

EPI Update for Friday, October 31, 2008
Center for Acute Disease Epidemiology
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- Hemorrhagic *E. coli* cases on the rise
- Hansen's disease in Iowa
- New "What We Do" page offers two ways to learn more about IDPH
- Meeting announcements and training opportunities

Hemorrhagic *E. coli* cases on the rise

Since late September, 29 cases of *E. coli* O157:H7 and other related strains of hemorrhagic *E. coli* have been reported to IDPH. This compares to an average of 18.4 cases during the same time period over the last five years. Of the 29 cases, 22 involve children ages 12 years and younger. Several of these children have been hospitalized and a few have developed hemolytic uremic syndrome (HUS).

All hemorrhagic *E. coli* cases are investigated by IDPH and local health departments to identify common exposures. The cases investigated this year include a cluster of five cases in eastern Iowa with a common exposure of unpasteurized apple cider; some of these and other sporadic cases have also reported eating unwashed apples and ground beef that may not have been fully cooked.

E. coli infections can be prevented:

- Make sure fresh juice or milk has been pasteurized. Even small samples can make a person sick.
- People ill with diarrhea should not prepare or touch food meant for others.
- If soap and water are not available, use an alcohol based hand gel to clean hands.
- When caring for someone with diarrhea, wash your hands and those of the ill person frequently.
- Cook all ground meats, especially hamburger, thoroughly – to a temperature of 155 F for at least 15-16 seconds, or until juices run clear and no pink is visible.
- Always wash fresh vegetables or fruits thoroughly before eating.

All patients with hemorrhagic *E. coli* and/or HUS should be reported to the Iowa Department of Public Health or their local health department. For more information on *E. coli*, go to

www.idph.state.ia.us/idph_universalhelp/main.aspx?system=IdphEpiManual&context=E.coli_O157:H7_Factsheet .

Hansen's disease in Iowa

Hansen's disease, formerly called leprosy, is caused by a bacillus, *Mycobacterium leprae*. Recently a case was reported in Iowa in an immigrant from Guam. Typically, imported cases of Hansen's disease are reported every couple years in Iowa. While leprosy is not endemic in Iowa, it is endemic in California, Hawaii, Louisiana, Texas and Puerto Rico, so one does not have to leave the country to contract this disease. Cases of Hansen's disease must complete approximately six months of treatment with up to three antibiotics. Patients are not isolated from society today, as leprosy is very difficult to spread to others. Public health interventions are limited to screening and education of household contacts of cases.

Mycobacterium are unique in their ability to survive for long periods of time internal and external to hosts due to a coarse, waxy outer wall. In Latin, "myco" means wax, referring to the waxy compounds in the bacteria's cell wall. The cell wall is also thick and hydrophobic making it a particularly hardy genus. A unique feature contributing to its long incubation period is the ability of *Mycobacterium leprae* to divide as slowly as once every 20 days. Other bacteria, such as *E. coli*, multiply every 20 minutes. *Mycobacterium leprae* has never been grown in bacteriologic media or cell culture, but has been grown in mouse foot pads. Skin biopsies are needed for definitive diagnosis.

In 2002, the number of new cases detected worldwide was 763,917. In 2002, 96 cases occurring in the United States were reported to CDC. In that same year, WHO reported that 90% of all cases occurred in Brazil, Madagascar, Mozambique, Tanzania, and Nepal

New "What We Do" page offers two ways to learn more about IDPH

By going to www.idph.state.ia.us/what_we_do.asp, you can go on a virtual tour of IDPH's vision, mission, goals, strategies, and programs.

To help connect our planning with the efforts of local and state public health professionals on the Iowa Public Health Standards, the "virtual tour" is based on the components of the Standards. In the tour, you can learn more about the strategies we use to achieve our goals to:

- prevent injuries,
- promote healthy behaviors,
- protect against environmental hazards,
- prevent epidemics and the spread of disease,
- prepare for, respond to, and assist communities in recovery from public health emergencies, and;
- strengthen the public health infrastructure, which includes building organizational capacity and assuring access to quality health services and a qualified health workforce.

You also can read short profiles of the IDPH programs working to meet these goals. Each profile includes:

- why the program is important to promoting and protecting the health of Iowans,
- a description of services the program provides,
- measures of progress toward program goals,
- what Iowans can do to help the program achieve its goals,

- fiscal year 2006, 2007, and 2008 expenditure information; and
- a main telephone number and Internet address for contacting the program.

Plans to enhance this tour include links to action plans, and to the data and measures we use to evaluate our progress. Contact Jonn Durbin at 515-281-8936 or jdurbin@idph.state.ia.us with questions or suggestions for improving the site.

Meeting announcements and training opportunities

None.

Have a healthy and happy week!

Center for Acute Disease Epidemiology
Iowa Department of Public Health
800-362-2736