



# Understanding Lyme Disease

## BEFORE YOU BEGIN FIREFLY LIGHT THERAPY

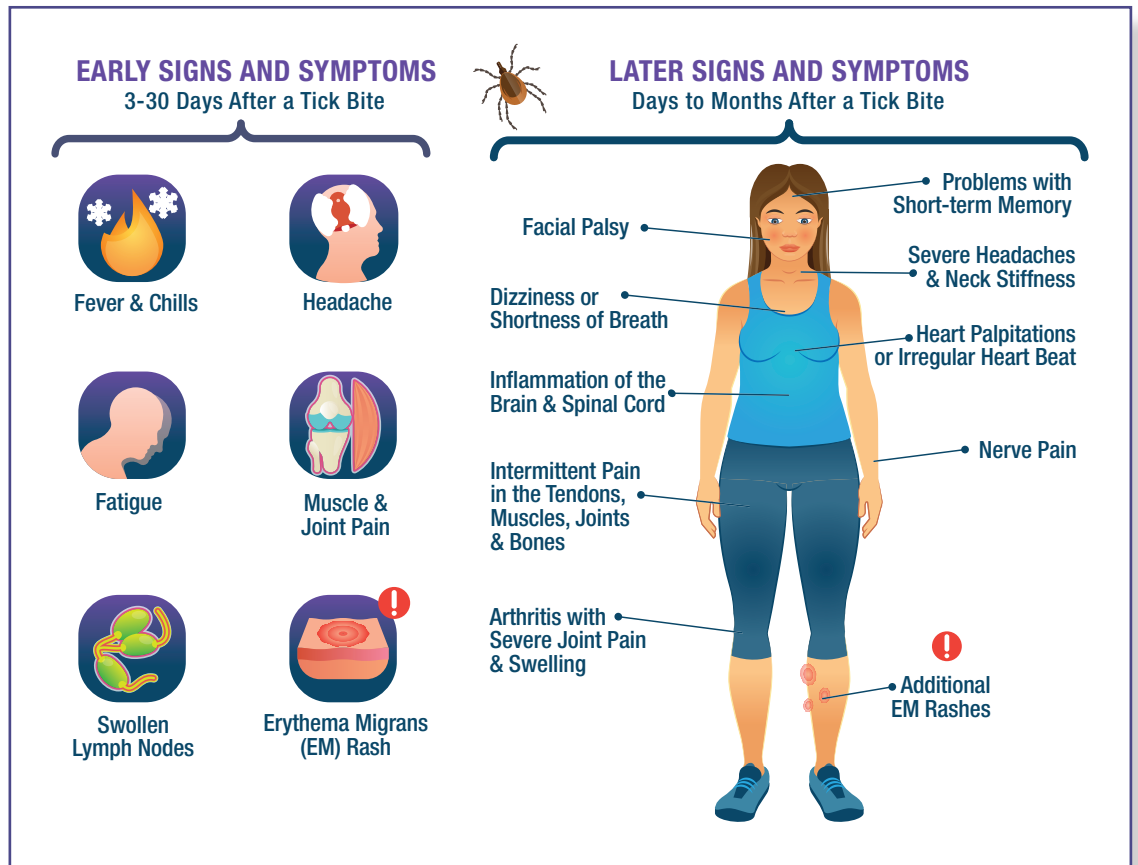
Lyme disease is caused by four main species of bacteria. *Borrelia Burgdorferi* and *Borrelia Mayonii* cause Lyme disease in the United States, while *Borrelia Afzelii* and *Borrelia Garinii* are the leading causes in Europe and Asia. The most common tick-borne illness in these regions, Lyme disease is transmitted most often by the bite of an infected black-legged tick, commonly known as a deer tick. However; reports are now surfacing showing Lyme in mosquitos, nats, and other types of ticks, such as dog ticks.

## Symptoms

The signs and symptoms of Lyme disease vary. They usually appear in stages, but the stages can overlap.

