

Questions and Answers about Lyme Disease

Q. How do people get Lyme disease?

A. By the bite of a deer tick (*Ixodes scapularis*) infected with lyme disease bacteria, *Borrelia burgdorferi*.¹

Q. What are the signs and symptoms of Lyme disease?

A. Usually within 7 to 14 days following a tick bite, 80% of patients will have a red, slowly expanding “bull’s-eye” rash (called erythema migrans), accompanied by general tiredness, fever, headache, stiff neck, muscle aches, and joint pain.² If untreated, weeks to months later some patients may develop arthritis, neurological abnormalities, facial palsy, motor and sensory nerve inflammation (radiculoneuritis), and inflammation of the brain (encephalitis) and, rarely, cardiac problems.²

Q. How is Lyme disease diagnosed?

A. The diagnosis of Lyme disease is based primarily on clinical findings, and it is often appropriate to treat patients with early disease solely on the basis of objective signs and a known exposure. Serologic testing can provide valuable supportive diagnostic information. The CDC recommends testing initially with a sensitive first test, either an enzyme-linked immunosorbent assay (ELISA) or an indirect fluorescent antibody (IFA) test, followed by testing with the more specific Western immunoblot (WB) test to corroborate equivocal or positive results obtained with the first test.³ HHLA requires a green tube for standard Lyme disease testing (by ELISA), please specify (WB) if that methodology is required.

Q. How is Lyme disease treated?

A. Antibiotic treatment for 3-4 weeks with doxycycline or amoxicillin is generally effective in early disease.¹ Cefuroxime axetil or erythromycin can be used for persons allergic to penicillin or who cannot take tetracyclines.¹ Later disease, particularly with objective neurologic manifestations may require treatment with intravenous ceftriaxone or penicillin for 4 weeks or more. In later disease, treatment failures may occur and re-treatment may be necessary.¹

1) “Learn about Lyme Disease” CDC: www.cdc.gov/ncidod/dvbid/lyme/

2) Arthritis Health Center, “Lyme Disease” WebMD, <http://arthritis.webmd.com/Hc/Lyme-disease-Topic-overview>

3) “Lyme Disease Diagnosis” CDC http://www.cdc.gov/ncidod/dvbid/lyme/ld_humandisease_diagnosis.htm.