Delaware Division of Public Health
Bureau of Epidemiology

Lyme Disease (LD) Case Report Form

PATIENT INFORMATION

Last Name:	**First Name:**	**Telephone #:**
Street Address:	**Zip Code:**	**County:** ☐ New Castle ☐ Kent ☐ Sussex

Gender: ☐ Male ☐ Female

Date of birth:

Hispanic Ethnicity: ☐ Yes ☐ No ☐ Unknown

Race: ☐ American Indian or Alaskan Native ☐ Asian ☐ Black or African American ☐ Other ☐ Native Hawaiian or Pacific Islander ☐ Unknown ☐ White

PHYSICIAN / PROVIDER INFORMATION

Physician:	**Address:**	**Phone:**

LABORATORY RESULTS

EIA/IFA (IgM, IgG, Total) ☐ **Positive** ☐ **Negative** ☐ **Equivocal** ☐ **Not done** ☐ **Titer** _____

Specimen Source: ☐ Serum ☐ CSF ☐ Synovial Fluid ☐ Other

Western Blot (WB)

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*

IgM: ☐ **Positive** ☐ **Negative** ☐ **Not done**

☐ 41kDa (FlaB) ☐ 39 kDa (BmpA) ☐ 21-25 kDa (OspC)

IgG: ☐ **Positive** ☐ **Negative** ☐ **Not done**

☐ 93 kDa ☐ 66 kDa ☐ 58 kDa ☐ 45 kDa ☐ 41 kDa
☐ 39 kDa ☐ 30 kDa ☐ 28 kDa ☐ 21 kDa ☐ 18 kDa

Other tests *(check all that apply)*:

☐ *B. burgdorferi* culture positive?

☐ CSF titer higher than serum titer*?

☐ Other positive result? *(PCR, etc.)*:

Specify: _____

CLINICAL

Did you diagnose the patient with LD? ☐ **Yes** ☐ **No**

Date of LD diagnosis:

Date of symptom onset:

Case definition signs and symptoms

	Yes	No	Unknown
Erythema Migrans (EM) rash	☐	☐	☐
Arthritis *(objective episodes of joint swelling)*	☐	☐	☐
Bells palsy or other cranial neuritis	☐	☐	☐
Radiculoneuropathy	☐	☐	☐
Lymphocytic meningitis	☐	☐	☐
Encephalomyelitis*	☐	☐	☐
**If encephalomyelitis is checked, CSF titer must be higher than serum titer*	☐	☐	☐
2nd or 3rd degree atrioventricular block	☐	☐	☐

Other signs and symptoms *(check all that apply)*:

☐ 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

SUPPLEMENTAL INFORMATION

Was the patient pregnant at the time of illness? ☐ Yes ☐ No ☐ Unknown ☐ NA

Was the patient hospitalized for this illness? ☐ Yes ☐ No ☐ Unknown

Antibiotic(s) used for this illness: _____

Antibiotic usage (days prescribed): _____

-----FOR PUBLIC HEALTH SURVEILLANCE USE ONLY-----

CASE STATUS:	DERSS ID#:	COMMENTS:
☐ Confirmed: ☐ Unconfirmed: ☐ Not a Case:		

Lyme Disease Surveillance Case Definition

Clinical Description:

A systemic, tick-borne disease with protein manifestations, including dermatologic, rheumatologic, neurologic, and cardiac abnormalities. The best clinical marker for the disease is the initial skin lesion, erythema migrans, which occurs among 60%-80% of patients.

Clinical Case Definition:

- Erythema migrans, OR
- At least one late manifestation, as defined below and laboratory confirmation of infection.

Laboratory Confirmation - For the purposes of surveillance, the definition of a qualified laboratory assay is:

- A positive culture for *B. Burgdorferi*
- Single-tier IgG immunoblot seropositivity
- A two-tiered approach using a sensitive enzyme immunoassay or immunofluorescence antibody followed by Western blot.

Case Classification – Confirmed: a case that meets one of the clinical case definitions above.

Definition of terms used in the clinical description and case definition:

A. Erythema migrans (EM)

- For purpose 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 solitary lesion must reach at least 5cm in size. Secondary lesions may also occur. Annular Erythematous lesions occurring within several hours of 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, mild stiff neck, arthralgia, and 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.

B. **Late manifestations** – Include any of the following when an alternate explanation is not found:

- **Musculoskeletal system**: Recurrent, brief attacks (weeks or months) of objective joint swelling in one or few joints, sometimes followed by chronic arthritis in one or few joints. Manifestations not considered as criteria for diagnosis include chronic progressive arthritis not proceeded by brief attacks and chronic symmetrical Polyarthritis. Additionally, arthralgia, myalgia, or fibromyalgia syndromes alone are not criteria for musculoskeletal involvement.
- **Nervous system:** (Any one the following alone, or in combination): lymphocytic meningitis; cranial neuritis, particularly facial palsy (may be bilateral); radiculoneuropathy; or rarely encephalomyelitis, which must be confirmed by showing antibody production against *B. Burgdorferi* in the cerebrospinal fluid (CSF), demonstrated by a higher titer of antibody in CSF than in serum. Headache, fatigue, paresthesias, or mild stiff neck alone, are not criteria for neurologic involvement.
- **Cardiovascular system**: Acute onset, high grade (2^{nd} or 3^{rd} degree) artioventricular 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.

C. **Laboratory confirmation** – As noted above, laboratory confirmation of infection with *B. Burgdorferi* is established when a laboratory isolates the spirochete from tissue or sterile body fluid or detects diagnostic levels of IgM or IgG antibodies to the spirochete in serum, CSF, or other sterile body fluid (i.e., synovial fluid). States may determine the criteria for laboratory confirmation and diagnostic levels of antibody. Syphilis and other known causes of biologic false-positive serologic test results should be excluded when laboratory confirmation has been based on serologic testing alone.

Note: *This surveillance case definition was developed for national reporting of Lyme disease; it is not intended to be used in clinical diagnosis.*
Source: Centers for Disease Control and Prevention (CDC)

For questions related to this form, please call the Bureau of Epidemiology at 1-888-295-5156

This form is available on our webpage: http://www.dhss.delaware.gov/dhss/dph/epi/lyme.html
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