

**North Carolina Department of Health and Human Services  
Division of Public Health • Epidemiology Section  
Communicable Disease Branch**



**ATTENTION HEALTH CARE PROVIDERS:**

Please report relevant clinical findings about this disease event to the local health department.

Durham County Health Department  
Communicable Disease Control  
414 East Main Street  
Durham, NC 27701

Telephone: (919) 560-7600  
Fax: (919) 560-7716

**LYME DISEASE  
Confidential Communicable Disease Report—Part 2  
NC DISEASE CODE: 51**

**REMINDER to Local Health Department staff: If sending this form to the Health Care Provider, remember to attach a cover letter from your agency indicating the part(s) of the form the provider should complete.**

Patient's Last Name	First	Middle	Suffix	Maiden/Other	Alias	Birthdate (mm/dd/yyyy) / /
						SSN

**NC EDSS LAB RESULTS** Verify if lab results for this event are in NC EDSS. If not present, enter results.

Specimen Date	Specimen #	Specimen Source	Type of Test	Test Result(s)	Description (comments)	Result Date	Lab Name—City/State
/ /						/ /	
/ /						/ /	
/ /						/ /	

**NC EDSS PART 2 WIZARD COMMUNICABLE DISEASE**

**Is/was patient symptomatic for this disease?**  Y  N  U  
**If yes, symptom onset date (mm/dd/yyyy):** \_\_\_/\_\_\_/\_\_\_  
**CHECK ALL THAT APPLY:**

**Meningitis**  Y  N  U  
 Onset date (mm/dd/yyyy): \_\_\_\_\_  
 Lymphocytic meningitis  Y  N  U

**Encephalitis**  Y  N  U  
 Onset date (mm/dd/yyyy): \_\_\_\_\_

**Encephalomyelitis/meningoencephalitis**  Y  N  U  
 Onset date (mm/dd/yyyy): \_\_\_\_\_

**Radiculoneuropathy**  Y  N  U  
 Onset date (mm/dd/yyyy): \_\_\_\_\_

**Cranial neuritis, including Bell's Palsy**  Y  N  U

**Recurrent, brief attacks (weeks or months) of objective joint swelling in one or a few joints**  Y  N  U

**Arthritis**  Y  N  U  
 Onset date (mm/dd/yyyy): \_\_\_\_\_  
 Extent:  One joint  Multiple joints  
 Specify location(s) \_\_\_\_\_  
 Type:  Septic  Reactive  Other  
 Recurrent  Y  N  U

**Erythema migrans (bull's-eye skin lesion)**  Y  N  U  
 Onset date (mm/dd/yyyy): \_\_\_\_\_  
 Diameter of largest lesion \_\_\_\_\_ x \_\_\_\_\_  
 Centimeters  Inches  
 Number of lesions \_\_\_\_\_  
 Location of lesion(s) \_\_\_\_\_  
 Observed by health care provider  Y  N  U

**Myocarditis**  Y  N  U  
 Onset date (mm/dd/yyyy): \_\_\_\_\_  
 EKG obtained?  Y  N  U  
 Abnormal?  Y  N  U  
 Describe: \_\_\_\_\_  
**High degree (2nd or 3rd degree) heart block**  Y  N  U  
 Onset date (mm/dd/yyyy): \_\_\_\_\_

**Did patient have a reactive non-treponemal test for syphilis (i.e. VDRL, TRUST, RPR)?**  Y  N  U  
**Did the patient have CSF-VDRL?**  Y  N  U  
 Result  Positive  Negative  Unknown

**Did medical provider diagnose Lyme Disease**  Y  N  U

**TREATMENT**  
**Did the patient take an antibiotic as treatment for this illness?**  Y  N  U  
 Specify antibiotic name: \_\_\_\_\_  
 Antibiotic name unknown  
 Date antibiotic began (mm/dd/yyyy) \_\_\_\_\_

**VECTOR EXPOSURES**  
**During the 30 days prior to onset, did the patient have an opportunity for exposure to ticks**  
 If yes,  
 Exposed on (mm/dd/yyyy): \_\_\_\_\_  
 Until (mm/dd/yyyy): \_\_\_\_\_  
 Frequency  Once  Multiple times within this time period  Daily  
 County of exposure \_\_\_\_\_  
 State of exposure \_\_\_\_\_  
 Country of exposure \_\_\_\_\_  
 Was the tick embedded?  Y  N  U  
 How long? \_\_\_\_\_  
 Hours  Days  Unknown

