

EPI Update for Friday, May 7, 2010
Center for Acute Disease Epidemiology
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Outbreak of mumps in northwest Iowa**
- **Specimen collection for laboratory testing**
- **Meeting announcements and training opportunities**

Outbreak of mumps in northwest Iowa

An outbreak of eight mumps cases has been identified in Northwest Iowa (primarily in Sioux County); all have occurred in young adults, mostly college students. Mumps should be considered in any Iowan with consistent symptoms regardless of the patient's vaccination status; symptoms develop 12 to 25 days after exposure. (While MMR reduces the risk of mumps infection, in past outbreaks many people infected with mumps had previously received one or two doses of vaccine.)

Mumps is typically characterized by fever and swelling of the salivary/parotid glands, which usually lasts several days; however, about one-third of infections do not cause clinically apparent salivary/parotid gland swelling (often orchitis or mastitis occur). Respiratory symptoms are common. Infection in adulthood may produce a more severe disease. Encephalitis occurs rarely, and permanent sequelae such as deafness or death are uncommon.

Mumps is highly contagious and is spread through the air and by droplets of saliva or mucus from the mouth, nose, or throat of an infected person, usually when the person coughs, sneezes or talks. It is typically preventable through vaccination, however, recent studies have indicated that the efficacy of two doses of mumps vaccine may not be as high as previously believed (about 90 percent rather than 95 percent, especially in those whose last dose of MMR was given more than 10 years ago, as in the case of most college students.)

All eight confirmed cases have sought medical care in Sioux County; therefore, it is especially important that all health care providers in this and nearby counties are fully vaccinated (two doses of MMR) or have reliable history of prior mumps infection (more common in those born prior to 1957).

IDPH recommends all Iowans, especially those who may have been exposed to mumps, should check to be sure they have received two doses of the MMR vaccine (however vaccination after exposure may not prevent disease). Those who are not fully immunized are being referred to their personal health care provider for vaccination. Those with symptoms of mumps are also being told to contact their health care provider before seeking medical care to ensure that they do not expose others to mumps in the waiting room.

Please notify the local public health agency immediately of any suspected cases. Testing (IgM serology and buccal swab for PCR) of those with mumps consistent symptoms should be conducted through the University Hygienic Laboratory (UHL), and courier services are available to transport specimens to UHL (testing and courier provided free of charge). The local public health agency can assist in obtaining specimen collection kits, facilitating transport via the UHL courier, and providing instructions for specimen collection. The average turnaround time for the testing is approximately 48 hours (this includes courier transport time).

Health care providers should consider the following when evaluating patients with possible mumps:

- Persons suspected to have mumps should not sit in waiting rooms. These suspect cases should be escorted immediately to examining rooms and should not walk through common areas. A mask should be placed on the patient.
- Health care providers should wear appropriate personal protective equipment, i.e. masks (droplet spread).
- Any unvaccinated staff member who is exposed to a patient with mumps or who develops symptoms of mumps, regardless of vaccination status, should stop seeing patients and contact the health department immediately.

For additional information please call 800-362-2736 or visit www.idph.state.ia.us/adper/mumps.asp.

Specimen collection for laboratory testing

Optimal diagnostic testing requires both a sensitive and specific test, is performed at a qualified laboratory, and is the best possible specimen to test. This includes a specimen that was collected at the appropriate time post symptom onset and with the best technique, specimen type, transport medium, storage conditions, and shipment. These parameters vary according to the disease suspected to be the cause of illness and the type of test that is to be performed. For example, if testing for influenza virus, the best specimen would be a nasopharyngeal swab or aspirate in viral transport medium, collected within three days post symptom onset, and stored and shipped at refrigerated temperatures.

The University Hygienic Laboratory can provide information on specimen collection and testing options and any other instructions specific to a test. Collection instructions and other associated documents are available at www.uhl.uiowa.edu/kitsquotesforms/clinicaltestmenu.pdf or by calling 319-335-4500 or 1-800-421-IOWA (1-800-421-4692).

Meeting announcements and training opportunities

None

Have a healthy and happy (and mumps-free) week!

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