

California Department of Public Health
 Center for Infectious Diseases
 Division of Communicable Disease Control
 Infectious Diseases Branch
 Surveillance and Statistics Section
 MS 7306, P.O. Box 997377
 Sacramento, CA 95899-7377

Local ID Number _____

(Please use the same ID Number on the preliminary and final reports to allow linkage to the same case.)

Report Status (check one)

Preliminary Final

SPOTTED FEVER RICKETTSIOSES CASE REPORT

Check one: Rocky Mountain spotted fever (*Rickettsia rickettsii*)
 Other spotted fever rickettsiosis (including *Rickettsia parkeri*, etc.)

This form should be completed only for cases of Rocky Mountain spotted fever and other spotted fever rickettsioses. Ehrlichiosis and anaplasmosis cases should be reported on the Ehrlichiosis/Anaplasmosis Case Report form. Cases of typhus and other non-spotted fever rickettsioses should be reported on the Typhus and Other Non-Spotted Fever Rickettsioses Case Report form.

PATIENT INFORMATION					
Last Name	First Name	Middle Name	Suffix	Primary Language	
Social Security Number (9 digits)		DOB (mm/dd/yyyy)	Age	<input type="checkbox"/> English <input type="checkbox"/> Spanish <input type="checkbox"/> Other: _____	
Address Number & Street - Residence		Apartment/Unit Number		Ethnicity (check one) <input type="checkbox"/> Hispanic/Latino <input type="checkbox"/> Non-Hispanic/Non-Latino <input type="checkbox"/> Unk	
City/Town		State	Zip Code	Race* (check all that apply, race descriptions on page 6) <input type="checkbox"/> African-American/Black <input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Asian (check all that apply) <input type="checkbox"/> Asian Indian <input type="checkbox"/> Japanese <input type="checkbox"/> Cambodian <input type="checkbox"/> Korean <input type="checkbox"/> Chinese <input type="checkbox"/> Laotian <input type="checkbox"/> Filipino <input type="checkbox"/> Thai <input type="checkbox"/> Hmong <input type="checkbox"/> Vietnamese <input type="checkbox"/> Other: _____	
Census Tract	County of Residence	Country of Residence		<input type="checkbox"/> Pacific Islander (check all that apply) <input type="checkbox"/> Native Hawaiian <input type="checkbox"/> Samoan <input type="checkbox"/> Guamanian <input type="checkbox"/> Other: _____	
Country of Birth		If not U.S. Born - Date of Arrival in U.S. (mm/dd/yyyy)			
Home Telephone	Cellular Phone/Pager	Work/School Telephone			
E-mail Address		Other Electronic Contact Information			
Work/School Location		Work/School Contact			
Gender <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Other: _____					
Pregnant?		If Yes, Est. Delivery Date (mm/dd/yyyy)			
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk					
Medical Record Number		Patient's Parent/Guardian Name			
Occupation Setting (see list on page 6)		Other Describe/Specify			
Occupation (see list on page 6)		Other Describe/Specify			
CLINICAL INFORMATION					
Physician Name - Last Name			First Name		Telephone Number

First three letters of patient's last name:

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SIGNS AND SYMPTOMS

Symptomatic? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		Onset Date (mm/dd/yyyy)			Date First Sought Medical Care (mm/dd/yyyy)	
Signs and Symptoms	Yes	No	Unk	If Yes, Specify as Noted		
Fever				Highest temperature (specify °F/°C)		
Chills						
Sweats						
Headache						
Muscle pain						
Joint pain				Joint(s)		
Eye pain						
Abdominal pain						
Nausea or vomiting						
Diarrhea						
Rash or other cutaneous lesion				Location / size / appearance		
Cough						
Hypotension				Date measured (mm/dd/yyyy)		Systolic / Diastolic

Other signs / symptoms (specify)

HOSPITALIZATION

Did patient visit emergency room for illness? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	Was patient hospitalized? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	If Yes, how many total hospital nights?
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If there were any ER or hospital stays related to this illness, specify details below.

