

## **EPI Update for Friday, July 21, 2017**

### **Center for Acute Disease Epidemiology (CADE)**

### **Iowa Department of Public Health (IDPH)**

Items for this week's EPI Update include:

- **Iowa's first West Nile virus case of the season confirmed**
- **Recommended diagnostic tests for Lyme disease**
- **In the news: Cocoa and chocolate are not just treats - they are good for your cognition**
- **Infographic: Two-tiered testing for Lyme disease**
- **Meeting announcements and training opportunities**

#### **Iowa's first West Nile virus case of the season confirmed**

The first human case of West Nile virus in Iowa in 2017 has been confirmed in Ida County. A middle aged (41-60 years) male tested positive for the virus. He was not hospitalized and is recovering. In addition, surveillance has identified six mosquito pools in Iowa that tested positive for West Nile virus (one in Polk County, two in Pottawattamie County, one in Story County and two in Woodbury County). The West Nile virus season typically lasts from late summer into early autumn.

Please encourage your patients to take the following steps to reduce their risk of exposure to West Nile virus:

- Use insect repellent with DEET, picaridin, IR3535 or oil of lemon eucalyptus. Always read the repellent label and consult with a health care provider if you have questions when using these types of products for children. For example, DEET should not be used on infants less than 2 months old and oil of lemon eucalyptus should not be used on children under 3 years old.
- Avoid outdoor activities at dusk and dawn when mosquitoes are most active.
- Wear long-sleeved shirts, pants, shoes and socks whenever possible outdoors.
- Eliminate standing water around the home because that's where mosquitoes lay eggs. Empty water from buckets, cans, pool covers and pet water dishes. Change water in bird baths every three to four days.

For more information on West Nile virus in Iowa, visit [idph.iowa.gov/cade/disease-information/west-nile-virus](http://idph.iowa.gov/cade/disease-information/west-nile-virus).

#### **Recommended diagnostic tests for Lyme disease**

Lyme disease is caused by the bacterium *Borrelia burgdorferi* and is transmitted to humans through the bite of infected blacklegged ticks. Diagnosing Lyme disease can be difficult and laboratory testing is helpful if used correctly and performed with validated methods. Current diagnostic testing for Lyme disease measures the patient's antibody response to infection. CDC recommends an FDA approved two-step process when testing for antibodies against the Lyme disease bacteria. Both steps can be done using the same blood specimen.

The first step is an enzyme immunoassay (EIA) test or, less frequently, indirect immunofluorescence assay (IFA). If the first test is negative, no further testing is necessary. If it is positive or equivocal, the second step in testing should be performed: immunoblot testing or "Western blot." The two steps are intended to be done together. CDC does not recommend skipping the first test and just doing the Western blot. Doing so will increase the frequency of false positive results, and may lead to misdiagnosis and improper treatment.

