

EPI Update for Friday, July 17, 2009
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Obesity emerges as a potential risk factor for severe illness in novel influenza A (H1N1) infections**
- **Pertussis prevalence reinforces need to vaccinate adults**
- **Tips for health care providers managing bat-related rabies exposure cases**
- **Meeting announcements and training opportunities**

Obesity emerges as a potential risk factor for severe illness in novel influenza A (H1N1) infections

A recent report issued by the Centers for Disease Control and Prevention (CDC) indicates the potential for severe complications of novel influenza A (H1N1) infections, particularly in the extremely obese.

The report described novel influenza A (H1N1) illness in 10 patients in Michigan, nine with a body mass index (BMI) ≥ 30 , including seven who were extremely obese with a BMI ≥ 40 . Of the 10 patients, five had pulmonary emboli, nine had multiorgan dysfunction syndrome, and three died. Only three patients had underlying health conditions associated with a higher risk for seasonal influenza complications. The median age of patients was 46 years.

Obesity has not been previously identified as a risk factor for severe complication of seasonal influenza. Additional study is needed to determine whether obesity is an independent risk factor for severe complications of novel influenza A (H1N1) virus infection. To access the CDC study, please visit www.cdc.gov/mmwr/preview/mmwrhtml/mm58d0710a1.htm

Pertussis outbreaks reinforce need to vaccinate adults

Currently, cases of pertussis are being reported in four Iowa counties. These cases emphasize the importance of vaccination. A report issued in June, 2008 by the CDC details the recommendations of the Advisory Committee on Immunization Practices (ACIP) for pertussis vaccinations including adults, children, and health care workers.

Pertussis can be a serious disease in young children. Common complications in children younger than one year of age include seizures, pneumonia, and cardiovascular compromise. The case-fatality rate among newborns and infants aged younger than two months is 1.8 percent.

In 2005, the ACIP issued vaccine guidelines recommending vaccination among HCWs, particularly those with direct patient contact with infants aged younger than 12 months. Widespread implementation of this recommendation AND vaccinating all adults appropriately can reduce the risk for future pertussis transmission in Iowa.

For more information please visit these Web sites:

www.cdc.gov/mmwr/preview/mmwrhtml/rr5517a1.htm,

www.idph.state.ia.us/idph_universalhelp/main.aspx?system=IdphEpiManual.

Considerations for health care providers managing bat-related rabies exposure cases

Traditionally, IDPH has experienced an increase in the number of bat-related rabies consultation calls to the department in the late summer and early fall months. According to the Iowa Department of Natural Resources, bats usually migrate in August and September, when days begin to shorten. Silver-haired, hoary, evening, red, and Indiana bats migrate from Iowa, and return in May. Big and little brown, eastern pipistrelles, and northern myotis bats tend to hibernate in caves in eastern Iowa counties. The big brown bat is the species that most commonly hibernates in homes in Iowa during the winter. Another potential explanation for the increased calls regarding human – bat interaction is that bat populations are highest during these months as the young pups are now mobile and moving throughout Iowa.

Any direct contact between a human and a bat should be evaluated for rabies exposure. Situations that might qualify as exposures include:

- Being bitten by a bat
- Waking up to find a bat in the room
- Finding a bat in the room of an unattended child or incapacitated person.

Bat exposures pose a special problem because bat bites are difficult to detect on the skin and may not be noticed. If an exposure has occurred, the bat should be captured if possible and submitted for testing. Avoid damaging the bat's head during capture, because an intact brain is essential for rabies testing. Deceased bats should be kept cool at refrigerator temperatures, but not frozen. Rabies treatment is usually recommended if the bat cannot be submitted for testing.

IDPH provides 24 hour consultation for rabies. During business hours call 800-362-2736 and after-hours 515-323-4360 (the State Patrol will page the on-call medical staff).

Meeting announcements and training opportunities

The Fall Epidemiology Updates are one-day seminars held at six sites throughout Iowa. CADE staff will provide presentations on epidemiologic topics of interest. The updates are intended for local public health staff, infection preventionists, and staff from long term care facilities. The following are the dates

and locations of the Fall Updates. Additional details including a description of topics will be provided at a later date.

Cherokee	September 17
Marshalltown	September 30
Ottumwa	October 2
Creston	October 6
Cedar Rapids	October 14
Mason City	November 18

Have a healthy week!

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800-362-2736