

## **EPI Update for Friday October 21, 2005**

### **Center For Acute Disease Epidemiology**

#### **Iowa Department of Public Health**

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

- **Influenza Update: Influenza Links & Antiviral Medications**
- **IDPH Recommendations Regarding Stockpiling Antiviral Medications**
- **Pertussis Vaccine Study**
- **Rx for Survival**
- **Polio in Minnesota**
- **Occupational Exposure to HIV - Updated Guidelines**
- **Announcements / Upcoming Meetings**

#### **Avian Influenza Update/Pandemic Influenza Preparedness International**

The H5N1 strain identified in Asia has been recently identified in Turkey and Romania. In all three countries the strain was identified in poultry. No human cases have been reported in these countries to date. Though the reported mortality rate is high, it is important to note that there are likely mild cases of H5N1 infection not captured by local, national and WHO surveillance efforts.

October 15<sup>th</sup> -Europe-the Standing Committee on Food Chain and Animal Health meet and are expected to review proposals on prevention measures. This includes asking each member state to define which areas are at risk and apply necessary measures to reduce risk to separate wild birds from poultry.

October 14<sup>th</sup> - Eurasia-Russian authorities ask World Organization for Animal Health to send a team to Siberia.

October 20<sup>th</sup> - World Health Organization- there have been 118 confirmed cases in Indonesia, Thailand, Vietnam and Cambodia. Of those 118 cases, 61 have died. The most recent fatality occurred in Thailand.

#### ***U.S.***

Federal public health officials are working to finalize a national pandemic influenza response plan and to provide guidance to state health departments for the development of state plans. In addition new and updated resources are being posted at the CDC web site on avian influenza.

#### ***Iowa***

Updated fact sheets on pandemic and avian influenza, as well as antiviral medications are now available on the IDPH website. The fact sheets contain updated information for

health care providers and general public audiences. The fact sheets are available on our website at: <http://www.idph.state.ia.us/adper/flu.asp>.

### **IDPH Recommendations Regarding Stockpiling Antiviral Medications**

The Iowa Department of Public health has issued a Public Health Bulletin titled: "Recommendations for Health Care Providers Regarding Stockpiling Influenza Antiviral Medication" and is encouraging all health care providers to review. The recommendations are available on our website at: <http://www.idph.state.ia.us/adper/flu.asp>.

### **Pertussis Vaccine Study**

National Institute of Health (NIH) has issued a news release with the headlines "ACELLULAR PERTUSSIS VACCINE PROVES EFFECTIVE IN ADULTS, ADOLESCENTS." The news release is referencing a study published in the New England Journal of Medicine. The title of the article is "A vaccine to protect adults and adolescents against illness due to 'Bordetella pertussis' infection -- or whooping cough -- has proved more than 90 percent effective in a national, large-scale clinical study."

While this is positive news, the Advisory Committee on Immunization Practices (ACIP) voted to recommend routine use of these products for adolescents; however, the committee has not yet recommended these vaccines for adults. ACIP is scheduled to meet at the end of the month to review pertussis immunization strategies for adults.

Despite positive results related to the new Tdap vaccines, **close contacts to a case of pertussis need to be treated / prophylaxed with antibiotics regardless of their immunization status.** Instances of pertussis have begun to increase again in Iowa this fall. During 2004, and to date in 2005, over 50% of confirmed pertussis cases occur in patients between ages 10 to 18, with the highest concentrations in patients aged 12 - 15 (middle-school aged children). Health Care Professionals are encouraged to follow recommended guidelines for vaccination, prophylaxis, and treatment for pertussis within IDPH's EPI manual. Addition resources and education products can be found at the following links:

[Guidelines for use of Tdap vaccines <http://www.cdc.gov/nip/vaccine/tdap/default.htm>](http://www.cdc.gov/nip/vaccine/tdap/default.htm)

[October 10, 2005 Public Health Bulletin on Pertussis](http://www.idph.state.ia.us/adper/common/pdf/pertussis/pertussis_public_health_bulletin.pdf)

[<http://www.idph.state.ia.us/adper/common/pdf/pertussis/pertussis\\_public\\_health\\_bulletin.pdf>](http://www.idph.state.ia.us/adper/common/pdf/pertussis/pertussis_public_health_bulletin.pdf)

[Influenza vs. Cold vs. Pertussis](http://www.idph.state.ia.us/adper/common/pdf/flu/flu_colds_pertussis.pdf)

[<http://www.idph.state.ia.us/adper/common/pdf/flu/flu\\_colds\\_pertussis.pdf>](http://www.idph.state.ia.us/adper/common/pdf/flu/flu_colds_pertussis.pdf)

## **Rx for Survival**

Rx for Survival highlights many of the public health accomplishments that have more than doubled life expectancy in developed countries within the past century. The highlights cover such topics as vaccines to antibiotics, and/or environmental health to nutrition.

