

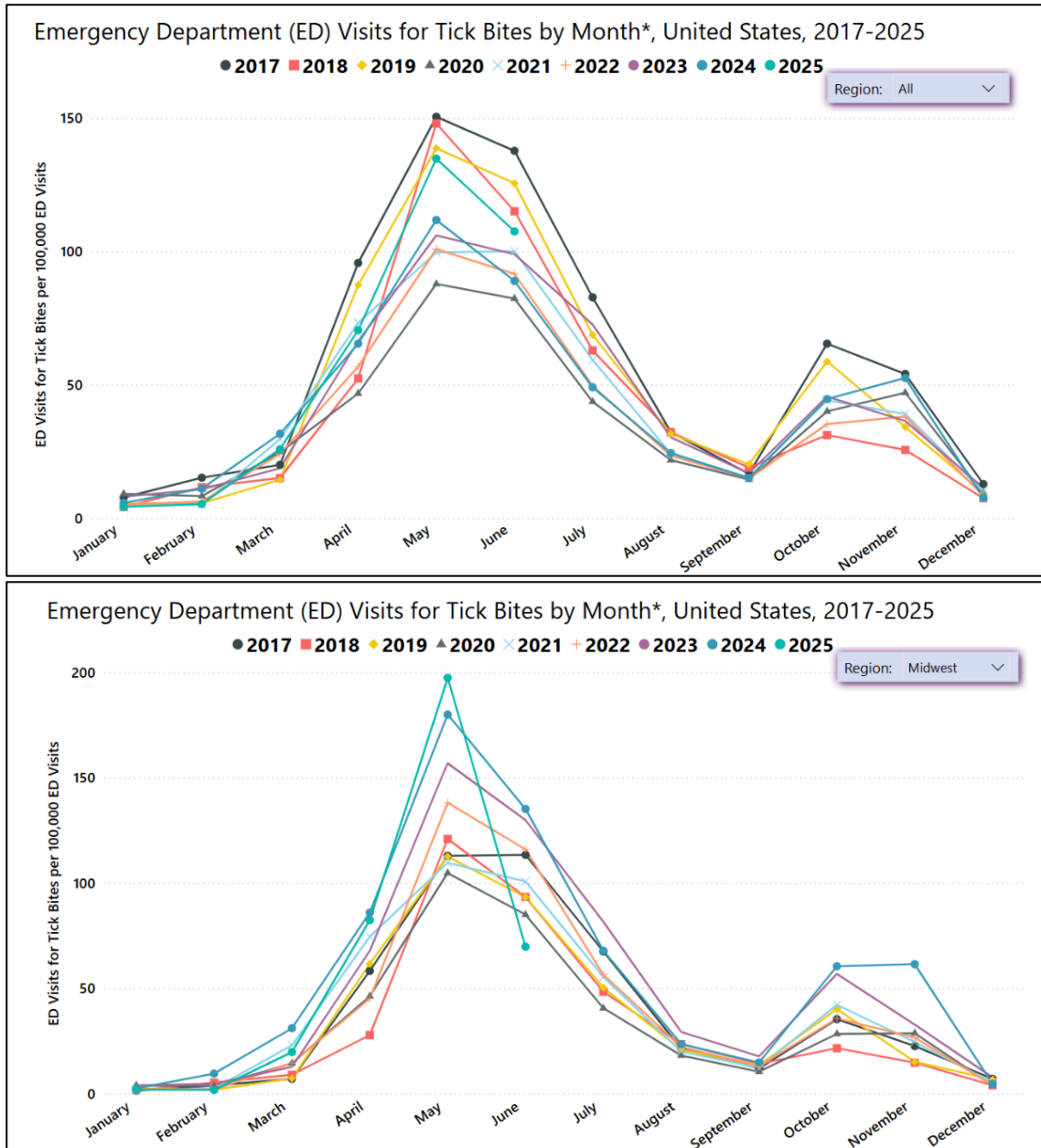
Report to the Boards of Health
Jennifer Morse, MD, MPH, FAAFP, Medical Director

Mid-Michigan District Health Department, Wednesday, June 25, 2025
Central Michigan District Health Department, Wednesday, June 25, 2025
District Health Department 10, Friday, June 27, 2025



