



ROCKY MOUNTAIN SPOTTED FEVER
 Confidential Communicable Disease Report—Part 2
 NC DISEASE CODE: 35

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

Medical provider completing clinical component of surveillance form: Name/Title: _____ Telephone: (____) ____ - ____ Fax: (____) ____ - ____ Date completed ____/____/____	LHD CD nurse/designee completing form for submission to DPH: Name/Title (print): _____ Telephone: (____) ____ - ____ Date completed ____/____/____ LHD CD nurse/designee signature _____
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GENERAL DIAGNOSTIC INFORMATION

Is/was patient symptomatic?..... Y N U

Date of illness onset (mm/dd/yyyy): ____/____/____

Date of diagnosis (mm/dd/yyyy): ____/____/____

Patient's health care provider for this illness

Name of provider's practice or facility

Telephone number for health care provider
 (____) ____ - ____

PREDISPOSING CONDITIONS

Any immunosuppressive conditions . Y N U

Please specify: _____

LOCAL HEALTH DEPARTMENT USE ONLY

Check one:
 Case definition is met.
 (Complete Part 1 and Part 2 and submit to state)
 Case definition is not met.
 (Complete Part 2 only and submit to state)

CLINICAL FINDINGS

Fever..... Y N U

Headache..... Y N U

Muscle aches/pains (myalgias)..... Y N U

Skin rash..... Y N U

Location:
 All over the body (generalized)
 Generalized, predominately central/torso/back (centripetal)
 Generalized, predominately face/hands/feet (centrifugal)
 Localized/Focal
 Palms and soles
 Unknown

Appearance of rash (choose all that apply):
 Macular Papular
 Petechial Unknown

Further appearance of rash (select one):
 Discrete Confluent Unknown

Nausea..... Y N U

Vomiting..... Y N U

Thrombocytopenia..... Y N U

Leukopenia..... Y N U

Anemia..... Y N U

Elevated liver enzymes..... Y N U

Acute respiratory distress syndrome (ARDS)..... Y N U

Acute renal failure..... Y N U

Disseminated intravascular coagulation..... Y N U

Specify _____

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

Specify: _____

REASON FOR TESTING

Why was the patient tested for this condition?

Symptomatic of disease

Screening of asymptomatic person with reported risk factor(s)

Exposed to organism causing this disease (asymptomatic)

Household/close contact to a person reported with this disease

Other, specify _____

Unknown

TREATMENT

Did patient take an antibiotic as treatment for this illness?..... Y N U

If yes:
 Check all antibiotics that apply:
 Doxycycline Chloramphenicol
 Unknown
 Other (specify) _____

Date antibiotic began (mm/dd/yyyy) _____

If no:
 Did patient refuse treatment?..... Y N U

Comments/details: _____

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): ____/____/____

TRAVEL/IMMIGRATION

The patient is:
 Resident NC
 Resident of another state or US territory
 None of the above

Did patient have a travel history during the 14 days prior to onset?..... Y N U

List travel dates and destinations _____

Does patient know anyone else with similar symptom(s) who had the same or similar travel history?..... Y N U

List persons and contact information: _____

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): ____/____/____

ICU admission?..... Y N U

OTHER EXPOSURE INFORMATION

Does the patient know anyone else with similar symptoms?..... Y N U

If yes, specify: _____

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OUTDOOR ACTIVITY & ANIMAL EXPOSURE

During the 14 days prior to onset of symptoms, did the patient participate in outdoor activities: Y N U

If yes, specify and give details:

ANIMALS

During the 14 days prior to onset of symptoms, did the patient have exposure to household pets? Y N U

If there was exposure to more than one household pet, please enter each pet separately.

Pet #1: Dog Cat Other
Were ticks seen on pet? Y N U

Pet #2: Dog Cat Other
Were ticks seen on pet? Y N U

Pet #3: Dog Cat Other
Were ticks seen on pet? Y N U

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 suspected of being part of a common source outbreak? Y N U

Notes:

VECTORBORNE EXPOSURES

During the 14 days prior to onset of symptoms, did the patient have an opportunity for exposure to ticks? Y N U

Exposed on (mm/dd/yyyy): ____/____/____
Until (mm/dd/yyyy): ____/____/____

Frequency
 Once
 Multiple times within this time period
 Daily

Exposure setting _____
City/county of exposure _____
State of exposure _____
Country of exposure _____

Was the tick embedded? Y N U

How long? _____
 Hours
 Days
 Unknown

Notes:

CASE INTERVIEWS/INVESTIGATIONS

Was the patient interviewed? Y N U
Date of interview (mm/dd/yyyy): ____/____/____

Were interviews conducted with others? Y N U
Who was interviewed?

Were health care providers consulted? Y N U
Who was consulted?

