

Lyme Disease: Family Health and Prevention for Pet Owners

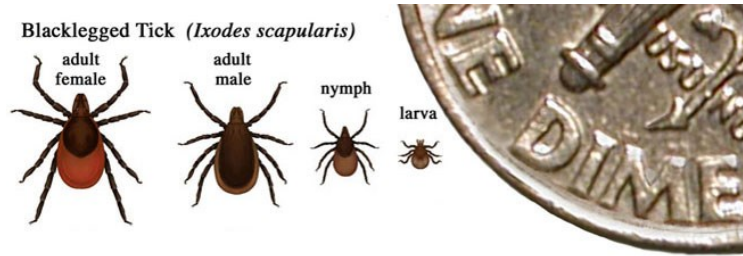


Ingham County
Health Department

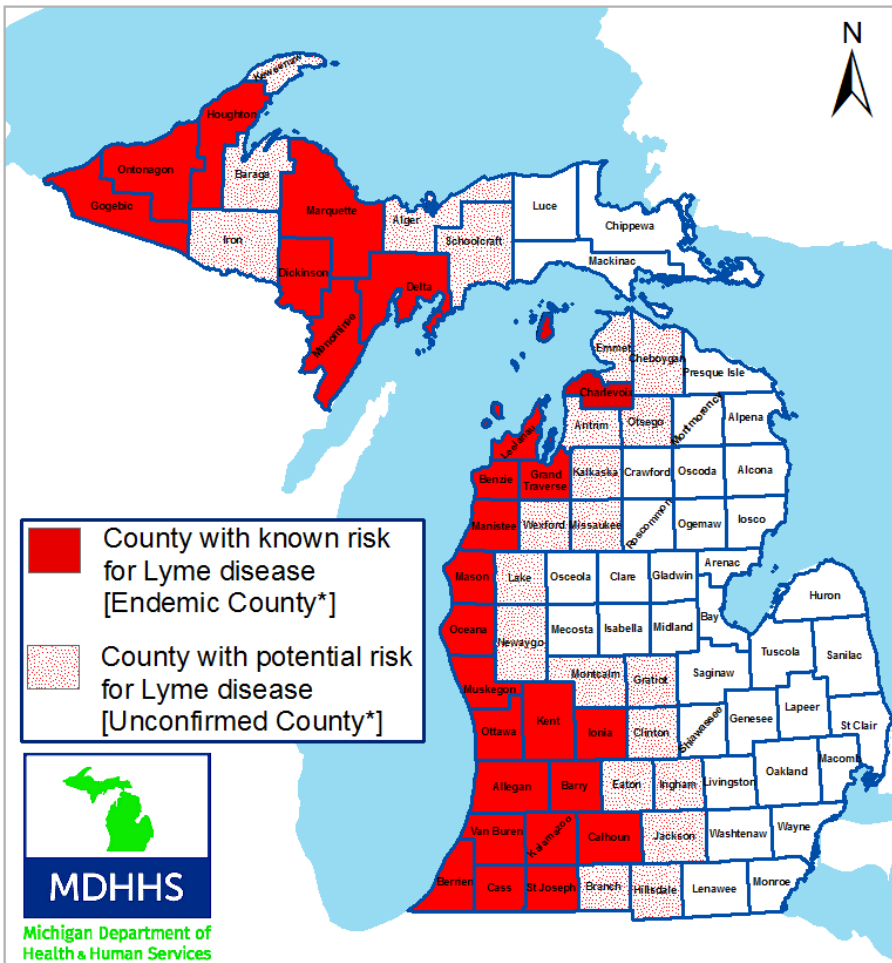
Lyme Disease

What is it?

Lyme disease is a zoonotic disease, meaning that it affects both animals and people. Lyme disease is caused by the bacterium *Borrelia burgdorferi* and it is spread by infected black legged deer ticks. The ticks' saliva can infect a person or animal if it is attached for 48 hours or longer. They can attach themselves when you are on walks, hikes, or during any outdoor activities. Many pets and wild animals can help spread these infected ticks, which can impact human and animal health. Adult ticks are active all year round and this is why it is important to treat your pets year round for ticks.



Michigan Lyme Disease Risk Map: 2015



Where is it located?

