

WISCONSIN LYME DISEASE CASE REPORT

PATIENT/PHYSICIAN INFORMATION

Patient's Name: _____	Date reported to HD: _____ (mm/dd/yyyy)
Street Address: _____	Agency Reporting: _____
City: _____	Provider Name: _____
Patient Phone: _____	Provider Address: _____
	Provider Phone: _____

DEMOGRAPHICS

State of residence: _____	County of residence: _____	Zip code: _____
Sex: male female unknown	Date of birth: _____	Hispanic Ethnicity: yes no unknown
		Race: <input type="checkbox"/> American Indian or Alaskan Native <input type="checkbox"/> Black or African American <input type="checkbox"/> Native Hawaiian or Pacific Islander
		Asian White Unknown

LABORATORY FINDINGS

EIA/IFA IgM IgG total	positive	equivocal	Other tests (check what applies): <i>B. burgdorferi</i> cultured CSF titer higher than serum titer*? Additional assays (including PCR) <i>Specify test, collection date, specimen type, and result:</i>
Specimen collection date: _____ (if not serum, specify):	negative	not done	
Western Blot (WB) Specimen collection date: _____ (if not serum, specify):	IgM: positive	negative not done	
<i>Please indicate positive WB bands, if known. For IgM, 2 of 3 bands must be positive For IgG, 5 of 10 bands must be positive</i>	41kDa (FlaB)	39 kDa (BmpA)	21-25 kDa (OspC)
	IgG: positive	negative	not done
	93 kDa 66 kDa 58 kDa 45 kDa 41 kDa	28 kDa	21-25 kDa (OspC) 18 kDa

CLINICAL SIGNS AND SYMPTOMS AND EXPOSURE

Did a physician or other medical professional diagnose this patient with Lyme disease? yes no	Date of Lyme disease diagnosis: _____	Date of symptom onset: _____
---	--	-------------------------------------

Confirmatory signs and symptoms	Non-confirmatory signs and symptoms (check all that apply):																																								
<table border="1"> <tr> <td>yes</td> <td>no</td> <td>unknown</td> </tr> <tr> <td>EM rash (> 5 cm in diameter)</td> <td></td> <td></td> </tr> <tr> <td>Arthritis (objective episodes of joint swelling)</td> <td></td> <td></td> </tr> <tr> <td>Bells palsy or other cranial neuritis</td> <td></td> <td></td> </tr> <tr> <td>Encephalomyelitis*</td> <td></td> <td></td> </tr> <tr> <td>Lymphocytic meningitis</td> <td></td> <td></td> </tr> <tr> <td>Radiculoneuropathy</td> <td></td> <td></td> </tr> <tr> <td>2nd or 3rd degree atrioventricular block</td> <td></td> <td></td> </tr> </table> <p><i>*If encephalomyelitis is checked, CSF titer must be higher than serum titer</i></p>	yes	no	unknown	EM rash (> 5 cm in diameter)			Arthritis (objective episodes of joint swelling)			Bells palsy or other cranial neuritis			Encephalomyelitis*			Lymphocytic meningitis			Radiculoneuropathy			2 nd or 3 rd degree atrioventricular block			<table border="1"> <tr> <td>Arthralgias</td> <td>Myocarditis</td> </tr> <tr> <td>Bundle branch block</td> <td>Neck pain</td> </tr> <tr> <td>Cognitive impairment</td> <td>Other rash</td> </tr> <tr> <td>Encephalopathy</td> <td>Palpitations</td> </tr> <tr> <td>Fatigue</td> <td>Paresthesias</td> </tr> <tr> <td>Fever/Sweats/Chills</td> <td>Peripheral neuropathy</td> </tr> <tr> <td>Headache</td> <td>Visual/auditory impairment</td> </tr> <tr> <td>Myalgias</td> <td>Symptom(s) not listed</td> </tr> </table>	Arthralgias	Myocarditis	Bundle branch block	Neck pain	Cognitive impairment	Other rash	Encephalopathy	Palpitations	Fatigue	Paresthesias	Fever/Sweats/Chills	Peripheral neuropathy	Headache	Visual/auditory impairment	Myalgias	Symptom(s) not listed
yes	no	unknown																																							
EM rash (> 5 cm in diameter)																																									
Arthritis (objective episodes of joint swelling)																																									
Bells palsy or other cranial neuritis																																									
Encephalomyelitis*																																									
Lymphocytic meningitis																																									
Radiculoneuropathy																																									
2 nd or 3 rd degree atrioventricular block																																									
Arthralgias	Myocarditis																																								
Bundle branch block	Neck pain																																								
Cognitive impairment	Other rash																																								
Encephalopathy	Palpitations																																								
Fatigue	Paresthesias																																								
Fever/Sweats/Chills	Peripheral neuropathy																																								
Headache	Visual/auditory impairment																																								
Myalgias	Symptom(s) not listed																																								

Exposure: If EM is present, was the patient exposed to wooded, brushy or grassy areas in a Lyme disease endemic county ≤30 days before onset?
 yes no unknown If yes, where: County(s) _____ State(s) _____
 If the patient had EM, was there: A single EM or multiple EM rashes

