EPI Update for Friday, March 9, 2007 Center for Acute Disease Epidemiology Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- Carbon monoxide, reported cases and highlighted causes
- The burden of health care-associated infections
- Updated influenza guidance for acute-care facilities
- Last week in public health (1954)
- Salmonella Tennessee update
- Food washing needs inspiration
- Meeting announcements and training opportunities

Carbon monoxide, reported cases and highlighted causes

Twenty four cases of carbon monoxide poisoning related to the storm and clean up have been reported. The most common scenarios are as follows:

- 1. **Inappropriate use of heat generating appliances (gas/charcoal grill, etc.) within the living space of the building.** One case even tried placing the charcoal grill inside the fireplace, hoping it would vent through the fireplace chimney. A charcoal grill won't typically generate enough heat to establish an updraft in the chimney...leading to inadequate ventilation.
- 2. **Inappropriate placement of a gas powered generator.** The attached garage was used in one case. The basement was used in other cases. In another, the generator was placed on the back deck, the sliding glass door was cracked open to run the electric cord from the generator to indoor appliances, and inside, a wood burning stove was being used, causing a significant draw of outdoor air (including the generator's exhaust) through the cracked door and into the living space. In a similar case, the generator was on the back porch with the door cracked open for electrical cords and the resident commented that she noticed an exhaust odor.

The following are less common but worth noting:

- 1. The patient was moving snow with his tractor. The tractor has an enclosed cab and was determined to have an exhaust leak into the cab. Symptoms consistent with CO poisoning were reported but the patient declined to seek medical treatment.
- 2. This case was from a home furnace that was functioning correctly. The problem was that blowing snow and cold temperatures led to a blockage of the exhaust from the furnace. This resulted in the furnace exhaust being released into the home. The lesson learned from this scenario is to periodically inspect the furnace exhaust for blockage when heavy snow fall has occurred.

The burden of health care-associated infections

Recently the Association for Professionals in Infection Control (APIC) released a white paper on the burden of Health care-associated Infections (HAI) on patients and the cost of health care. This paper attempts to dispel three widely held myths concerning HAIs:

- 1. That HAIs are an expected outcome of treating an older, sicker patient population;
- 2. That the additional cost of HAIs is offset by reimbursement from insurance companies, etc;
- 3. That the number of HAIs in most institutions is insignificant, making the cost savings associated with reducing HAIs not worth the investment.

For more information, visit www.apic.org/Content/NavigationMenu/PracticeGuidance/Reports/hai whitepaper.pdf.

Updated influenza guidance for acute-care facilities

The Centers for Disease Control and Prevention has updated its infection control guidance concerning influenza prevention in acute-care facilities. This guidance includes discussion of vaccination, surveillance, education, and antiviral prophylaxis among other topics. For more information, visit

www.cdc.gov/flu/professionals/infectioncontrol/healthcarefacilities.htm.

Last week in public health (1954)

Last week in 1954, public school children in Pennsylvania were the first to receive polio vaccinations. Dr. Jonas Salk's injectable vaccine was the first vaccine to be used in the fight against polio. This began the process of the eventual eradication of polio from the western hemisphere. For more information, visit

www.history.com/tdih.do?action=tdihArticleCategory&id=52410.

Salmonella Tennessee update

As of March 7th, 425 persons infected with the outbreak strain of *Salmonella* Tennessee have been reported from 44 states. There have been eight confirmed cases in Iowa. Twenty percent of patients have been hospitalized and there have been no deaths. Onset dates of patients ranged from Aug. 1, 2006 to Feb. 16, 2007. An epidemiologic study comparing foods that ill and well persons said they ate showed that consumption of Peter Pan peanut butter and Great Value peanut butter were both statistically associated with illness. Product testing has confirmed the presence of the outbreak strain of *Salmonella* Tennessee in opened jars of peanut butter obtained from ill persons. Environmental samples collected by the FDA from the Georgia processing plant revealed the presence of Salmonella, suggesting that the contamination likely took place prior to the product reaching consumers. The FDA recall involves peanut butter but also involves peanut butter toppings, which may still be in consumer's homes. The full list of products involved in the recall can be found at

www.fda.gov/bbs/topics/NEWS/2007/NEW01574.html.

Due to the long shelf life of peanut butter and the uncertainty that the FDA recall message reached all consumers, it is important that local public health agencies realize we could continue to see cases linked to this outbreak for some time. IDPH is only requesting the supplemental *Salmonella* Tennessee follow-up form on confirmed *Salmonella* Tennessee cases.

Because of the large number of peanut butter jars received for testing, the University Hygienic Laboratory (UHL) only tested those with confirmed *Salmonella* Tennessee

isolated from the patient's stool. Following FDA and CDC recommendations UHL is no longer testing peanut butter.

Food washing needs inspiration

When it comes to motivating people to wash their produce before eating, visuals according to this story, seem to help. Potatoes for instance, need no food safety argument when dirt is easy to see and feel. But how about tomatoes and apples, which arrive at the grocer flawless and shiny? Or what about washing bananas and watermelons, the skins and rinds of which you'll never eat? Getting people to wash those just takes a different sort of visual. Ann Zander, a food safety expert with the Colorado State University Extension said, "Probably 100 people handled that banana before you did. If you have somebody who hasn't washed his hands after the bathroom or has the flu, that's all over it." Wash everything. Virtually all produce should be washed at home just before it is eaten. Washing in advance can reduce shelf life and promote bacterial growth.

Federal food safety officials say produce should not be washed with detergents, soaps or bleach which are not approved for use on food; and could make you sick. Though there are special produce washes, most experts say clean, cool running water is easier, more economical, and just as effective. Use running water, and keep the produce under the water for 20 seconds. Match cleaning technique to the type of produce. Produce with tough, creviced surfaces, like root vegetables, needs aggressive cleaning, such as scrubbing with a brush. More easily bruised items should be held under cool running water, and gently rubbed by hand. Remember to wash the scrubber after each use. Tossing it in the dishwasher is the most effective way to eradicate bacteria.

Meeting announcements and training opportunities

31st Annual Iowa Infection Control Seminar - May 1-2, 2007, Iowa City. For conference brochure and information a call for posters on Process Improvement in the area of safety or infection prevention, visit

www.uihealthcare.com/depts/cqspi/newsevents/index.html

Have a healthy and happy week! **Center for Acute Disease Epidemiology** Iowa Department of Public Health 800-362-2736