Ticks

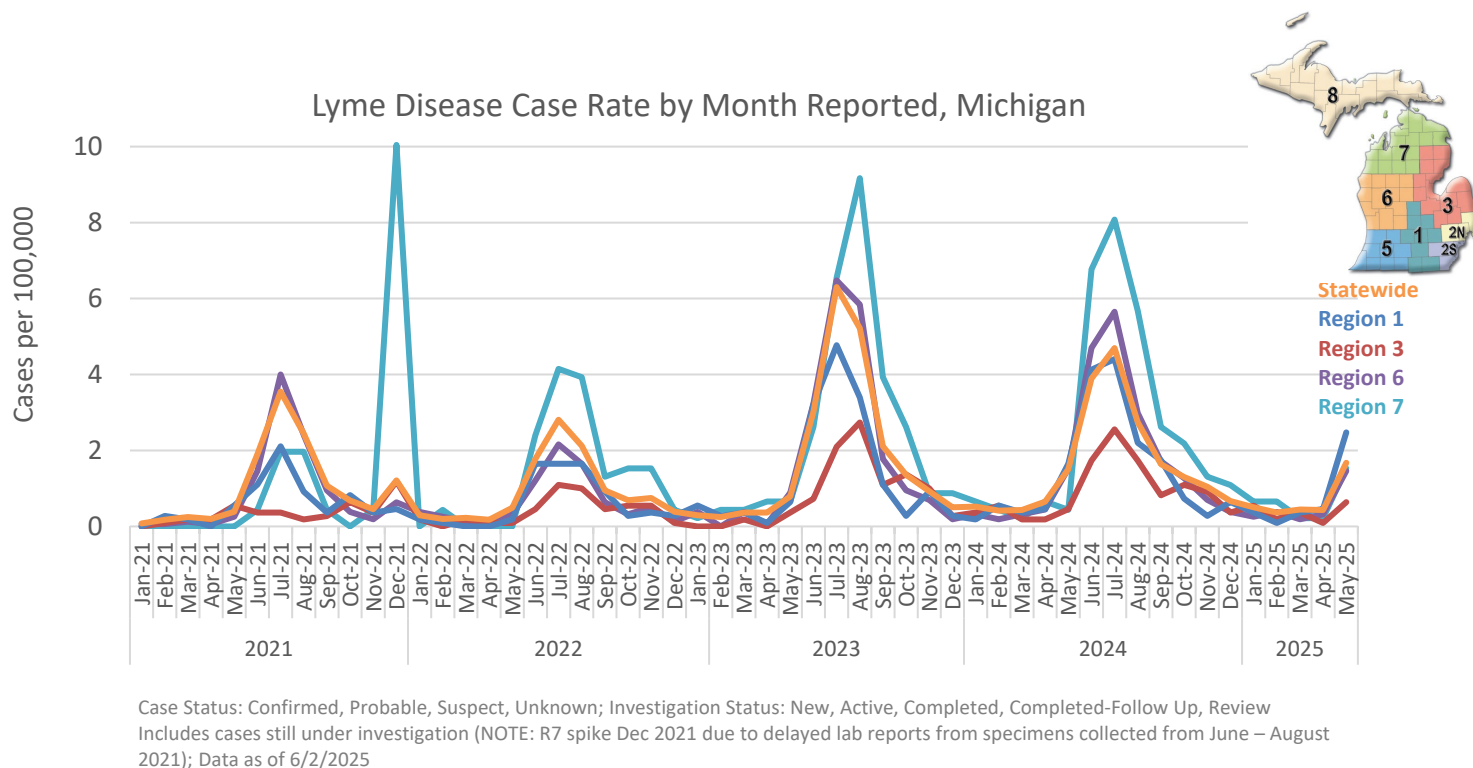
Reports of tick bites were at an all time high this May in the Midwest and a six year high for the US, according to ER visit data.



<https://www.cdc.gov/ticks/data-research/facts-stats/tick-bite-data-tracker.html>