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:

VACCINES

Has patient/contact ever received Rocky Mountain Spotted Fever Vaccine or any other vaccine or immune globulin related to this disease? Y N U

Vaccine type: _____
Date of administration (mm/dd/yyyy): _____
Source of this vaccine information: _____

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LABORATORY						
Name of laboratory _____		City _____		State _____		ZIP _____
SEROLOGIC TESTS Indicate Y(es) or N(o) ONLY if the test was performed.	SEROLOGY 1		SEROLOGY 2		Other Diagnostic Tests?	Positive?
	Collection Date (mm/dd/yyyy) _____		Collection Date (mm/dd/yyyy) _____		PCR	<input type="checkbox"/> Y <input type="checkbox"/> N
	Titer/Result	Positive?	Titer/Result	Positive?	Immunostain	<input type="checkbox"/> Y <input type="checkbox"/> N
	IFA-IgG	() <input type="checkbox"/> Y <input type="checkbox"/> N	() <input type="checkbox"/> Y <input type="checkbox"/> N	() <input type="checkbox"/> Y <input type="checkbox"/> N	Culture	<input type="checkbox"/> Y <input type="checkbox"/> N
IFA-IgM	() <input type="checkbox"/> Y <input type="checkbox"/> N	() <input type="checkbox"/> Y <input type="checkbox"/> N	() <input type="checkbox"/> Y <input type="checkbox"/> N	Comments/details:		
Other test: _____	() <input type="checkbox"/> Y <input type="checkbox"/> N	() <input type="checkbox"/> Y <input type="checkbox"/> N	() <input type="checkbox"/> Y <input type="checkbox"/> N			
Was there a fourfold change in antibody titer between the two serum specimens? <input type="checkbox"/> Y <input type="checkbox"/> N						

2008 CDC/CSTE CASE DEFINITION

CLINICAL PRESENTATION: Rocky Mountain spotted fever (RMSF) is an illness caused by *Rickettsia rickettsii*, a bacterial pathogen transmitted to humans through contact with ticks. Dermacentor species of ticks are most commonly associated with infection, including *Dermacentor variabilis* (the American dog tick), *Dermacentor andersoni* (the Rocky Mountain wood tick), and more recently *Rhipicephalus sanguineus* (the brown dog tick). Disease onset averages one week following a tick bite. Age-specific illness is highest for children and older adults. Illness is characterized by acute onset of fever, and may be accompanied by headache, malaise, myalgia, nausea/vomiting, or neurologic signs; a macular or maculopapular rash appears 4-7 days following onset in many (~80%) patients, often present on the palms and soles. RMSF may be fatal in as many as 20% of untreated cases, and severe, fulminant disease can occur.

Acute illness is best detected by polymerase chain reaction (PCR) and immunohistochemical methods (IHC) in skin biopsy specimens, and occasionally by PCR in appropriate whole blood specimens taken during the first week of illness, prior to antibiotic treatment. Serology can also be employed for detection, however an antibody response may not be detectable in initial samples, and paired acute and convalescent samples are essential for confirmation.

CLINICAL EVIDENCE: Any reported fever and one or more of the following: rash, headache, myalgia, anemia, thrombocytopenia, or any hepatic transaminase elevation.

LABORATORY EVIDENCE: For the purposes of surveillance,

Laboratory confirmed: Serological evidence of a fourfold change in immunoglobulin G (IgG)-specific antibody titer reactive with *Rickettsia rickettsii* antigen by indirect immunofluorescence assay (IFA) between paired serum specimens (one taken in the first week of illness and a second 2-4 weeks later), or detection of *R. rickettsii* DNA in a clinical specimen via amplification of a specific target by PCR assay, or demonstration of spotted fever group antigen in a biopsy or autopsy specimen by IHC, or isolation of *R. rickettsii* from a clinical specimen in cell culture.

Laboratory supportive: Has serologic evidence of elevated IgG or IgM antibody reactive with *R. rickettsii* antigen by IFA, enzyme-linked immunosorbent assay (ELISA), dot-ELISA, or latex agglutination. *Note:* Current commercially available ELISA tests are not quantitative, cannot be used to evaluate changes in antibody titer, and hence are not useful for serological confirmation. IgM tests are not strongly supported for use in serodiagnosis of acute disease, as the response may not be specific for the agent (resulting in false positives) and the IgM response may be persistent. Complement fixation (CF) tests and other older test methods are neither readily available nor commonly used. CDC uses in-house IFA IgG testing (cutoff of $\geq 1:64$), preferring simultaneous testing of paired specimens, and does not use IgM results for routine diagnostic testing.

EXPOSURE: Exposure is defined as having been in potential tick habitats within the past 14 days before onset of symptoms. A history of a tick bite is not required.

CASE CLASSIFICATION: *Confirmed:* A clinically compatible case (meets clinical evidence criteria) that is laboratory confirmed; *Probable:* A clinically compatible case (meets clinical evidence criteria) that has supportive laboratory results; *Suspect:* A case with laboratory evidence of past or present infection but no clinical information available (e.g. a laboratory report).