The deer tick is found in forest, grassy, wooded or marshy areas near rivers, lakes or oceans. Many times wildlife and pets can help spread infected ticks or infect local tick populations if the animal is already positive for Lyme disease. This puts people at risk of getting Lyme disease by exposing them to infected ticks. It is estimated that only a fraction of the illnesses are reported every year. In 2015 there were 167 cases of Lyme disease reported for humans and 2,482 cases found in dogs in Michigan, with 34 cases coming from Ingham County. In recent years Ingham County has become an area with potential risk for Lyme disease.

* Lyme disease risk in this map is based on known, field confirmed populations of infected blacklegged ticks, or laboratory confirmed human cases.

- a) Counties labeled "endemic" are counties where infected tick populations have been confirmed - and/or -
Two or more laboratory confirmed human cases have been identified with local exposure.
- b) Counties labeled "unconfirmed" are counties bordering endemic counties, but which do not meet the above criteria for "endemic" counties.

What are the signs, symptoms and treatment for Lyme disease?



"Classic" erythema migrans rash



Facial palsy



Swollen knee

Humans

Typical symptoms that develop 3-30 days after infection:

- Fever
- Headache
- Muscle and joint aches
- Swollen lymph nodes
- Fatigue
- Erythema migrans (EM) rash or a bulls eye patterned rash

If left untreated the infection can spread to the joints, heart and nervous system causing:

- Neck Stiffness

- Arthritis with severe pain and swelling in the knees and other large joints
- Facial or Bell's Palsy (pictured above)
- Irregular heart beat
- Dizziness
- Shortness of breath
- Swelling of the brain and spinal cord
- Nerve pain

Patients are treated with antibiotics for about two weeks. If symptoms reach the arthritic stage patients are treated with oral antibiotics for 4-weeks and can be treated with intravenous (IV) antibiotics if they develop facial palsy.

Animals

Symptoms develop within 2-5 months including:

- Fever
- Loss of appetite
- Joint swelling, which can be warm and painful lasting days to weeks
- Decreased activity
- Episodes of lameness and limb pain
- Severe symptoms:
 - Kidney damage
 - Heart or nervous system disease



Blood tests can be done to see if an animal has Lyme. Treatment involves antibiotics for 4 weeks along with follow up with your veterinarian. Treatment can last longer depending on your pets' symptoms.

What can I do to protect my family?

- For your pets:
 - Use tick-repellant products year round like:
 - Chewables, collars and topical treatments
 - Talk with your local veterinarian on what product would be right for your pet
 - Try to avoid woody or grassy areas
 - Check your pet for ticks once they are inside
- Try to avoid tick environments from May-July
 - Ticks are very active and most cases of Lyme disease are transmitted during this time
 - Walk in the center of trails
 - Avoid contact with overgrown grass, brush or leaf litter at trail edges
 - Wear light colored pants, long sleeved shirts and close toed shoes
 - Use insect repellent that contains 20-30% DEET
- Check yourself and others for ticks
 - Check your skin, hair, scalp, neck, under arms and behind ears
 - Shower within 2 hours of being outside
 - Wash and dry clothes at high temperatures to kill any ticks
- Apply tick killing products near tick habitats only
 - Spray where the lawn meets the woods, **not** open lawn
 - Apply in early summer and fall for year round tick protection
- Adjust your landscape to limit tick spread
 - Make a **3 foot zone** between your lawn and any wooded, marshy or grassy areas
 - Clear high grass, brush and leaf litter
 - Rid your yard of any deer or rodents



Additional Information

For more information or if you have any questions about Lyme disease visit some of the organizations websites below:

Centers for Disease Control and Prevention:

Lyme Disease

<http://www.cdc.gov/lyme/index.html>

U.S. National Library of Medicine:

Medline Plus: Lyme Disease

<https://www.nlm.nih.gov/medlineplus/lymedisease.html>

Michigan Emerging Disease Issues:

<http://www.michigan.gov/emergingdiseases/>

Let us know what you think!

<https://www.surveymonkey.com/r/QDY8C8C>

Contact Information

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Hours of Operation:

Mon/Wed: 8am-12pm & 1pm-5pm

Tu/Thur: 8 am-7pm

Fri: 10am-12pm & 1pm-5pm

Sat: 8am-4pm

<http://hd.ingham.org>

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