

EPI Update for Friday, December 5, 2008
Center for Acute Disease Epidemiology
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Rabies in a Missouri man**
- **No influenza in Iowa yet, but specimens should be sent on suspected flu cases**
- **Chickenpox, shingles, and vaccines**
- **Guidelines for Mumps testing**
- **Meeting announcements and training opportunities**

Rabies in a Missouri man

This week the first human rabies fatality since 1959 was reported in Missouri. The victim was bitten by a bat in mid-October, but did not seek rabies vaccination/rabies immunoglobulin. It was reported that the family mistakenly believed that if the bat was healthy and stayed healthy for a few days that it could not be rabid. This tragedy serves as a reminder to promptly seek medical care after exposure to bats.

Potential exposure to rabies occurs when you:

- a) are bitten by a bat.
- b) have physical contact with a bat and cannot definitively say you were **not** bitten (for example, the bat flies into your arm).
- c) find a bat in the room you or a non-verbal child, or if an incapacitated person has been asleep.

If potentially exposed:

- a) capture the bat and submit it for rabies testing immediately.
- b) if bat is not available, promptly seek medical attention.

NOTE: The **only** animals that can be observed (quarantined) to determine if rabid are dogs, cats and ferrets.

For additional rabies resources, visit, www.idph.state.ia.us/adper/rabies.asp

No influenza in Iowa yet, but specimens should be sent on suspected flu cases

No cases of flu have been confirmed in Iowa yet, but it will probably arrive in Iowa soon as flu has hit several of our neighboring states. Also, specimen submission to the state laboratory has been low recently, thus both IDPH and UHL request that health care providers submit specimens on patients with symptoms of influenza to UHL for free confirmatory testing. The following are the criteria for specimen submission:

- First and early cases with influenza-like illness (ILI) and periodic specimens throughout the season.
- Specimens should be sent regardless of rapid influenza test result for patients with ILI without other apparent cause.

- Influenza-like illness as defined by the CDC is a fever 100°F or greater with cough and/or sore throat without other apparent cause.
- Specimens should be sent to UHL using M4 transport media.

Directions for specimen collection and submission may be found at www.uhl.uiowa.edu/kitsquotesforms/vidandpcrcollectioninstructions.pdf. Test request forms are available at www.uhl.uiowa.edu/kitsquotesforms/vdvpbpcrrequestform.pdf.

The confirmatory testing performed by UHL determines the type and strains of influenza circulating in Iowa as well as possible indications of antiviral resistance. This information is then shared with health care providers, public health, and the public allowing for better treatment and control. Without your submissions these efforts are not possible.

Chicken pox, shingles, and vaccines

Chicken pox (varicella) is caused by varicella zoster virus (VZV). After the first infection, the virus can stay in the body and hide in nerve cells. An individual usually will only get chicken pox once in their lifetime. Chicken pox occurs approximately 2-3 weeks after exposure. The symptoms of chicken pox include generalized itchy vesicular rash consisting of 250-500 lesions, mild fever and tiredness. The symptoms of shingles are the sudden occurrence of vesicles (poxs) on one side of the body, usually on the chest and lower back. Pain can occur in the area 48-72 hours before developing lesions.

The varicella vaccine was introduced in 1995. The vaccine efficacy is estimated to be around 80 percent against all infection and 95 percent against severe disease. Breakthrough infection can occur; but it is significantly milder than naturally occurring chicken pox, with fewer lesions (generally fewer than 50). Recently, the Advisory Committee on Immunization Practices (ACIP) recommends second doses of vaccine for children, with the first dose at age 12-15 months and the second dose at age 4-6 years. A second dose catch-up vaccination is recommended for children, adolescents, and adults who have received only one dose.

Shingles or herpes zoster results from a reactivation of the individual's first infection and a person may have multiple bouts of shingles. Shingles has a high burden of disease with over one million cases annually. Fifteen to 30 percent of people will develop shingles during their lifetime with the risk being greatest among immunosuppressed and the elderly. A shingles vaccine is available and ACIP recommends routine vaccination with one dose of vaccine for adults 60 years of age and older, regardless of prior history of zoster disease.

For more information about chicken pox and the varicella vaccine, visit, www.cdc.gov/vaccines/vpd-vac/varicella/default.htm. For more information about shingles and its vaccine, visit, www.cdc.gov/vaccines/vpd-vac/shingles/vac-faqs.htm.

Guidelines for mumps testing

Recently Iowa experienced the largest epidemic of mumps in 20 years in the U.S.; fortunately, now only a couple cases are occurring each month. Since many people and almost all children are vaccinated, testing only for mumps antibody can be problematic when trying to diagnosis disease. If you suspect a patient has mumps, both serology

and PCR from a buccal swab are recommended. Samples should be collected and shipped as follows:

PCR on buccal swab: Parotid gland duct (buccal) swab for PCR testing (in M4 viral transport medium) may be collected from date of onset of symptoms to nine days after onset of symptoms. Massage the parotid (salivary) glands for 30 seconds prior to swabbing the buccal cavity (the space near the upper rear molars between the cheek and the teeth). Place swab into M4 Viral Transport Medium and do not remove swab. Specimens must be stored and shipped cold (on ice packs). Laboratories have M4 transport tubes available in the UHL Biodefense kits (blue box), herpes kits, and virus isolation kits. Include a completed Virus Detection and PCR Request form.

Serologic testing: Serum for mumps virus IgM should be collected three to four days after symptom onset. Collect 7-10 ml blood in a red top or serum separator tube (SST). Specimen may be shipped with the buccal swab on an ice pack or separately at ambient temperature. Include a completed Serology Test Request (this form is also used for the QuantiFERON TB gold test).

Information on how to test for other viruses and UHL test request forms are available on the UHL web site. For more information, visit, www.uhl.uiowa.edu .

Meeting announcements and training opportunities

None.

Have a healthy and happy week!

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