HOSPITALIZATION - DETAILS

Hospital Name 1	Street Address			Admit Date (mm/dd/yyyy)	
	City			Discharge / Transfer Date (mm/dd/yyyy)	
	State	Zip Code	Telephone Number	Medical Record Number	Discharge Diagnosis
Hospital Name 2	Street Address			Admit Date (mm/dd/yyyy)	
	City			Discharge / Transfer Date (mm/dd/yyyy)	
	State	Zip Code	Telephone Number	Medical Record Number	Discharge Diagnosis

OUTCOME

Outcome? <input type="checkbox"/> Survived <input type="checkbox"/> Died <input type="checkbox"/> Unk	If Survived, Survived as of _____ (mm/dd/yyyy)	Date of Death (mm/dd/yyyy)
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First three letters of patient's last name:

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LABORATORY INFORMATION

LABORATORY RESULTS SUMMARY - SEROLOGY

Specimen Type 1	Collection Date (mm/dd/yyyy)	Type of Test	Antigen
	Results	Laboratory Name	Telephone Number
Specimen Type 2	Collection Date (mm/dd/yyyy)	Type of Test	Antigen
	Results	Laboratory Name	Telephone Number

LABORATORY RESULTS SUMMARY - OTHER

Hematology? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	Collection Date (mm/dd/yyyy)	WBC	HCT	Hb	Platelets
Serum chemistry? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	Collection Date (mm/dd/yyyy)	ALT	AST		
Other laboratory diagnostics performed (e.g., PCR, buffy coat smear)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk		If Yes, describe			

EPIDEMIOLOGIC INFORMATION

ANIMAL AND INSECT EXPOSURES

Observe any of the following at or around home? <input type="checkbox"/> Dogs <input type="checkbox"/> Cats <input type="checkbox"/> Rodents <input type="checkbox"/> Opossums <input type="checkbox"/> Fleas <input type="checkbox"/> Ticks	Observe any of the following at place of employment? <input type="checkbox"/> Dogs <input type="checkbox"/> Cats <input type="checkbox"/> Rodents <input type="checkbox"/> Opossums <input type="checkbox"/> Fleas <input type="checkbox"/> Ticks
Did patient recall any insect bites in the 10 days prior to illness? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	If Yes, specify all locations, type of insect bite, and dates below.

INSECT BITE HISTORY - DETAILS

Bite 1	Location (city, county, state, country)	Date of Insect Bite (mm/dd/yyyy)	Type of Insect Bite <input type="checkbox"/> Flea <input type="checkbox"/> Other: _____ <input type="checkbox"/> Tick
Bite 2	Location (city, county, state, country)	Date of Insect Bite (mm/dd/yyyy)	Type of Insect Bite <input type="checkbox"/> Flea <input type="checkbox"/> Other: _____ <input type="checkbox"/> Tick

TRAVEL HISTORY

Did patient travel out of county of residence during the incubation period ? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	If Yes, specify all locations and dates in the Travel History - Details Table.
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TRAVEL HISTORY - DETAILS

Location (city, county, state, country)	Date Travel Started (mm/dd/yyyy)	Date Travel Ended (mm/dd/yyyy)

First three letters of
patient's last name:

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NOTES / REMARKS

REPORTING AGENCY

<i>Investigator Name</i>	<i>Local Health Jurisdiction</i>	<i>Telephone Number</i>	<i>Date (mm/dd/yyyy)</i>
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First Reported By
 Clinician Laboratory Other (specify): _____
DISEASE CASE CLASSIFICATION*Case Classification (see case definition below)*
 Confirmed Probable Suspected
STATE USE ONLY*State Case Classification*
 Confirmed Probable Suspected Not a case Need additional information
CASE DEFINITION**SPOTTED FEVER RICKETTSIOSIS (2010)****CLINICAL DESCRIPTION**

Spotted fever rickettsioses are a group of tickborne infections caused by some members of the genus *Rickettsia*. 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 *Rhiphicephalus 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. In addition to RMSF, human illness associated with other spotted fever group *Rickettsia* species, including infection with *Rickettsia parkeri* (associated with *Amblyomma maculatum* ticks), has also been reported. In these patients, clinical presentation appears similar to, but may be milder than, RMSF; the presence of an eschar at the site of tick attachment has been reported for some other spotted fever rickettsioses.