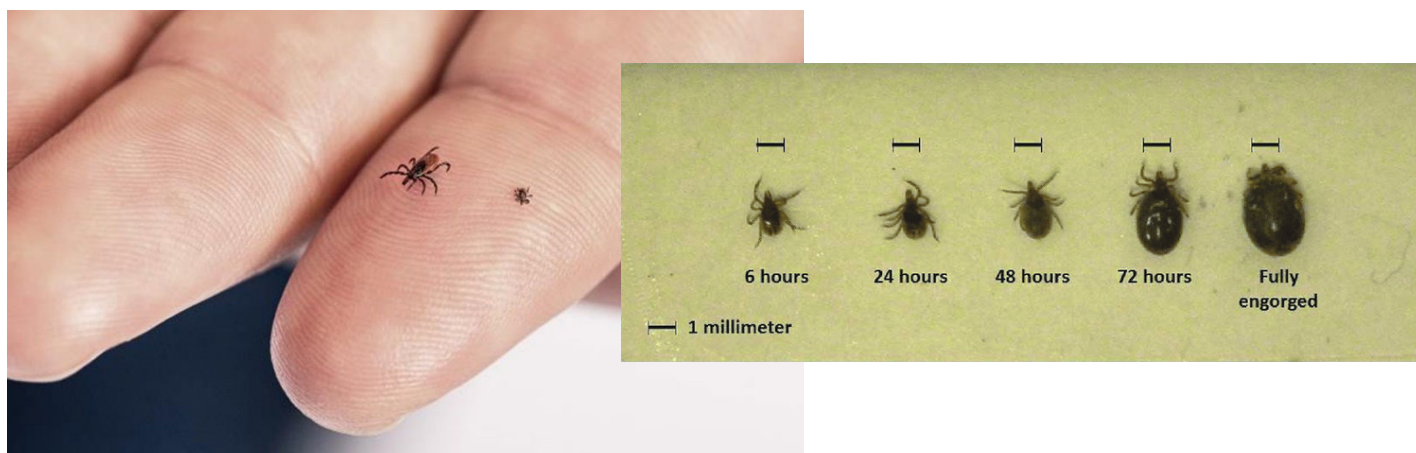
May also marks the start of peak transmission season for Lyme disease in Michigan, which typically goes through August. This coincides with the nymph life phase of the blacklegged ticks. Adult ticks are more likely to carry

diseases like Lyme, but the nymph ticks are so small they are often missed and able to attach long enough to transmit diseases.

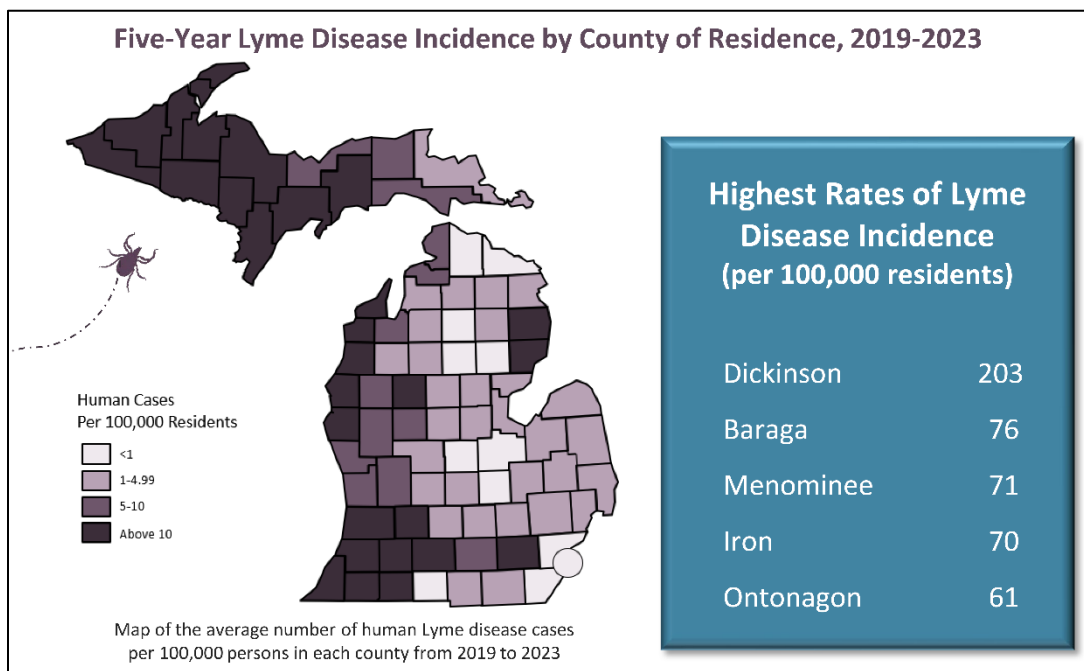


Tick bites don't hurt and, unless removed, the tick will stay attached for several days until it is full of blood and drops off. The three most common tickborne illnesses in Michigan, Lyme disease, anaplasmosis, and babesiosis, are all spread by the blacklegged tick and typically won't spread until the tick has been attached for at least 24 hours. That is why checking for ticks daily and removing them when found is important to prevent tickborne illnesses.

