

**EPI Update for Friday, May 2, 2008**  
**Center for Acute Disease Epidemiology (CADE)**  
**Iowa Department of Public Health (IDPH)**

**Items for this week's EPI Update include:**

- **Measles outbreaks: update**
- **Measles immunity in health care workers**
- **2007 annual rabies report released**
- **Interesting Q fever case**
- **Did you ever wonder...?**

**Measles outbreaks: update**

If measles is suspected contact public health immediately! We are available 24/7 at 800-362-2736. This is a public health emergency; please do NOT wait until the next business day to contact us.

From January 1 through April 25, 2008, 64 cases of confirmed measles have been reported in the United States; 10 states have cases (including Illinois) and outbreaks are ongoing in five: Wisconsin, Washington, Arizona, Michigan, and New York. There are no cases in Iowa to date. (Several cases of children and adults with measles-like symptoms have been investigated; all have been proved not to be measles).

Several of the initial measles cases were in unvaccinated international travelers who then spread the disease in the United States to non-travelers. These cases and outbreaks resulted primarily from failure to vaccinate, and highlight the following issues:

- The ongoing risk of measles in unvaccinated persons (and in those rare individuals in whom the vaccine did not "take"),
- The risk of ill persons transmitting measles to others, including infants too young to be vaccinated, and
- The importance of maintaining high levels of vaccination.

The measles vaccine (MMR) is up to 99 percent effective after two doses.

If measles is being considered as a diagnosis, draw blood to be sent to UHL (see below) and isolate the patient (while at clinic/hospital, and then at home after preliminary diagnosis and until diagnosis is proved not to be measles. At that time check the vaccine status of family members, other exposed patients and medical staff to be sure they are fully vaccinated; if not, vaccinate immediately as vaccine can prevent illness if given quickly, and within 3 days of exposure.)

The classic signs of measles are fever, cough, conjunctivitis, and coryza, with a red blotchy rash (usually beginning on the face) occurring 3-7 days after onset of symptoms. (Otitis media is a common presenting symptom). Ask patient or

parent about travel out of state or contact with others with similar illness in the previous 21 days (but many cases have not traveled nor remember exposure to ill persons, so this does not rule out measles). Measles is highly contagious and can be transmitted to others without close contact, even hours after the person with measles has left the area.

Test blood for measles IgM (not IgG) antibodies; a blood specimen should be drawn at the time of presentation. However, if tested early in illness this test may be falsely negative, thus those with negative tests should be redrawn again at least 3 days after onset of rash (keeping patient in isolation during this time). Send these specimens immediately to University Hygienic Laboratory for emergency testing. Contact public health for help in coordinating testing.

### **Measles immunity in health care workers**

Due to the measles situation in Iowa's bordering states and the U.S., it is important to ensure that all health care workers are vaccinated against measles. (This includes anyone who works in a health care facility).

See <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm57e501a1.htm>

In accordance with current recommendations, health care personnel should have documented evidence of measles immunity:

- Documented receipt of 2 doses of live measles virus vaccine
- Laboratory evidence of immunity
- Documentation of physician-diagnosed measles
- Or birth before 1957
  - ✓ Although birth before 1957 is generally considered evidence of measles immunity, during a measles outbreak medical facilities should recommend 1 dose of MMR vaccine to health-care workers born before 1957 who do not have a history of physician-diagnosed measles or laboratory evidence of measles immunity

More information on measles, such as fact sheet, Q and A's, and tools for health care providers, will be posted soon at [www.idph.state.ia.us](http://www.idph.state.ia.us) .

### **2007 Iowa annual rabies report released**

The 2007 annual rabies in Iowa report has been released. In 2007, 31 cases of animal rabies were reported in Iowa. Rabies was identified most frequently in wildlife species (13 bats and 5 skunks), and thirteen cases were diagnosed in domestic species (7 cats, 5 dogs, and 1 horse).

CDC announced this year that the United States is free from dog strain rabies, the strain that is easily transmitted from dog to dog. However, this does not mean our dogs are free from rabies risk. Dogs (and other mammals) are susceptible to the bat and skunk strain rabies we commonly see in Iowa. Therefore, we need to continue to vaccinate our pets and valuable livestock against rabies. Dog bites to humans are still considered a rabies risk and need to be assessed accordingly.

Nationwide, one human rabies case was reported in 2007. This case occurred in Minnesota and underscores the importance of seeking prompt medical attention if you are bitten by or come in direct contact with a bat. Bat bites cannot always be visibly detectable; if you have any physical contact with a bat, you should immediately wash the exposed area thoroughly with soap and water. If possible, the bat should be captured and tested for rabies. If capture is not possible, rabies prophylaxis may be needed, thus medical attention should be sought.

Additionally, if a bat is found in a room with an unattended child, a sleeping person, or anyone who cannot reliably communicate what happened, this is considered a potential bat exposure, and the bat should be caught and tested if possible, as rabies prophylaxis may be needed. For more information visit: [www.idph.state.ia.us/adper/common/pdf/cade/rabies\\_final\\_2007.pdf](http://www.idph.state.ia.us/adper/common/pdf/cade/rabies_final_2007.pdf)

### **Interesting Q fever case**

Recently, a human case of Q fever was identified in Iowa. *Coxiella burnetii*, the bacteria which causes Q-fever, is prevalent in our environment and periodically causes disease in both animals and humans. An investigation occurred, and no additional human cases have been identified to date. Q fever in humans should be reported as an unusual disease, and we receive case reports each year.

Q fever in animals is a reportable disease to the Iowa Department of Agriculture and Land Stewardship (IDALS). When IDALS receives animal disease reports, they educate animal facility staff on testing, treatment, prevention and clean-up efforts.

Local public health is conducting education and awareness in-service sessions for all of the employees of the animal facility. IDALS has conducted an onsite assessment of the operation and provided animal health recommendations.

For more information see

[http://www.cdc.gov/ncidod/diseases/submenus/sub\\_q\\_fever.htm](http://www.cdc.gov/ncidod/diseases/submenus/sub_q_fever.htm)

### **Did you ever wonder...?**

- How many children have been born to women over 50?
- Where those children were born?
- Which state or county has the highest mortality rate?
- What's the leading cause of infant death in Iowa and how does Iowa compare to other states?

To review national, state, and county data related to these questions (and many others) visit CDC Wonder database. This is one example of the many data sets available from the Centers for Disease Control and Prevention (CDC).

For more information visit: <http://wonder.cdc.gov/welcome.html> and <http://wonder.cdc.gov/DataSets.html>.

### **Meeting announcements and training opportunities**

None

**Have a healthy and happy (and hopefully measles free) week!**

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800-362-2736