Tick-borne diseases, transmitted through the bite of a tick, are on the rise in many parts of the United States, including Michigan. While risk for tick-borne illnesses, like Lyme disease, can vary based on several factors, awareness and prevention are essential for reducing the likelihood of contracting these diseases.

What is a tick?
A tick is a parasitic arachnid, closely related to insects and spiders. They have a four-stage life cycle and survive by feeding on the blood of a host at each stage in the cycle. There are over 850 different species of ticks worldwide, more than 20 of which can be found in Michigan. The most common species you may encounter include the American dog tick, blacklegged tick (deer tick), lone star tick, and woodchuck tick.

Tick Bite Prevention
- Be aware of locations where you are most likely to encounter ticks, like grassy or wooded areas. Take extra precautions while in these areas.
- Check your skin and clothes for ticks after returning from the outdoors. Remove ticks as soon as possible and dispose of properly.
- Wear long, light-colored pants (to more easily spot ticks) and tuck pant legs into socks or boots.
- Use EPA approved repellents, like DEET. More information can be found at: https://www.epa.gov/insect-repellents
- Treat clothing and gear with products containing 0.5% permethrin. Do not apply permethrin directly to your skin.
If a Tick Bites You

If you find a tick attached to your skin, do not panic. Following these steps for safe removal can reduce the risk of disease transmission:

1. Use fine tipped tweezers to grasp the tick as close to the skin as possible. Do not use your fingers to pull the tick off your skin.

2. Pull upward with steady, even pressure. Don't jerk or twist the tick. It is important to try to keep the tick intact so that the mouthparts can be removed with the rest of the tick.

3. Keep the tick intact and dispose of it by flushing it down the toilet or sealing it in a bag with rubbing alcohol.

4. Clean the bite area and your hands with rubbing alcohol or soap and water.

Following a tick bite, monitor for symptoms for the next 30 days and call your healthcare provider if you have questions or develop symptoms.
Tick-Borne Diseases

Ticks can be a vector for various pathogens. Some of the most common tick-borne illnesses include Lyme disease, babesiosis, anaplasmosis, and Rocky Mountain spotted fever. Of those, Lyme disease is the most commonly reported vector-borne illness in the United States.

The risk of Lyme disease has steadily increased in Michigan, as well as the abundance of its vector, the blacklegged tick.

Early symptoms of Lyme disease include fever and chills, headache, muscle and joint pain, and an expanding rash called erythema migrans. You may have heard the common term “bull’s-eye rash”, due to the classic target-like appearance, but it is important to know that most of these rashes look like a solid red or reddish-blue oval. Identification of early symptoms can aid with diagnosis and treatment of the illness before it progresses into disseminated, or stage 2, Lyme disease.

If you experience symptoms and suspect or know that you have been bitten by a tick, call your healthcare provider. If you are bitten by a tick while at work, report it to your supervisor so that the proper steps can be taken to ensure the right care, if needed, is provided to you. More information on ticks and bite prevention can be found on the CDC website at https://www.cdc.gov/ticks