You can tell from the pictures below how small ticks are. In the left photo, the tick on the left is an adult and on the right is a nymph. In the right image you can see how much larger the nymph tick becomes the longer it feeds.

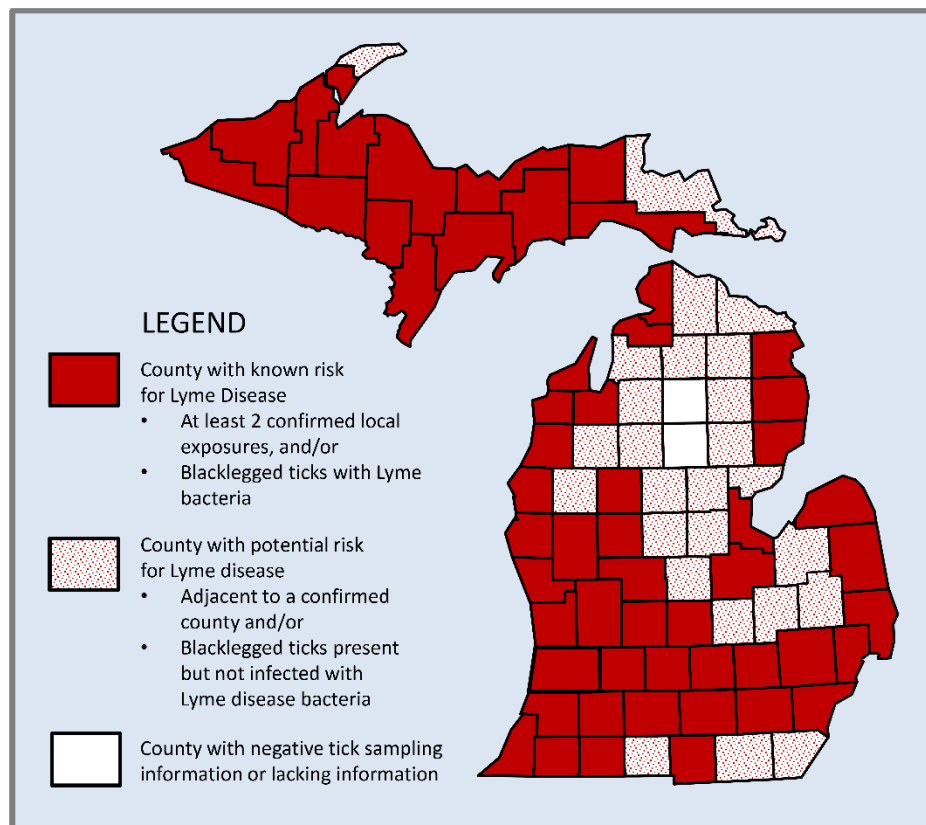


Lyme disease is the most common tick-borne illness reported in Michigan. In 2023, about 1,000 cases of Lyme disease were contracted in Michigan. The map below shows the areas of Michigan that have the highest rates of Lyme disease, based on data from 2019 to 2023.