Rx for Survival is more than just a documentary, and includes a six-part series telling compelling stories of public health workers across the globe. The producers have created partnerships with media, schools, and public health agencies across the globe. A simultaneous media effort will reach over 200 million Americans, promoting public health and offering viewers a way to make a difference. For more information, follow this link <http://www.tchd.org/special.htm>.

## **Polio in Minnesota**

On September 29, 2005, the Minnesota Department of Health (MDH) identified poliovirus type 1 in an unvaccinated, immunocompromised infant girl aged 7 months (the index patient) in an Amish community whose members predominantly were unvaccinated for polio. The patient has no paralysis; the source of the patient's infection is unknown. Subsequently, poliovirus infections in three other children within the index patient's community have been documented.

Most poliovirus infections are asymptomatic or cause mild, febrile disease. Poliovirus infections occasionally cause aseptic meningitis and one out of 200 infections from poliovirus type 1 results in paralytic poliomyelitis, characterized by acute onset of flaccid paralysis that is typically asymmetric and associated with a prodromal fever. Poliovirus is spread through fecal material, oral secretions, and fomites. Widespread transmission among vaccinated health-care workers or in a community with high vaccination coverage is unlikely because fully vaccinated persons are not at risk for disease from this or other polioviruses and seldom shed the virus for longer than a week if they are infected.

The National Immunization Survey reports that polio vaccination coverage in Minnesota is 93% for children aged 19--35 months and 98% for school-aged children; however, communities of unvaccinated persons exist in Minnesota and many other states (5). The risk for transmission in communities with low vaccination coverage is high. The estimated rate of transmission for wild poliovirus among unvaccinated household contacts is 73%--96% (6). Contacts between persons in communities with low vaccination coverage pose the potential for transmission of this poliovirus to other communities in the United States, Canada, and other countries.

This outbreak reminds us why it remains important to promote vaccinations.

## **Occupational Exposure to HIV - Updated Guidelines**

CDC has released updated guidelines for the management of occupational exposures to HIV. Most importantly, the guidelines modify and expand the list of antiretroviral medications that can be considered for post-exposure prophylaxis (PEP). The previous first-choice regimen was found to have unacceptably high levels of toxicity and side

effects. Newer regimens with lower toxicity are now recommended. Other factors, such as information on antiretroviral resistance in the source patient or current medications in the exposed person should also be considered when formulating the PEP regimen.

If indicated, PEP should be initiated as soon as possible, preferably within hours. Consultation with persons having expertise in antiretroviral therapy and HIV transmission is desirable and can be achieved by calling the PEpline at 1-888-448-4911, 7 days a week. Reevaluation of exposed persons is strongly encouraged within 72 hours post exposure, especially if more information about the exposure or source becomes available. The report is available at <http://www.cdc.gov/mmwr/pdf/rr/rr5409.pdf>

### **Meeting Announcements and Training Opportunities**

- The next Fall Epidemiology Updates are taking place on Tuesday October 25, 2005, in Marshalltown and Thursday, October 27, 2005, in Marion. See the Fall Epidemiology Updates Brochure, now available online at the Iowa Department of Public Health's web site, for more details.

[http://www.idph.state.ia.us/common/pdf/conferences/disease\\_prevention\\_fall.pdf](http://www.idph.state.ia.us/common/pdf/conferences/disease_prevention_fall.pdf)

- ***SAVE THE DATE: "When Antibiotics Don't Work"***

IARTF Grand Rounds Teleconference scheduled for December 14, 2005, from Noon to 1:00 PM. Topics include:

- 1) Antibiotic Resistance Surveillance
- 2) Decreasing Antibiotic Resistance Through Patient Education
- 3) Community Acquired MRSA

- ***Upper Midwest Center for Public Health Preparedness Grand Rounds Series: The Role of Blood Centers in Emergency Response will be held on Thursday, October 27, 2005. For more information, see the Grand Rounds web site at [http://www.public-health.uiowa.edu/icphp/grand\\_rounds/current\\_session/gr102705.html](http://www.public-health.uiowa.edu/icphp/grand_rounds/current_session/gr102705.html)***

- **October is Children's Health Month**

Children's Health Month is celebrated in October, but children's health is important year-round. Visit <http://www.childrenshealth.gov/> to view information on topics such as childhood illnesses, education, and child care, health promotion, limiting environmental hazards, reducing risky behaviors, and safety issues. The calendar is a point of interest.

