

Epi Update for Friday, July 28, 2023

CENTER FOR ACUTE DISEASE EPIDEMIOLOGY (CADE)
BUREAU OF HIV, STI, AND HEPATITIS

IOWA DEPARTMENT OF HEALTH AND HUMAN SERVICES

Items for this week's Epi Update include

- Congenital syphilis increase – Testing and treatment recommendations
- Increased detection of West Nile virus in mosquito samples
- *Cyclospora* update
- Changes to SHL courier
- Meeting announcements and training opportunities

Congenital syphilis increase – Testing and treatment recommendations

Congenital syphilis is a preventable condition caused by untreated syphilis during pregnancy. In 2021, 11 congenital syphilis cases were reported in Iowa, more than in the previous 20 years combined. There were eight cases in 2022, and already five cases have been identified in 2023, including four within the last three months. The cases are not concentrated to a single geographic area.

Considering these increasing trends, Iowa HHS recommends serological testing for syphilis among pregnant women at three intervals: during their first prenatal visit, at 28-32 weeks gestation, and again at delivery. Pregnant women may initially test negative at their first prenatal visit and acquire the infection later in pregnancy. Symptoms may not be obvious. Furthermore, neonates with congenital syphilis may appear normal at physical examination, particularly if the mother acquired the infection late in pregnancy. These infants may develop a rapid onset of symptoms several months after birth.

Serologic testing for syphilis is widely available. Laboratory diagnosis of syphilis requires a minimum of two types of serologic tests: “treponemal” and “non-treponemal” tests.

- Treponemal tests detect antibodies to *Treponema pallidum*, the causative agent of syphilis.
- Non-treponemal tests (e.g., RPR or VDRL) detect cellular damage caused by *Treponema pallidum* and provide quantitative results that are crucial in guiding treatment decisions, especially in infants.

Syphilis testing algorithms with reflex testing are recommended, so that if the first test is reactive, the subsequent test(s) is automatically conducted. Reverse and traditional syphilis testing algorithms can be found at the APHL website at www.aphl.org/programs/infectious_disease/std/Pages/Syphilis.aspx.

Treatment guidelines for syphilis are available at www.cdc.gov/std/treatment-guidelines/syphilis.htm. Although there is currently a nationwide shortage of the first line medication used to treat syphilis in adults, the medication is prioritized for pregnant women. Please contact Iowa HHS if you have difficulty obtaining the medication.

The Bureau of HIV, STI, and Hepatitis at Iowa HHS can provide support in interpreting laboratory results, discussing treatment guidelines, facilitating contact tracing, and more. For questions, call 515-240-1143. In addition, the STD Clinical Consultation Network at the St. Louis Prevention and Treatment Center offers clinical consultation for complex syphilis cases. For more information, visit www.stdccn.org.

Increased detection of West Nile virus in mosquito samples

There has been a recent increase in mosquito samples testing positive for West Nile virus (WNV) in Iowa. So far in 2023, seven mosquito samples have tested positive for the virus at SHL. One human case has been reported.

WNV is endemic in Iowa and activity usually peaks in late summer and early fall. For the best protection against the virus, Iowans should use an insect repellent with DEET, Picaridin, oil of lemon eucalyptus, Para-menthane-diol, 2-undecanone or IR3535. Product labels should be read carefully before use. Oil of lemon eucalyptus and Para-menthane-diol should not be used on children younger than 3 years, and DEET should not be used on infants younger than 2 months.

For more information about vector-borne diseases in Iowa, visit idph.iowa.gov/cade/vectorborne-illness.

Cyclospora update

An increasing number of *Cyclospora* infections have been reported in Iowa this summer, with 40 *Cyclospora* infections reported in 19 counties this year. Cases usually peak in the summer, and often impact travelers to tropical or sub-tropical regions where the parasite is endemic. *Cyclospora* can also be spread without travel by eating contaminated imported food, most often fresh produce.

Symptoms of cyclosporiasis include diarrhea, loss of appetite, weight loss, cramping, bloating, increased gas, nausea, and fatigue. Without treatment, diarrhea can last weeks to months. Trimethoprim/sulfamethoxazole is the usual therapy for *Cyclospora* infection.

Cyclospora-specific stool testing includes PCR or special acid-fast staining needed to identify *Cyclospora* oocysts. Iowa HHS requests that *Cyclospora* positive specimens are forwarded to SHL for further analysis.

For more information about ongoing cyclosporiasis investigations in the United States, visit www.cdc.gov/parasites/cyclosporiasis/outbreaks/2023/index.html

Changes to SHL courier

SHL is changing courier services, effective August 1. Central Delivery Service (CDS) has been transporting samples to SHL laboratories for over 15 years. Ron Hardy (owner of CDS) is retiring and will discontinue service to SHL as of July 31. SHL is very grateful to CDS for the many years of excellent service and is very appreciative of Mr. Hardy's expertise, flexibility, and reliability.

On August 1, STAT Courier will be handling pickups. For more information, visit www.shl.uiowa.edu/.

Meeting announcements and training opportunities

Contaminated surfaces can play a role in the spread of dangerous germs and antibiotic-resistant organisms in health care facilities. Supplemental disinfection techniques, such as ultraviolet-C (UV-C) disinfection and hydrogen peroxide vapor (HPV) application, may help reduce surface contamination. There are many advantages and challenges to using these techniques safely and effectively. Iowa HHS is hosting a free webinar, *Infection Prevention Best Practices: Supplemental Disinfection Techniques*, on August 9, 12 noon – 1 PM. Continuing education credits are available. To register, visit ecri.zoom.us/webinar/register/WN_c8g7dT0HTxeLaUdG2qg-gg.

Have a healthy and happy week!

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