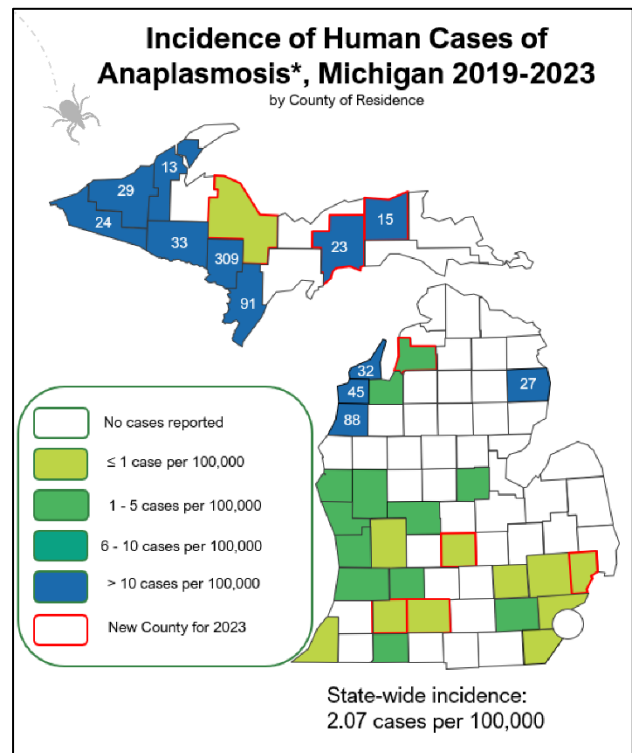
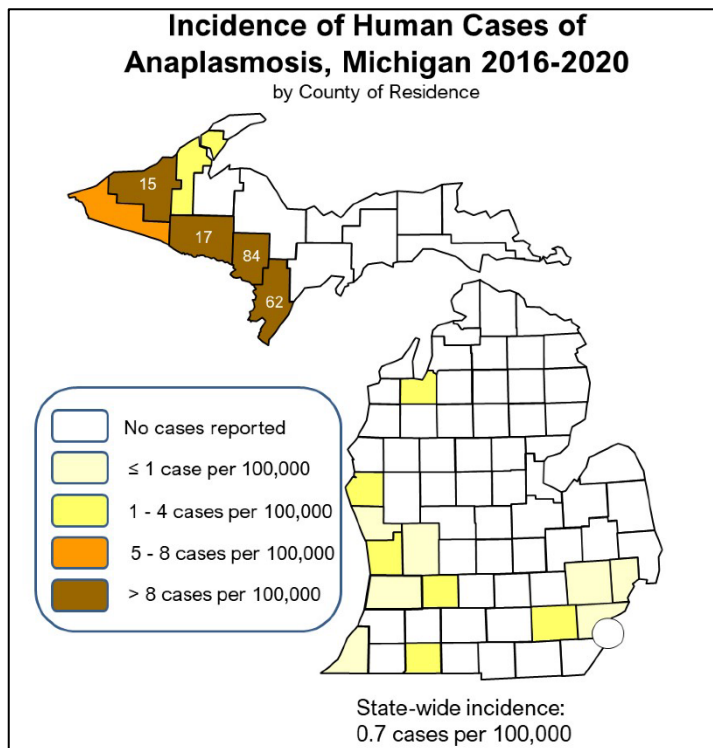


Using the this data long with what is known about the location and Lyme infection status of blacklegged ticks, the Michigan Lyme Disease Risk Map is created.

For more information about Lyme disease prevention, visit www.michigan.gov/lyme



The second most common tick-borne illness in Michigan, **anaplasmosis**, has been increasing in both incidence and territory. Below you can see a comparison of the incidence and location of cases from 2016-2020 and 2019-2023.



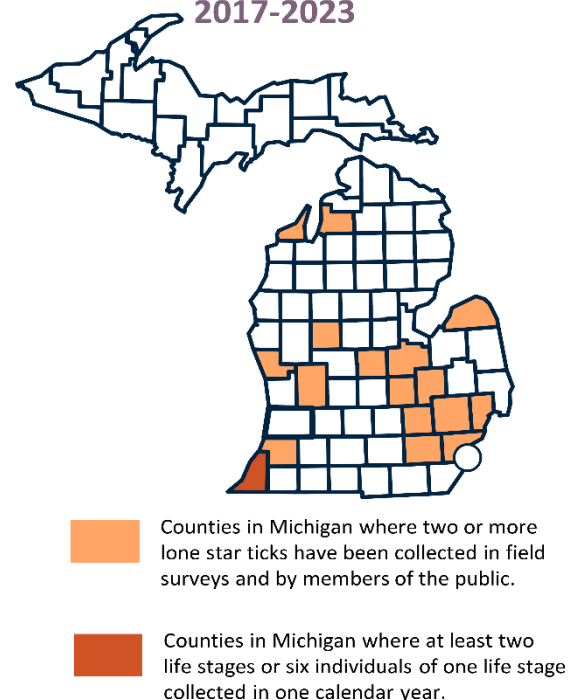
Babesiosis, the third most common tickborne disease, is also increasing. While there were only 9 cases reported for all of 2023, there were a total of 10 cases in the five years of 2016-2020.

Lone star ticks are the third most common tick in Michigan, making up about 5% of all ticks submitted. It is found mainly in southern Michigan and has become established in Berrien County. The Lone Star tick can transmit ehrlichiosis, tularemia, Bourbon virus, Heartland virus, and southern tick-associated rash illness (STARI). A bite from this tick may also be associated with Alpha-gal Syndrome (AGS). AGS is a serious, potentially life-threatening allergic reaction that may occur after a person eats red meat or is exposed to products containing alpha-gal. Alpha-gal (full name: galactose- α -1,3-galactose) is a sugar molecule found in most mammals and products made from mammals, however it is not normally found in fish, reptiles, birds, or humans.