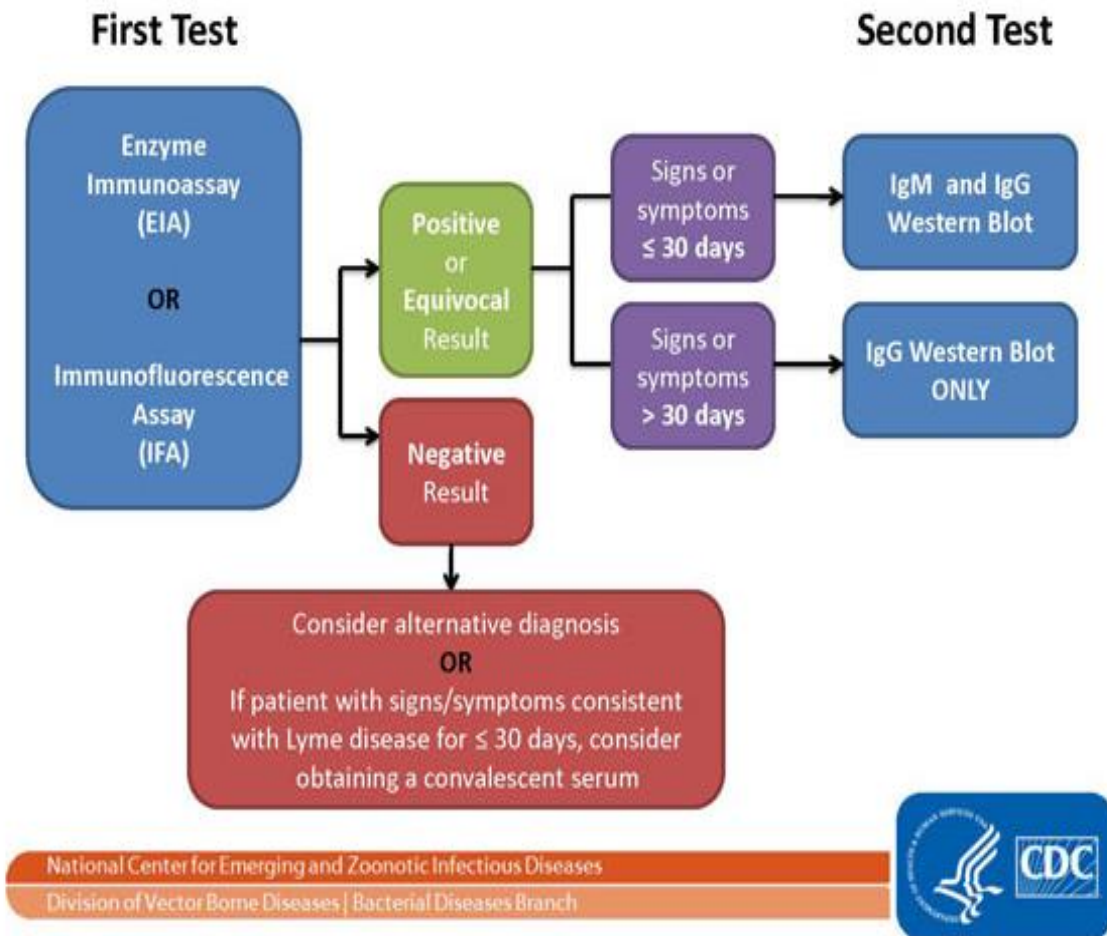
To avoid false positives, it is important to test only when a patient has symptoms consistent with Lyme disease. Symptoms include headaches, dizziness, joint/body pain and erythema migrans (EM), which occurs in 75 percent of cases.

For more information about Lyme disease testing, visit [www.cdc.gov/lyme/diagnostesting/labtest/twostep/index.html](http://www.cdc.gov/lyme/diagnostesting/labtest/twostep/index.html).

In the news: Cocoa and chocolate are not just treats - they are good for your cognition  
[www.sciencedaily.com/releases/2017/06/170629101648.htm](http://www.sciencedaily.com/releases/2017/06/170629101648.htm)

Infographic: Two-tiered testing for Lyme disease

## Two-Tiered Testing for Lyme Disease



To view in full size, visit [www.cdc.gov/lyme/diagnostesting/labtest/twostep/index.html](http://www.cdc.gov/lyme/diagnostesting/labtest/twostep/index.html)

## **Meeting announcements and training opportunities**

Free online course for youth - Excellence in Exhibition: Preventing Disease in Animals and People  
The Center for Food Security and Public Health (CFSPH) at ISU's College of Veterinary Medicine, in collaboration with IDPH and with support from CDC and the Council of State and Territorial Epidemiologists, created an online course to teach youth about zoonotic diseases. Excellence in Exhibition: Preventing Disease in Animals and People is meant to encourage showmanship and animal involvement, while keeping both animals and humans safe and healthy.

The course is divided into six lessons. The first three lessons focus on specific zoonotic diseases and ways to prevent transmission to humans and animals. Two additional lessons are presented as case studies and the sixth lesson highlights agencies and career opportunities in One Health—the health of animals, people and the environment. The estimated completion time for each lesson is 20–30 minutes. A certificate of completion is provided at the end of each lesson. This course is targeted at youth aged 13–18 years.

For more information, visit [www.bluenoflu.org](http://www.bluenoflu.org)

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