

LYME DISEASE

"The Great Imitator"

Lyme disease - Basics

- The most common vector-borne illness in the U.S.
- Also known as Lyme borreliosis.
- Transmitted to humans via ticks which are infected with a spirochete (spiral shape bacterium) called *Borrelia burgdorferi*.
- *Borrelia's* cork-screw shape allows it to burrow into a variety of tissues, causing multi-system illness. Co-infection with *Babesia* or *Ehrlichia* is common.
- Called *The Great Imitator* since its symptoms mimic many other diseases. For this reason, patients are often misdiagnosed with chronic fatigue syndrome, fibromyalgia, multiple sclerosis, and various psychiatric illnesses, including depression.
- Misdiagnosis leads to unrestrained progression of Lyme infection and delay of correct treatment.



Classic Erythema Chronicum Migrans "bull's eye" rash.

Signs and symptoms of Lyme disease

- Symptoms of Lyme disease begin 3-30 days after a tick bite; average 7 days. Symptoms vary by disease stage.
- **Stage 1:** Occurs 1-30 days after the tick bite. Flu-like illness (fever, chills, fatigue, malaise, muscle or joint pain), headache, red expanding rash (bull's eye rash, depicted above). The rash occurs at or near the site of the tick bite and may persist for 2-3 weeks.
- **Stage 2:** Early disseminated disease, 3-10 weeks after inoculation. Musculoskeletal and neurologic symptoms, such as arthritis, facial muscle weakness or paralysis, meningitis, waxing and waning headache, neck pain/stiffness, fever, malaise, double or blurred vision, dizziness, heart palpitations, or chest pain.
- **Stage 3:** Occurs months to years after the initial infection. Arthritis of large joints, especially the knee, associated with warmth, swelling, and limited range of motion. Other neurologic features (encephalopathy, neuropathy, etc.)