

EPI Update for Friday, July 22, 2011
Center for Acute Disease Epidemiology (CADE)
Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- **Update on West Nile virus activity**
- **What is phytophotodermatitis?**
- **Heat stress safety critical for outdoor workers in the summer months**
- **Continue to keep pools healthy this summer**
- **Ten greatest achievements in public health**
- **Meeting announcements and training opportunities**

Update on West Nile virus activity

West Nile virus activity was confirmed again this week by the State Hygienic Laboratory (SHL) in two sentinel chickens in Polk County. West Nile virus is endemic in Iowa and activity usually peaks in late summer and early fall. Local partners collect mosquitoes and maintain sentinel chicken flocks across the state. Iowa State University Medical Entomology monitors the levels of *Culex pipiens* and *Culex tarsalis* mosquitoes (the primary vectors of WNV) statewide and the State Hygienic Laboratory (SHL) tests the mosquitoes to determine whether they are infected with West Nile virus or other arboviruses. SHL also tests the blood drawn from sentinel chickens weekly to determine whether they have been infected with West Nile virus or other arboviruses. For more information about West Nile Virus, visit www.idph.state.ia.us/Cade/WNV.aspx.

What is phytophotodermatitis?

Every summer, the Iowa Statewide Poison Control Center receives several calls about people who have developed rashes and blisters after dermal contact with certain plants or fruits. This condition, phytophotodermatitis, is caused by the interaction of ultraviolet light and chemicals called psoralens, which get on the skin by handling the plants and fruits. Some of the plants and fruit which contain psoralens are celery, parsley, parsnip, dill, lime, lemon, grapefruit, rue and the fig tree. The psoralens are found in the leaves and stems of the plant and also in the juice of the fruits. Phytophotodermatitis occurs more frequently towards the end of summer because the amount of psoralens in the plants and fruits increases as the growing season progresses.

Approximately 24 hours after exposure to UV light, the person will develop erythema in the area where the psoralens were absorbed into the skin. Vesicles or bullae can develop over the subsequent 48 hours. Hyperpigmentation may develop over one to two weeks in the area of the rash, and will usually fade over several months.

After contact with plants or fruits that contain psoralens, wash the area thoroughly with soap and water, and avoid the sun and / or apply sunscreen to the area for 48 to 72 hours. Treatment for a rash or vesicles and bullae is the same as that for a thermal burn. Oral analgesics and topical steroids are sometimes used in treating vesicles and

bullae. If you have any questions about phytophotodermatitis, contact the Iowa Statewide Poison Control Center at 1-800-222-1222.

Heat stress safety critical for outdoor workers in the summer months

As the temperature and humidity rises, don't forget to talk to your patients who work outdoors about the health and safety risks associated with heat stress. Anyone can suffer from heat stress, including young and healthy individuals; however, those workers at highest risk include:

- Individuals age 65 or older
- Overweight individuals
- People who are physically ill, especially those with heart disease or high blood pressure, or who take certain medications, such as those for depression, insomnia, or poor circulation

Workers should be advised to take the following steps to prevent heat stress:

- Choose lightweight, light-colored, loose-fitting clothing and wear sunscreen.
- If possible, wear hats that shade their face such as sun hats, visors, etc.
- Be aware that protective clothing or personal protective equipment may increase the risk of heat stress.
- Schedule heavy work during the coolest parts of day.
- Gradually build up to heavy work. Stop immediately if they get dizzy, nauseated, or feel weak. Go into an air conditioned space and drink cool liquids.
- Take more breaks in extreme heat and humidity, and take breaks in the shade or a cool area when possible.
- Drink water frequently, regardless of the activity level.
- If experiencing a lot of sweating, replace salt and minerals by eating foods like bananas and salty crackers, or drink rehydrating beverages that contain salts such as sports drinks, and special rehydration fluids.
- Avoid drinks with caffeine, alcohol, and large amounts of sugar.
- Use a buddy system. Watch others for heat-induced illness, since some people may not realize that they are suffering heat-related illnesses and can become confused or lose consciousness.

For additional information on heat stress visit

www.cdc.gov/niosh/topics/heatstress/ or
www.bt.cdc.gov/disasters/extremeheat/heat_guide.asp.

Continue to keep pools healthy this summer

There has been a slight increase in the number of cryptosporidiosis cases reported this year (168) as compared to the number of cases reported at this time last year (143). We also tend to see cryptosporidiosis cases reports peak in July or August. Please remind patients to protect others by not swimming when they have diarrhea (this is essential for children in diapers). If diagnosed with cryptosporidiosis, patients should not swim for at least two weeks after diarrhea stops.

To prevent illness, advise patients to avoid swallowing water from lakes, streams and swimming pools. As always, wash hands thoroughly with soap and water before handling food or eating; after using the toilet or changing diapers; and after contact with animals.

For additional information visit www.idph.state.ia.us/Cade/Default.aspx or www.cdc.gov/crypto/.

Ten greatest achievements in public health

Achievement #8 – Cancer Prevention

Evidence-based cancer screening recommendations have been established to reduce mortality from colorectal cancer, female breast, and cervical cancer. Through the collaborative efforts of public health, professional clinician societies, not-for-profit organizations, and patient advocates, standards were developed that have significantly improved cancer screening test quality and use.

From 1973-2008, colorectal cancer was the most common malignant cancer diagnosed among Iowans and the second leading cause of cancer death in Iowa. In contrast, on a national level from 1998 to 2007, colorectal cancer death rates decreased from 25.6 per 100,000 population to 20.0 per 100,000 for men and from 18.0 per 100,000 to 14.2 for women.

The State Health Registry of Iowa estimates:

- 6,300 Iowans will die from cancer. This is 16 times the number caused by auto fatalities.
- Data will be collected on 16,500 new cancers among Iowa residents in 2011.
- African Americans have higher colorectal cancer incidence and mortality rates than whites or other races in Iowa.

For more information, visit State Health Registry of Iowa, Cancer in Iowa 2010 and 2011 at www.public-health.uiowa.edu/umphrc/documents/here.pdf.

Meeting announcements and training opportunities

SAVE THE DATE: Please mark your calendars. The Fall Epi Update has been scheduled for Wednesday, September 21st, 2011. Additional details will be published in future issues of the EPI Update.

We wish everyone a very happy week!

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