Efforts to prevent tick bites are important to prevent disease.

- Use repellent that contains 20 percent or more DEET, picaridin, or IR3535 on exposed skin for protection that lasts several hours.
- Wear clothing that has been treated with permethrin.
- Take a shower as soon as you can after coming indoors.
- Look for ticks on your body. Feel for bumps and look for tiny brown spots, especially in the scalp, ears, underarms, belly

one Star Tick Distribution in Michigan, 2017-2023



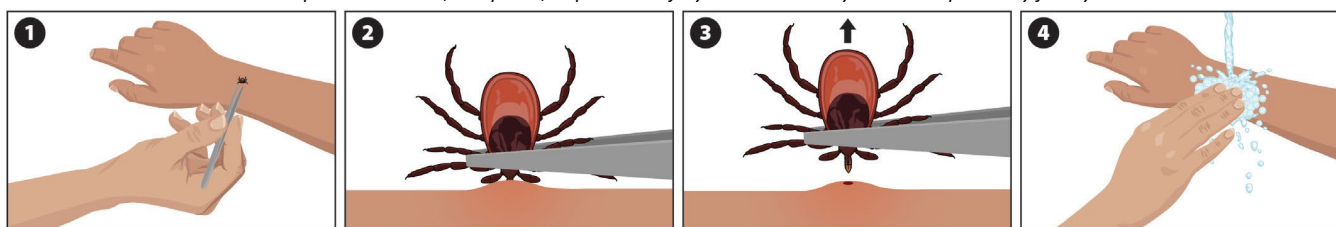
button, around waistline, behind knees, in the groin area, and between legs

- Put your clothes in the dryer on high heat for 60 minutes to kill any remaining ticks before washing them.

If you do find a tick remove it properly.

1. Use fine-tipped tweezers to grasp the tick at the surface of your skin.
2. Pull the tick straight up and out. Don't twist or jerk the tick—this can cause the mouth parts to break off and stay in the skin. If this happens, remove the mouth parts with tweezers if you can. If not, leave them alone and let your skin heal.
3. Clean the bite and your hands with rubbing alcohol, an iodine scrub, or soap and water.
4. You may get a small bump or redness that goes away in 1-2 days, like a mosquito bite. This is not a sign that you have Lyme disease.

Note: Do not put hot matches, nail polish, or petroleum jelly on the tick to try to make it pull away from your skin.

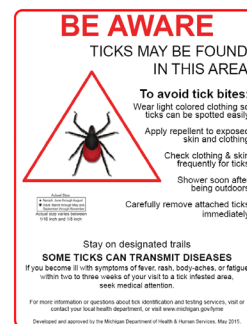


Once you've removed the tick, you can get help identifying what type it is by sending a picture or the tick to MDHHS. If it is the American dog tick, the most common type in Michigan, it very rarely spreads any kind of diseases. For more information go to <https://www.michigan.gov/emergingdiseases/home/lyme-disease>



Recommendations

1. Promote awareness of tick prevention strategies by making educational materials available in public areas, supporting field and park signs, and directing those with questions to sources of correct information.
2. Support tick and tickborne disease prevention measures such as keeping walking trails clear of overgrowth, supporting tick dragging, and other similar efforts.



References

- Michigan Department of Health and Human Services Bureau of Infectious Disease Prevention Emerging & Zoonotic Infectious Disease Section (EZID). 2023 Michigan Emerging and Zoonotic Disease Surveillance Summary. 2024. https://www.michigan.gov/emergingdiseases/-/media/Project/Websites/emergingdiseases/EZID_Annual_Surveillance_Summary.pdf?rev=beed8df505004c28a8c8205511bd40dd
- Michigan Department of Health and Human Services Bureau of Infectious Disease Prevention Emerging & Zoonotic Infectious Disease Section (EZID). Michigan Trends in Tickborne Disease 2016-2020. https://www.michigan.gov/emergingdiseases/-/media/Project/Websites/emergingdiseases/Folder3/2021_Tickborne_Disease_Summary_Report.pdf?rev=a77a79a5ca16467ebef4a41c9272e55
- <https://www.cdc.gov/ticks/about/index.html>