EPI Update for Friday, May 23, 2014 Center for Acute Disease Epidemiology (CADE) Iowa Department of Public Health (IDPH)

Items for this week's EPI Update include:

- Memorial Day weekend kicks off outdoor adventures
- Diarrheal Illnesses and recreational water
- Fifth disease
- Measles virus used to treat cancer
- Influenza surveillance report update
- Meeting announcements and training opportunities

Memorial Day weekend kicks off outdoor adventures

The long Memorial Day weekend often includes outdoor activities. IDPH encourages lowans to enjoy the many opportunities to be active outdoors, while remembering to protect against ticks and mosquitoes, which may carry diseases such as Lyme disease and West Nile virus. About 250 cases of Lyme disease and 44 cases of West Nile virus were reported to IDPH in 2013.

The best ways to prevent these diseases are to:

- avoid wooded and tall grassy areas
- wear long-sleeved shirts and pants tucked into socks or boots
- stay on trails when walking or hiking (avoiding high grass)
- use insect repellants that contain DEET (not recommended for use on children under 2 months of age)
- avoid outdoor activities at dusk and dawn when mosquitoes are most active
- eliminate standing water around the home

For more information, visit <u>www.idph.state.ia.us/IdphNews/Reader.aspx?id=AD8FC935-EBE4-4FEC-9C7F-FFBB1F00EE3E.</u>

Diarrheal illnesses and recreational water

Chlorination is an important tool in preventing illnesses related to recreational water exposure, but it is not always enough. Several organisms, such as *Cryptosporidium*, *Giardia*, and norovirus can survive several hours in properly chlorinated pool water. Therefore, the best way to prevent the spread of these organisms is to stop them from being introduced into the water in the first place. This is best achieved by preventing those ill with diarrhea from swimming, everyone showering before swimming, and practicing proper hand washing at all times.

There have been 68 cases of *Cryptosporidium* reported in Iowa this year, down slightly from 90 cases by this time last year. The summer season is just beginning, however, and the number of cases is expected to increase.

For more information on illnesses linked to recreational water exposure, visit www.cdc.gov/healthywater/swimming/rwi/.

Fifth disease

Fifth disease, or erythema infectiosum, is caused by parvovirus B19, and typically causes a mild rash illness. It is more common in children than adults. A person develops symptoms within four to 14 days after exposure; however, about 20 percent of infected children and adults are asymptomatic.

The first symptoms are usually fever, runny nose, and headache. A "slapped cheek" rash may develop over the face, especially in children. Some may get a second rash a few days later on the chest, back, buttocks, or arms and legs. This rash may be itchy and can vary in intensity, usually lasting seven to 10 days. Adults can also develop pain and swelling in their joints, which usually lasts one to three weeks. This virus spreads through respiratory secretions such as saliva, sputum, or nasal mucus. Patients are most contagious when symptomatic, but before development of later stage symptoms such as rash or joint pain/swelling. The virus can also spread through blood or from mother to child during pregnancy.

There is no vaccine or prophylaxis for parvovirus B19 infection, but transmission can be prevented by washing hands with soap and water, covering the mouth and nose while coughing or sneezing, avoiding close contact with sick people, and staying home while sick. For more information, visit www.cdc.gov/parvovirusb19/fifth-disease.html.

Measles virus used to treat cancer

Doctors from the Mayo Clinic were able to successfully treat a patient suffering from myeloma, a type of blood cancer, using a massive dose of measles virus engineered to infect and destroy cancerous cells. For more information on this treatment, visit www.mayoclinicproceedings.org/article/S0025-6196(14)00332-2/fulltext.

Last weekly influenza report

This week's flu report will be the last weekly report published this season; over the summer months, these reports will be published monthly. Weekly reports will resume in October. IDPH would like to thank all the sites that have and continue to report data to the Iowa Influenza Surveillance Network.

Meeting announcements and training opportunities

None

Have a healthy and happy week!

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