# EPI Update for Friday, April 7, 2006 Center for Acute Disease Epidemiology Iowa Department of Public Health (IDPH)

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

- Mumps update
- Influenza update
- Don't forget about tetanus, diphtheria, and pertussis
- Fatal cases of childhood lead poisoning in the United States
- Meeting announcements and training opportunities

### Mumps update

As of the end of Wednesday, April 5<sup>th</sup>, IDPH had 365 confirmed, probable, and suspect mumps cases reported. Forty-six of a total of 99 counties have been affected. Right now, about 20 new cases are being reported each day. College-age students are still being affected more than any other age group. No person-to-person spread has been documented in school or daycare settings, but transmission within families has occurred. The most recent update (Thursday, April 6) is available on our Web site at <a href="http://www.idph.state.ia.us/adper/mumps.asp">http://www.idph.state.ia.us/adper/mumps.asp</a>.

Please visit our Web site next week to view several new documents including an article from this week's Centers for Disease Control and Prevention (CDC) Morbidity and Mortality Weekly Report (MMWR) on the Iowa Mumps Epidemic.

## Influenza update

Influenza activity continues to decline rapidly.

## Don't forget about tetanus, diphtheria, and pertussis

The Advisory Committee on Immunization Practices (ACIP) recently reviewed tetanus, diphtheria, and pertussis vaccination policy in the United States, with emphasis on the vaccination policy for adolescents. Their findings and current recommendations were published in the February 23,

2006 MMWR 55 (early release) available at <a href="https://www.cdc.gov/mmwr/preview/mmwrhtml/rr55e223a1.htm">www.cdc.gov/mmwr/preview/mmwrhtml/rr55e223a1.htm</a> and <a href="https://www.cdc.gov/mmwr/pdf/rr/rr55e223.pdf">www.cdc.gov/mmwr/pdf/rr/rr55e223.pdf</a>. The report describes the clinical features and epidemiology of pertussis among adolescents, and summarizes the immune response, efficacy, and safety data of the two Tdap vaccines licensed for use.

Regarding tetanus vaccination in particular, the ACIP recommends a 10-year interval for routine administration of Td (adults) and a 5-year minimum interval between the last pediatric DTaP and the adolescent Tdap dose. Since we are approaching the time of year when animal bites are common, and the majority of individuals bitten by animals are children and adolescents, it is very important to confirm tetanus vaccination dates for persons under 18 years of age when assessing need for post injury treatment.

#### Fatal cases of childhood lead poisoning in the United States

Since 1990, three children have died from lead poisoning in the United States: a 2-year-old boy from Milwaukee in 1990, a 2-year-old girl from New Hampshire in 2000, and a 4-year-old boy from Minneapolis in February 2006.

On Sept. 12, 1990, the boy from Milwaukee was admitted to a hospital with a four-day history of lethargy and reduced appetite. The parents reported that the child had eaten paint chips. The child had symptoms consistent with lead encephalopathy, and his blood lead level was 144 micrograms per deciliter ( $\mu g/dL$ ). (A child is considered to be lead-poisoned at a blood lead level of 10  $\mu g/dL$ .) Chelation treatment was started, but the child developed seizures, became comatose, and died 26 hours after admission.

On March 29, 2000, the girl from New Hampshire was seen at a community hospital emergency department with a low-grade fever and vomiting. The child was diagnosed with strep throat. Later, the child's vomiting became worse, and she was admitted to the hospital. The child was tested for lead poisoning, and her blood lead level was 391  $\mu$ g/dL. Chelation treatment was started, but the child was pronounced brain dead four days later. Inspection of the child's home found deteriorated lead-based paint.

In mid-February 2006, a 4-year-old boy was seen at a hospital pediatric emergency department in Minneapolis for vomiting. After a complicated course of illness the child died (see

www.cdc.gov/mmwr/preview/mmwrhtml/mm5512a4.htm for details). The child had a blood lead level of 180  $\mu$ g/dL, and later died. Upon autopsy, a heart-shaped charm imprinted with "Reebok" was removed from the child's stomach. The charm was 99.1% lead by weight.

It is possible that some of these children might have survived if lead poisoning had been suspected early.

These three cases demonstrate that lead poisoning should be suspected in young children with unexplained and prolonged gastric symptoms such as vomiting, a history of mouthing or ingesting nonfood items (such as paint chips), developmental delays, or increased intracranial pressure. If lead poisoning is suspected, a blood lead level should be drawn and tested immediately. Next week's article will describe an Iowa case which demonstrates that obtaining a blood lead level immediately under these circumstances can save a child's life.

### Meeting announcements and training opportunities:

Presented by IDPH and the Iowa Department of Education
April 17, 2006
2:00 PM to 3:00 PM OR 3:15 PM to 4:15 PM
OR
April 24, 2006
10:00 AM to 11:00 AM
Broadcast via Iowa Communications Network (ICN)

No registration is required. Program materials, agenda, and ICN locations will be posted by April 11, at <a href="https://www.idph.state.ia.us/pandemic">www.idph.state.ia.us/pandemic</a> and <a href="https://www.state.ia.us/educate/">www.state.ia.us/educate/</a>.

Terrorist Threats to our Food Supply: Food Protection and Defense--Science, Ethics & Law

This conference will be presented Friday, April 21 at Cowles Auditorium, Humphrey Center, at the University of Minnesota. For more information about registration, continuing education credits, agenda and speakers, visit

the conference Web site at <a href="http://www.lifesci.consortium.umn.edu/conferences/foodsafety.php">http://www.lifesci.consortium.umn.edu/conferences/foodsafety.php</a>

Have a healthy and happy week!
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