



*Erythema migrans
(bull's-eye) rash*



*Lyme arthritis
(swollen knee)*



*Facial palsy
(facial droop)*

Diagnosis

Healthcare providers should consider the following factors when diagnosing Lyme disease:

- The likelihood that the patient has been exposed to infected blacklegged ticks (see map).
- Patient has signs and symptoms of Lyme disease, such as erythema migrans or arthritis.
- The possibility that other illnesses may be causing similar symptoms.
- Results of laboratory tests, recognizing that a serologic response may take several weeks to develop.

CDC recommends the use of Food and Drug Administration (FDA)-cleared tests for Lyme disease. Most available tests measure antibodies made in response to infection, which can take several weeks to appear in the blood. People who have been infected for longer than 6 weeks will almost always test positive, but people infected for shorter periods may not. Once produced, antibodies normally remain detectable in the blood for months or years after the patient has recovered.

This means that:

- Patients can have a negative blood test result if tested in the first few weeks after infection.
- Healthcare providers should treat patients for Lyme disease promptly if the patient has a history of recent exposure to tick bites and signs and symptoms of early Lyme disease, such as erythema migrans.
- A negative test result in a patient with arthritis or other long-standing symptoms is strong evidence that Lyme disease is not the cause of their illness.
- For people concerned about reinfection, it is difficult to distinguish between an old infection and a new infection using a blood test. Diagnosis of reinfection relies on careful clinical consideration of exposure history and symptoms.

Treatment

People treated with appropriate antibiotics in the early stages of Lyme disease usually recover rapidly and completely. The antibiotics most commonly used to treat Lyme disease include doxycycline, amoxicillin, or cefuroxime axetil. Early diagnosis and proper antibiotic treatment of Lyme disease can help prevent more severe disease.