CLINICAL EVIDENCE

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

LABORATORY CRITERIA FOR DIAGNOSIS

The organism in the acute phase of 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.

For the purposes of surveillance:

Laboratory confirmed:

- Serological evidence of a fourfold change in immunoglobulin G (IgG)-specific antibody titer reactive with *Rickettsia rickettsii* or other spotted fever group 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* or other spotted fever group 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* or other spotted fever group rickettsia from a clinical specimen in cell culture.

(continued on page 5)

CASE DEFINITION (continued)**LABORATORY CRITERIA FOR DIAGNOSIS (continued)**

Laboratory supportive:

- Has serologic evidence of elevated IgG or IgM antibody reactive with *R. rickettsii* or other spotted fever group 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. Occupation should be recorded if relevant to exposure. A history of a tick bite is not required.

CASE CLASSIFICATION

Suspected: A case with laboratory evidence of past or present infection but no clinical information available (e.g. a laboratory report).

Probable: A clinically compatible case (meets clinical evidence criteria) that has supportive laboratory results.

Confirmed: A clinically compatible case (meets clinical evidence criteria) that is laboratory confirmed.

RACE DESCRIPTIONS	
Race	Description
American Indian or Alaska Native	Patient has origins in any of the original peoples of North and South America (including Central America).
Asian	Patient has origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent (e.g., including Bangladesh, Cambodia, China, India, Indonesia, Japan, Korea, Malaysia, Nepal, Pakistan, the Philippine Islands, Thailand, and Vietnam).
Black or African American	Patient has origins in any of the black racial groups of Africa.
Native Hawaiian or Other Pacific Islander	Patient has origins in any of the original peoples of Hawaii, Guam, American Samoa, or other Pacific Islands.
White	Patient has origins in any of the original peoples of Europe, the Middle East, or North Africa.
OCCUPATION SETTING	
<ul style="list-style-type: none"> • Childcare/Preschool • Correctional Facility • Drug Treatment Center • Food Service • Health Care - Acute Care Facility • Health Care - Long Term Care Facility • Health Care - Other 	<ul style="list-style-type: none"> • Homeless Shelter • Laboratory • Military Facility • Other Residential Facility • Place of Worship • School • Other
OCCUPATION	
<ul style="list-style-type: none"> • Adult film actor/actress • Agriculture - farmworker or laborer (crop, nursery, or greenhouse) • Agriculture - field worker • Agriculture - migratory/seasonal worker • Agriculture - other/unknown • Animal - animal control worker • Animal - farm worker or laborer (farm or ranch animals) • Animal - veterinarian or other animal health practitioner • Animal - other/unknown • Clerical, office, or sales worker • Correctional facility - employee • Correctional facility - inmate • Craftsman, foreman, or operative • Daycare or child care attendee • Daycare or child care worker • Dentist or other dental health worker • Drug dealer • Fire fighting or prevention worker • Flight attendant • Food service - cook or food preparation worker • Food service - host or hostess • Food service - server • Food service - other/unknown • Homemaker • Laboratory technologist or technician • Laborer - private household or unskilled worker • Manager, official, or proprietor • Manicurist or pedicurist • Medical - emergency medical technician or paramedic • Medical - health care worker 	<ul style="list-style-type: none"> • Medical - medical assistant • Medical - pharmacist • Medical - physician assistant or nurse practitioner • Medical - physician or surgeon • Medical - nurse • Medical - other/unknown • Military • Police officer • Professional, technical, or related profession • Retired • Sex worker • Stay at home parent/guardian • Student - preschool or kindergarten • Student - elementary or middle school • Student - high school • Student - college or university • Student - other/unknown • Teacher/employee - preschool or kindergarten • Teacher/employee - elementary or middle school • Teacher/employee - high school • Teacher/instructor/employee - college or university • Teacher/instructor/employee - other/unknown • Unemployed - seeking employment • Unemployed - not seeking employment • Unemployed - other/unknown • Volunteer • Other • Refused • Unknown