

**Bats, Bugs, and Bacteria Month**

* Lyme disease is a bacterial infection transmitted to people and animals in Michigan by the bite of an infected Blacklegged tick. At this time, only Blacklegged ticks are known to transmit Lyme disease in Michigan.
* Lyme disease has been found in every county along the lower-peninsula Lake Michigan shoreline and is considered endemic (part of the natural environment).
* Blacklegged tick larvae do not spread Lyme disease. Young adult ticks, called nymphs, are the most dangerous life stage of a tick for transmitting Lyme disease to a human. Even though adults are also infectious, the smaller nymphs are harder to see and remove quickly.
* Studies show that removal of an infected feeding tick within 48 hours significantly reduces the potential for infection.
* Ticks can be active in Michigan any time the temperature is greater than 45 degrees Fahrenheit.
* Our pets can become hosts for ticks and also become infected with Lyme disease and other tick-borne diseases. Topical flea and tick treatments are recommended, and a Lyme disease vaccination is available. Consult your veterinarian for more information.

# Facts:

**Information Resources:**

 **INSERT LOCAL HEALTH DEPARTMENT CONTACT INFORMATION**

**[Michigan Department of Natural Resources](http://www.michigan.gov/dnr/0%2C1607%2C7-153-10370_12150_12220-26945--%2C00.html)**

**[Michigan Department of Health and Human Services](http://www.michigan.gov/emergingdiseases/0%2C1607%2C7-186-25890---%2C00.html)**

[**Michigan Lyme Disease Association**](http://www.mlda.org/)

[**Centers for Disease Control and Prevention**](http://www.cdc.gov/ncidod/dvbid/lyme/index.htm)

[**American Lyme Disease Association**](http://www.aldf.com/)

**Lyme Disease**

**Lyme Disease Prevention & Symptoms**

Be aware of Lyme disease, but do not be so concerned that you cannot enjoy the outdoors. There are some easy ways to help prevent ticks from biting. If you are planning to recreate, hunt, or work in Michigan's "out-of-doors", here are some considerations:

**If you are going to be in area where ticks live, protect yourself:**

* Wear light colored clothing so ticks can be spotted more easily and removed quickly
* It is better to wear boots or close-toed shoes. Ticks are usually located close to the ground
* Long sleeved shirts and pants tucked into socks (or boot tops) can be helpful
* Applying insect repellants that contain DEET to clothes and exposed skin.
* Apply Permethrin (which kills ticks on contact) to clothes to reduce the risk of tick attachment
* DEET can be used safely on children and adults. Apply according to label guidelines.

**Early Signs and Symptoms (3 to 30 days after a tick bite):**

* Circular or bullseye shape rash that begins around 7 days after the bite.
* The rash may feel warm to the touch and can reach up to 12 inches across or more
* The early symptoms of Lyme disease can be mild and easily overlooked. Seek medical attention and treatment early.

**Later Signs and Symptoms (Days to months after a tick bite):**

* Severe headache and neck stiffness
* More rashes appearing on body
* Severe joint pain and swelling particularly the knees and other large joints
* Episodes of dizziness or shortness of breath
* Shooting pains, numbness, or tingling in the hands or feet
* Problems with short-term memory
* Heart palpitations or an irregular heart beat
* Facial or Bell’s palsy (loss of muscle tone or droop on one or both sides of face)

Michigan State University Extension Service

Michigan Department of Health and Human Services

Communicable Disease and Immunization Division

517-335-8165

**Available Services:**