### Early Signs and Symptoms

A small, red bump, similar to the bump of a mosquito bite, often appears at the site of a tick bite or tick removal and resolves over a few days. This is a normal occurrence and doesn't indicate Lyme disease.



However, these signs and symptoms can occur within a month after you've been infected:

**Rash:** From three to 30 days after an infected tick bite, an expanding red area might appear that sometimes clears in the center, forming a bull's-eye pattern. The rash (erythema migrans) expands slowly over days and can spread to 12 inches (30 centimeters) across. It's typically not itchy or painful but might feel warm to the touch.

**Erythema Migrans:** This is one of the hallmarks of Lyme disease, although not everyone with Lyme disease develops the rash. Some people develop this rash at more than one place on their bodies.

**Other Symptoms:** Fever, chills, fatigue, body aches, headache, neck stiffness and swollen lymph nodes can accompany the rash.

For more information contact our National Sales Rep Lori Tran at [lori@balesphotonics.com](mailto:lori@balesphotonics.com) or call 307-256-0508

Sourced from: [mayoclinic.org/diseases-conditions/lyme-disease/symptoms-causes](https://www.mayoclinic.org/diseases-conditions/lyme-disease/symptoms-causes)

## Later Signs and Symptoms

If untreated, new signs and symptoms of Lyme infection might appear in the following weeks to months. These include:

**Erythema Migrans:** The rash may appear on other areas of your body.

**Joint Pain:** Bouts of severe joint pain and swelling are especially likely to affect your knees, but the pain can shift from one joint to another.

**Neurological Problems:** Weeks, months or even years after infection, you might develop inflammation of the membranes surrounding your brain (meningitis), temporary paralysis of one side of your face (Bell's Palsy), numbness or weakness in your limbs, and impaired muscle movement.

## Less Common Signs and Symptoms

Several weeks after infection, some people develop:

**Heart problems** such as an irregular heartbeat, **eye inflammation**, **liver inflammation** (hepatitis), **severe fatigue**

## When to See a Health Professional

The longer the tick remains attached to your skin, the greater your risk of getting the disease. If you think you've been bitten and have signs and symptoms of Lyme disease – particularly if you live in an area where Lyme disease is common – contact your doctor. Treatment for Lyme disease is more effective if begun early.

## See Your Doctor Even if Symptoms Disappear

Visit your doctor even if signs and symptoms disappear – the absence of symptoms doesn't mean the disease is gone. Untreated, Lyme disease can spread to other parts of your body for several months to years after infection, causing arthritis and nervous system problems. Ticks can also transmit other illnesses, such as babesiosis and Colorado tick fever.

## What to Expect When Treating Lyme Disease with Firefly Light Therapy

Firefly Light Therapy is a very powerful treatment for Lyme disease and for that reason we recommend a slow progression of time and intensity over a series of treatments.

**First we scan the body and identify the pathogens.** This scan is painless, quick and does not require disrobing. The Fscan reveals the pathogens present and the light therapy is then programmed to help destroy those specific parasites. The light therapy treatments are also quick and painless (about 10 minutes each) and you'll only feel a warm light on your abdomen. **Usually a series of 3 treatments is given over the course of a week.**

**Due to the powerful nature of Firefly Light Therapy, you may still experience what is called a "Herxheimer reaction."** This is the body's normal response to a massive release of toxins present inside of the bacteria when the cell dies during treatment. A Herx reaction or "herxing" can feel like the flu. Typically, increased muscle and joint pains, headaches, nausea, fatigue, low-grade fevers and brain fog are common but usually pass within 48 hours. Following a detox protocol and revving up antioxidants prescribed by your practitioner can minimize this discomfort. **These reactions are a great indicator that the treatment is working!**

## Our Latest Firefly Light Therapy Protocol

We're presently in Phase One of a Firefly protocol for a reduction in Herx reactions.