



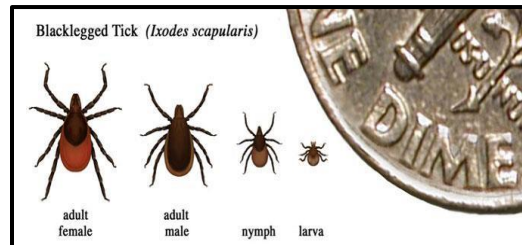
Lyme Disease Fact Sheet

Lyme disease overview

Lyme disease is the most common tick- borne disease in Maryland and the United States. It is caused by the bacterium *Borrelia burgdorferi* and transmitted through the bite of an infected black-legged tick (deer tick). Common symptoms of Lyme disease include fever, headache, fatigue, and a skin rash called erythema migrans. If untreated, infection can spread to joints, the nervous system, and the heart. Lyme disease is diagnosed based on symptoms, physical findings (e.g., rash) and the possibility of exposure to an infected tick. Prompt treatment (within 6 weeks of the bite) of Lyme disease with appropriate antibiotics can reduce the long-term health effects of the disease. Pictures of the rash may help clinicians diagnose and treat Lyme disease in its earliest stages. Laboratory blood tests are also helpful in diagnosing Lyme disease if used correctly and performed with validated methods. A small percentage of individuals who receive proper treatment may experience continued symptoms known as Post- Treatment Lyme Disease Syndrome (PTLDS). Ticks that transmit Lyme Disease can also carry other organisms, sometimes causing "co-infections" such as Erlichia, Babesiosis, Anaplasmosis, and Rocky Mountain Spotted Fever (Centers for Disease Control and Prevention).

How Lyme disease is spread

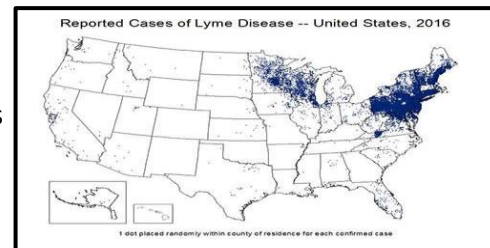
Lyme disease is spread when the bacterium *Borrelia burgdorferi* enters the body through the bite of an infected tick. Ticks can attach to any part of the human body and are often found in hard-to-see areas such as the groin, armpits, and scalp. In most cases, a tick must be attached for 36 to 48 hours or more for transmission to occur. Most people are infected when bitten by immature ticks called nymphs.



Nymphs are tiny (less than 2 mm) and difficult to see. Nymphs feed during the spring and summer months. Adult ticks can also transmit Lyme disease, but are larger and more likely to be found before they have had time to transmit the bacteria. Adult ticks are most active during cooler months. Black- legged ticks search for host animals from leaf litter on the forest floor or from the tips of grasses and shrubs. Ticks crawl onto animals or people as they brush against them. The risk of exposure to ticks is highest in the woods and in the area between a person’s lawn and the woods. Ticks may also be carried by animals and pets into a person’s lawn, garden, or house. People who spend time in heavily wooded areas where ticks are infected with Lyme disease are at higher risk for exposure (Centers for Disease Control and Prevention).

Where Lyme disease is found

Nationally, cases of Lyme disease are heavily concentrated in the Northeast and upper Midwest. Maryland is one of 14 states from which around 95% of confirmed Lyme disease cases are reported. Cecil County is considered to be an area of high Lyme disease incidence (CDC).



Healthy People, Healthy Community, Healthy Future

Administrative Services.....	410-996-5550	Environmental Health Services.....	410-996-5160
Behavioral Health Services	410-996-5106	Health Promotions.....	410-996-5168
Emergency Preparedness.....	410-996-5113	Special Population Services.....	410-996-5112
Community Health Services /Disease Control	410-996-5100	En Español	410-996-5550 EXT 4680
TTY Users for Disabled: Maryland Relay		800-201-7165	

Lyme disease in Cecil County and Maryland

From 2017 to 2022, there were 8,483 reports of confirmed and probable cases of Lyme disease in Maryland, of which 330 were in Cecil County. For Maryland, the incidence of confirmed and probable Lyme disease cases increased from 30.5 cases per 100,000 population in 2017 to 32.9 cases per 100,000 population in 2022, a 2.4 % increase in incidence. Over this same period of time the incidence of confirmed and probable Lyme disease cases in Cecil County decreased by 0.9%, from 59.6 cases per 100,000 population in 2017 to 58.7 cases per 100,000 population in 2022. Although the incidence of Lyme disease in Cecil County slightly decreased over the last several years, it remains significantly higher than the state average.

Lyme Disease Confirmed and Probable Cases and Incidence Rates per 100,000 Population, Cecil County and Maryland, 2017-2022												
	2017		2018		2019		2020		2021		2022	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Cecil County	63	59.6	65	61.5	61	57.8	35	33.1	44	41.7	62	58.7
Maryland	1887	30.5	1384	22.4	1420	23	838	13.6	918	14.9	2036	32.9

National Electronic Disease Surveillance System (NEDSS) database. Maryland Department of Health. Prevention and Health Promotion Administration.

Underreporting of Lyme disease is a problem. It is believed that the true incidence of Lyme disease in the United States is around ten times higher than what is reported (CDC).

What you can do to prevent Lyme disease

- **Avoid tick-infested areas.** Ticks are most active in the late spring through early fall. When hiking, you should walk in the center of the trail and avoid overgrown grass, brush, and leaf litter at the edge of the trail.
- **Use Insect Repellent.** Use insect repellent containing DEET on clothes and exposed skin. You can also treat clothes with the insecticide *permethrin*.
- **Wear appropriate clothing.** Wearing long pants and long sleeves helps to keep ticks off of your body. Tucking shirts into pants and pants into socks helps to keep ticks on the outside of clothing. Light colored clothing also makes ticks easier to spot.
- **Check for ticks daily.** Always check for ticks after being outdoors, even in your own yard. Remember to check your children and pets after they have been outside.
- **Protect your pets.** Talk to your veterinarian about tick control products for pets.

More information about Lyme disease is available through the, Maryland Department of Health (<https://health.maryland.gov/phpa/OIDEOR/CZVBD/Pages/lyme-disease.aspx>), and the Centers for Disease Control and Prevention (CDC) (<http://www.cdc.gov/lyme/index.html>).

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