years of age and those entering college. The vaccine is also recommended for travelers to countries where meningococcal infections are more common, certain high-risk individuals (such as those without spleens), and some laboratory personnel. It may also be used in some community outbreak situations.

- **Environmental cleaning**
  Environmental cleaning is not needed. However, articles soiled with saliva or discharges from the nose or throat should be cleaned.

For more information, visit
www.idph.state.ia.us/adper/common/pdf/epi_manual/meningitis.pdf.

Special announcement about contacting CADE
The Iowa Department of Public Health, Center for Acute Disease Epidemiology (CADE) will be switching phone systems beginning Friday after 4 PM thru Monday at 8 AM, June 22-25, 2007. This may cause disruptions using the disease reporting (1-800-362-2736) number. Please fax all disease reports to the CADE secure number (515-281-5698) during this time. For emergency phone consultations during this time, call the IDPH duty officer at 1-866-834-9671 to connect with the on-call medical epidemiologist.

Meeting announcements and training opportunities
The Iowa Disease Surveillance System (IDSS) training sessions for hospital infection control, laboratory staff, and local public health agency staff are beginning soon. If you plan to attend one of these sessions, it is important that you request a Premier Access Safeword Silver Token about 2 weeks before the training. If you have not requested a token yet, please contact John Satre at jsatre@idph.state.ia.us or (515) 242-5090.

Have a healthy and happy summer!
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800-362-2736