

EPI Update for Friday, March 27, 2009
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **West Nile Virus: ten years later**
- **Norovirus outbreak in northwest Iowa**
- **Safe cooking outdoors involves more than just food safety**
- **Meeting announcements and training opportunities**

West Nile Virus: ten years later

West Nile Virus (WNV) was first discovered in the U.S. in New York City in 1999. Since that time, WNV has spread across the U.S. and has been detected in humans, animals, and mosquitoes. The first human cases of WNV in Iowa were reported in 2002. The next year the numbers peaked and then decreased over the next several years, but the number never went back to zero. This pattern is typical when a new disease is introduced into a virgin area.

Human cases of West Nile Virus in Iowa and nationally:

- 2002: 55 in Iowa, nationally 4156
- 2003: 147 in Iowa, nationally 9862
- 2004: 23 in Iowa, nationally 2539
- 2005: 37 in Iowa, nationally 3000
- 2006: 37 in Iowa, nationally 4263
- 2007: 30 in Iowa, nationally 3630
- 2008: 5 in Iowa, nationally 1338

Last spring and summer, Iowa experienced above average precipitation and flooding. This provided ideal conditions for an outbreak of nuisance mosquitoes (mosquitoes that do not carry disease but still bite) resulting in far more being seen in the month of June than is typical. This flooding probably suppressed the type of mosquitoes that do carry disease because rushing water flushes their aquatic larval stages out of the preferred stagnant water habitats. Early season disease-carrying mosquito activity is important for the amplification of the virus between mosquitoes and birds; a critical step for disease to be seen later in humans. In addition to above average precipitation, Iowa experienced moderate temperatures throughout the summer of 2008. This likely contributed to Iowa's decrease in human cases, since WNV is most efficiently transmitted when conditions are hot and dry. For more information, visit www.idph.state.ia.us/adper/wnv_surveillance.asp.

Norovirus outbreak in northwest Iowa

Written by Community Health Partners (CHP), the public health provider for Sioux County. On February 9th, we were notified that 20 of 23 people who

attended a work-related party at a local restaurant were experiencing gastrointestinal (GI) symptoms. Two of the attendees sought medical care where stool specimens were taken which tested positive for Norovirus. Within hours of receiving this information, the regional epidemiologist and the environmental specialist from the local health department arrived, and we began our first full-blown foodborne outbreak investigation.

The investigation focused on the local restaurant, where 15 of their food workers had been ill with diarrheal illness in recent weeks. We then learned that 13 of 50 people in another party, who had also eaten at the local restaurant, were also ill with GI symptoms. With the help of IDPH, we developed a questionnaire and conducted 110 interviews with people who had either eaten at the restaurant or who worked there. Of the 110 interviewed, 57 had been ill.

We provided guidance and recommendations about food handling and preparation, the cleaning of hard surfaces and utensils, and policies about employees not returning to work until after diarrheal illnesses have completely resolved; hand washing demonstrations were given to all employees. The restaurant in question implemented most of the recommendations they received, including closing their salad bar for several weeks and taking several items off the menu. Area schools also reported implementing general recommendations in their cafeterias as preventative measures.

IDPH also provided guidance for media inquiries and for the information we released to the public via the press and radio. The local newspaper printed a story with the headline: "It Pays to Be Obsessive," which talked about the importance of scrupulous hand washing.

By February 19th the area medical clinic reported they had seen no diarrheal illness in a week. Through much intense work and much collaborative effort, we were able to break the chain of the spread of infection in the community and provide the public with important disease prevention information.

Safe cooking outdoors involves more than just food safety

The spring thaw is upon us and as the weather continues to warm, the outdoor grilling season will soon be in full swing. Unfortunately, cooking outdoors can increase the risk of injuries unless done correctly. So keep in mind these safety precautions before firing up your grill this year.

- Check the gas lines and valves on gas grills to make sure there are no cracks, holes or blockages.
- If you suspect a gas leak, don't use the grill until the problem is fixed.
- Store liquid petroleum (LP) tanks in a secure, upright position and don't store additional full containers under the grill.
- Keep the grill on level ground at least ten feet away from a building, shrubs or anything that could catch fire.

- Don't operate gas or charcoal grills in enclosed areas such as garages, campers or tents, as carbon monoxide poisoning can occur.
- When using charcoal, follow the directions on the charcoal bags and be sure charcoal is completely extinguished before discarding.
- Follow manufacturer's directions for using gas grills.
- Don't leave grills unattended. Keep children and pets away from grills.

Meeting announcements and training opportunities

The greater Omaha APIC long-term care annual conference will be held Friday, April 17, 2009 in Council Bluffs, Iowa. For more information, visit www.goapic.org/brochures/2009LTC.pdf.

Editorial note: After a recent change to new computer software, you may have noticed question marks where bullets should have been. Hopefully this has been corrected and today's update will retain the more appropriate bullets.

Have a healthy and happy week!

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