

EPI Update for Friday, January 22, 2010
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Latest updates to immunization schedules**
- **HPV testing and cytology**
- **Genetic influence and infectious disease**
- **Safe winter walking**
- **Be vigilant about carbon monoxide poisoning**
- **Meeting announcements and training opportunities**

Latest updates to immunization schedules

The updated child and adolescent immunization schedules have been posted and can be easily downloaded from: www.cdc.gov/vaccines/recs/schedules/child-schedule.htm

HPV testing and cytology

A recent study found that HPV testing may be more effective than cytology in preventing invasive cervical cancer. HPV-based screening detected high-grade lesions earlier than cytology screening alone, thus preventing more invasive cervical cancer. However, HPV testing in younger women led to over-diagnosis of cervical intraepithelial neoplasia compared with cytology. Thus for women aged 35 years or more, they recommend the use of HPV-DNA testing for primary screening at prolonged intervals, with cytology reserved for triage of HPV-positive women. See: www.infectiousdiseaseneews.com/article/60124.aspx

Genetic influence and infectious disease

During infectious disease outbreaks, some exposed people develop disease and others do not. It is known that for some infectious diseases, such as tuberculosis (TB) and Hansen's disease (leprosy), illness tends to cluster within certain families and populations. The study of genetics demonstrated that genetic variation between individuals may influence susceptibility to disease.

Genes associated with increased resistance to diseases including malaria, tuberculosis, pneumococcal disease, HIV, norovirus, as well as chronic hepatitis B and C have been identified, as well as genes associated with increased susceptibility to diseases such as tuberculosis, leprosy, cholera, pneumococcal disease, and Creutzfeldt-Jakob disease.

It is important to remember that the disease process is complex and there are many factors that influence if and how a disease develops. Bottom line - not everyone who ate the contaminated potato salad at the church supper will automatically get ill – they may be genetically resistant.

Safe winter walking

Slips, trips and falls are the second most common cause of accidental deaths in the U.S. each year, second only to traffic accidents. While fatalities are rare outcomes, painful, sometimes debilitating injuries can result from slips, trips and falls. Many of these injuries are preventable through simple safety precautions:

- Transition risk - use special care when entering and exiting buildings or vehicles; use handrails or the vehicle for support.
- Parking lots - almost 80 percent of slips and falls due to snow and ice occur in parking lots and on sidewalks, with more than 50 percent occurring between 6 a.m. and noon.
- North-facing entrances – these tend to remain icy, so when possible, avoid north-facing entrances to buildings.
- Appropriate footwear - rubber and neoprene composite boots and shoes will give more traction than leather or plastic.
- Slick surfaces – when walking on slippery surfaces, slow down, bend knees slightly, take small steps, walk flat-footed and keep a hand free for balance.
- Be smart - don't carry heavy items that can impair your balance (including children). Slow down and watch for hazards. Use handrails where available.
- Indoor risks – wet surfaces are a huge risk, so be careful when entering buildings.

Be vigilant about carbon monoxide poisoning

This week's ice storms and power outages can increase the risk for carbon monoxide (CO) poisoning if affected households use gas powered generators or combustion heaters. Symptoms of carbon monoxide poisoning include headache, dizziness, weakness, nausea, vomiting, chest pain and confusion. Anyone with these symptoms should go outside immediately.

When assessing patients during and after power outages, question exposure to gas powered generators or other combustion devices. Remember that oxygen saturation measured by pulse oximetry in patients with CO poisoning are inaccurate, since pulse oximeters cannot distinguish between carboxyhemoglobin and oxyhemoglobin.

Report all cases of CO poisoning (currently defined as):

- A blood carbon monoxide level equal to or greater than 10 percent carboxyhemoglobin or its equivalent with a breath analyzer test; **or**
- A clinical diagnosis of carbon monoxide poisoning regardless of any test result.

Report by calling your local county health department or by calling IDPH at 800-362-2736. The Iowa Statewide Poison Control Center at 800-222-1222 provides

365/24/7 consultation to the public and physicians on CO poisoning treatment. For more information, contact the IDPH Division of Environmental Health at 800-972-2026 or visit: www.idph.state.ia.us/eh/carbon_monoxide.asp

Meeting announcements and training opportunities

None

Have a healthy and happy (and a stable upright position) week!

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800-362-2736