**Notes:**

**TRAVEL**  
**Did patient have a travel history during the 30 days prior to onset?**  Y  N  U  
 List travel dates and destinations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Additional travel/residency information:**

Patient's Last Name	First	Middle	Suffix	Maiden/Other	Alias	Birthdate (mm/dd/yyyy)
						SSN

**CLINICAL FINDINGS**

Other symptoms, signs, clinical findings, or complications consistent with this illness.....  Y  N  U

Specify: \_\_\_\_\_

Notes:

**HOSPITALIZATION INFORMATION**

Was patient hospitalized for this illness >24 hours? .....  Y  N  U

Hospital name: \_\_\_\_\_

City, State: \_\_\_\_\_

Hospital contact name: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Admit date (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

Discharge date (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

**CASE INTERVIEWS/INVESTIGATIONS**

Was the patient interviewed? .....  Y  N  U

Date of interview (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

Medical records reviewed (including telephone review with provider/office staff)? .....  Y  N  U

Specify reason if medical records were not reviewed:

Notes on medical record verification:

**REASON FOR TESTING**

Why was the patient tested for this condition?

Symptomatic of disease

Tick bite without symptoms of disease

Other \_\_\_\_\_

Unknown

**CLINICAL OUTCOMES**

Discharge/Final diagnosis: \_\_\_\_\_

Survived? .....  Y  N  U

Died? .....  Y  N  U

Died from this illness? .....  Y  N  U

Date of death (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

**GEOGRAPHICAL SITE OF EXPOSURE**

In what geographic location was the patient MOST LIKELY exposed?

Specify location:

In NC

City \_\_\_\_\_

County \_\_\_\_\_

Outside NC, but within US

City \_\_\_\_\_

State \_\_\_\_\_

County \_\_\_\_\_

Outside US

City \_\_\_\_\_

Country \_\_\_\_\_

Unknown

Is the patient part of an outbreak of this disease? .....  Y  N

Notes:

**PREDISPOSING CONDITIONS**

Any immunosuppressive conditions .  Y  N  U

Specify \_\_\_\_\_

Autoimmune disease .....  Y  N  U

Specify:

Systemic lupus erythematosus

Rheumatoid arthritis

Other \_\_\_\_\_

Other underlying illness .....  Y  N  U

Specify \_\_\_\_\_

**TRAVEL/IMMIGRATION**

The patient is:

Resident of NC

Resident of another state or US territory

None of the above

**VACCINE**

Has patient/contact ever received vaccine for this disease? .....  Y  N  U

Vaccine type \_\_\_\_\_

Date of administration (mm/dd/yyyy): \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of this vaccine information \_\_\_\_\_

## **Lyme Disease (*Borrelia burgdorferi*)**

### **2008 CDC Case Definition**

This surveillance case definition was developed for national reporting of Lyme disease; it is not intended to be used in clinical diagnosis.

#### **Clinical presentation**

A systemic, tick-borne disease with protean manifestations, including dermatologic, rheumatologic, neurologic, and cardiac abnormalities. The best clinical marker for the disease is erythema migrans (EM), the initial skin lesion that occurs in 60%-80% of patients.

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 across its largest diameter. 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.

For purposes of surveillance, 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 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 polyarthritis. Additionally, arthralgia, myalgia, or fibromyalgia syndromes alone are not criteria for musculoskeletal involvement.
- **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 *Borrelia burgdorferi* in the cerebrospinal fluid (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.
- **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.

#### **Laboratory evidence**

For the purposes of surveillance, the definition of a qualified laboratory assay is (1) a positive culture for *B. burgdorferi*, (2) two-tier testing interpreted using established criteria [1], or (3) single-tier IgG immunoblot seropositivity interpreted using established criteria [1-4].

#### **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.

#### **Disease endemic to county**

A county in which Lyme disease is endemic is one 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*.

#### **Case classification**

**Confirmed:** a) a case of EM with a known exposure (as defined above), or b) a case of EM with laboratory evidence of infection (as defined above) and without a known exposure or c) a case with at least one late manifestation that has laboratory evidence of infection.

**Probable:** any other case of physician-diagnosed Lyme disease that has laboratory evidence of infection (as defined above).

**Suspected:** a) a case of EM where there is no known exposure (as defined above) and no laboratory evidence of infection (as defined above), or b) a case with laboratory evidence of infection but no clinical information available (e.g. a laboratory report).

Lyme disease reports will not be considered cases if the medical provider specifically states this is not a case of Lyme disease, or the only symptom listed is "tick bite" or "insect bite."