SUPPLEMENTAL INFORMATION

-Was the patient pregnant at the time of illness?	yes	no	unknown
-Was the patient hospitalized for this illness?	yes	no	unknown
-Antibiotics used for this illness (check all that apply):	doxycycline	ceftriaxone	<input type="checkbox"/> penicillin amoxicillin <input type="checkbox"/> cefuroxime axetil
	azithromycin	<input type="checkbox"/> other: _____	
-Combined duration of antibiotics for this illness:	<1 month	1 - 3 months	>3 months None recorded

----FOR HEALTH DEPARTMENT USE ONLY----

Confirmed Case EM rash in a Wisconsin resident or At least one late manifestation that has laboratory evidence of infection that meets criteria (see next page)	Probable Case physician- diagnosed Lyme disease with non-confirmatory signs and symptoms and laboratory evidence of infection that meets criteria (see next page)	Suspect Case Any positive laboratory test with no clinical information available (e.g. a laboratory report without a case report form)
---	---	--

WISCONSIN LYME DISEASE SURVEILLANCE CASE DEFINITION (06/01/2008)

Clinical description: a systemic, tickborne disease with protean manifestations, including dermatologic, rheumatologic, neurologic, and cardiac abnormalities. The best clinical marker for the disease is the initial skin lesion (i.e., erythema migrans {EM}) that occurs in 60%-80% of patients.

Surveillance case definition: this surveillance case definition was based on the revised national case definition effective January 1, 2008. It is developed for national reporting of Lyme disease and not intended to be used in clinical diagnosis.

Case classifications:**Confirmed case:**

- EM with a potential exposure in a Lyme disease endemic county <30 days before illness (as defined below), *or*
- At least one late manifestation that has laboratory evidence of infection that meets criteria.

Probable:

- Physician-diagnosed Lyme disease that has laboratory evidence of infection with non-confirmatory signs and symptoms.

Suspect:

- Any positive laboratory test with no clinical information available (e.g. a laboratory report).

Not a Case:

- Any case report that does not meet the confirmed, probable, or suspect category.

Definitions and Clarifications:

Erythema migrans (EM). For purposes of surveillance, EM is defined as a skin lesion that typically begins as a red macule or papule and expands over a period of days to weeks to form a large round lesion, often with partial central clearing. A single primary lesion must reach greater than or equal to 5 cm in size. Secondary lesions also may occur. Annular erythematous lesions occurring within several hours of a tick bite represent hypersensitivity reactions and do not qualify as EM. For most patients, the expanding EM lesion is accompanied by other acute symptoms, particularly fatigue, fever, headache, mildly stiff neck, arthralgia, or myalgia. These symptoms are typically intermittent. The diagnosis of EM must be made by a physician. Laboratory confirmation is recommended for persons with no known exposure.

Confirmatory late manifestations. Late signs and symptoms include any of the following when an alternate explanation is not found:

1. Musculoskeletal system. Recurrent, brief attacks (weeks or months) of objective joint swelling in one or a few joints, sometimes followed by chronic arthritis in one or a few joints. Manifestations not considered as criteria for diagnosis include chronic progressive arthritis not preceded by brief attacks and chronic symmetrical polyarthrititis. Additionally, arthralgia, myalgia, or fibromyalgia syndromes alone are not criteria for musculoskeletal involvement.
2. Nervous system. Any of the following, alone or in combination: lymphocytic meningitis; cranial neuritis, particularly facial palsy (may be bilateral); radiculoneuropathy; or, rarely, encephalomyelitis. Encephalomyelitis must be confirmed by demonstration of antibody production against *B. burgdorferi* in the CSF, evidenced by a higher titer of antibody in CSF than in serum. Headache, fatigue, paresthesia, or mildly stiff neck alone are not criteria for neurologic involvement.
3. Cardiovascular system. Acute onset of high-grade (2nd-degree or 3rd-degree) atrioventricular conduction defects that resolve in days to weeks and are sometimes associated with myocarditis. Palpitations, bradycardia, bundle branch block, or myocarditis alone are not criteria for cardiovascular involvement.

Non-confirmatory. Other non-confirmatory signs and symptoms include:

Fever, sweats, chills, fatigue, neck pain, arthralgias, myalgias, fibromyalgia syndromes, cognitive impairment, headache, paresthesias, visual/auditory impairment, peripheral neuropathy, encephalopathy, palpitations, bradycardia, bundle branch block, myocarditis, or other rash.

Disease endemic to county. A county in which Lyme disease is endemic in which at least two confirmed cases have been acquired in the county or in which established populations of a known tick vector are infected with *B. burgdorferi*. For the purposes of surveillance, all Wisconsin counties are considered as endemic.

Exposure. Exposure is defined as having been (less than or equal to 30 days before onset of EM) in wooded, brushy, or grassy areas (i.e., potential tick habitats) in a county in which Lyme disease is endemic. A history of tick bite is not required.

Laboratory evidence. For the purpose of surveillance, the definition of a qualified laboratory assay is (1) a positive culture for *B. burgdorferi*, (2) two-tier testing* with IgM immunoblot seropositive result for specimens collected within 30 days of onset date, or (3) single-tier IgG immunoblot seropositive interpreted using established criteria. Additional assays may be added based on periodic review of the scientific literature and strong evidence of comparable or better performance than qualifying assays.

* Two-tier testing includes an initial screen by enzyme immunoassay (EIA) or indirect immunofluorescence assay (IFA), followed by a Western immunoblot on any equivocal or positive EIA or IFA results.