

TICKBORNE RICKETTSIAL DISEASE CASE REPORT

Use for: **Anaplasmosis, Ehrlichiosis, and Spotted Fever Rickettsiosis(SFR) including Rocky Mountain Spotted Fever(RMSF)**

PATIENT/PHYSICIAN INFORMATION

Patient's Name: _____ Patient Phone: _____

Street Address: _____ County of Residence: _____

City: _____ State: _____ Zip Code: _____

Sex:	<input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Unknown	Date of birth:	/ /	Ethnicity:	<input type="checkbox"/> Hispanic <input type="checkbox"/> Non-Hispanic <input type="checkbox"/> 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	<input type="checkbox"/> Asian <input type="checkbox"/> White <input type="checkbox"/> Unknown
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Was the patient pregnant? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	Patient hospitalized? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	Admission date:	/ /	Patient died from this illness?	<input type="checkbox"/> Yes / / <input type="checkbox"/> No <input type="checkbox"/> Unk
Hospital:		Discharge date:		/ /	

Agency Reporting (name and address): _____

Physician (name and address): _____ Physician Phone: _____

LABORATORY FINDINGS

Laboratory performing test(s): _____ City/State: _____

Serological Test Results: (EIA, IFA, ELISA)	Serology #1			Collection Date:			Serology #2			Collection Date:		
	IgG Titer	Pos.	Neg.	IgM Titer	Pos.	Neg.	IgG Titer	Pos.	Neg.	IgM Titer	Pos.	Neg.

Anaplasmosis	<i>A. phagocytophilum</i>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
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Ehrlichiosis	<i>E. chaffeensis</i>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
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SFR (including RMSF)	Spotted Fever Group	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
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Other	Organism:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
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Other Test Results:	PCR	Smear/Morulae	Culture	Immunohistochemical (IHC)	Other Tests:	If specimen was not serum, specify:
Collection Date: / /	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	Pos. Neg.	

Anaplasmosis	<i>A. phagocytophilum</i>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
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Ehrlichiosis	<i>E. chaffeensis</i>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
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<i>E. ewingii</i>	_____	<input type="checkbox"/>	<input type="checkbox"/>	N/A	<input type="checkbox"/>	<input type="checkbox"/>	N/A	<input type="checkbox"/>	<input type="checkbox"/>	N/A	<input type="checkbox"/>	<input type="checkbox"/>
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SFR (including RMSF)	Spotted Fever Group	_____	<input type="checkbox"/>	<input type="checkbox"/>	N/A	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
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Other	Organism:	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
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CLINICAL SIGNS AND SYMPTOMS

Patient must have at least: fever/sweats/chills **AND one or more of the following:** rash headache myalgia anemia leucopenia thrombocytopenia elevated hepatic transaminases eschar (primarily SFR, a black necrotic area around site of tick bite)

Was a clinically compatible illness present (if there is no presence of a clinically compatible illness then this is not a case)? Yes No Unk

Onset Date: / /	Underlying immunosuppressive condition? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk Specify conditions: _____	Life threatening complications in clinical course of illness? <input type="checkbox"/> Adult respiratory distress syndrome (ARDS) <input type="checkbox"/> Meningitis/encephalitis <input type="checkbox"/> Disseminated intravascular coagulopathy (DIC) <input type="checkbox"/> Renal Failure <input type="checkbox"/> Other: _____ <input type="checkbox"/> None
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Was patient treated for this illness? Yes No Unk If, yes, / / Doxycycline? Other: _____

Was patient tested for other tick-borne illnesses? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk If yes, specify: _____	Was patient diagnosed with another tick-borne illness? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk If yes, specify: _____
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RISK

History of travel outside county of residence within 30 days of onset of symptoms? Yes No County: _____

History of travel outside state of residence within 30 days of onset of symptoms? Yes No State: _____

History of tick bite or exposure within 21 days of illness onset: Yes No Unk

Note: Serology testing requires a four fold titer change between 2 serum samples for confirmation of results. The first sample should be collected within 1 week of illness and second sample 2-4 weeks later. CDC uses an IFA IgG titer cutoff $\geq 1:64$ and does not use IgM test results independently. IgM tests may be unreliable because they lack specificity and may persist for a long time. When sera demonstrate elevated antibody responses to multiple infectious agents among rickettsial species, and between ehrlichial and anaplasma species, the greater antibody response is generally directed at the actual agent involved. Current commercially available ELISA tests cannot evaluate changes in antibody titer. EDTA blood sample should be collected before patient has been treated with antibiotics when performing PCR testing. Biopsy/autopsy specimen should be collected when performing IHC testing.

TICKBORNE RICKETTSIAL DISEASE CASE REPORT

CDC Anaplasmosis, Ehrlichiosis, and Spotted Fever Rickettsiosis(SFR) Including Rocky Mountain Spotted Fever(RMSF) Surveillance Case Definition

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 Tickborne Rickettsial disease and not intended to be used in clinical diagnosis.

Clinical presentation: A tick-borne illness characterized by acute onset of fever/sweats/chills and one or more of the following symptoms or signs: rash, headache, myalgia, malaise, anemia, leukopenia, thrombocytopenia, or elevated hepatic transaminases. Nausea and vomiting may be present in some cases.

- **Confirmed Anaplasmosis\ Ehrlichiosis:**

- A clinically compatible case **AND**

- Evidence of a fourfold change in IgG antibody titer reactive with *Anaplasma phagocytophilum* or *Ehrlichia spp.* antigen by IFA, **OR**
- Detection of DNA using PCR assay, **OR**
- Detection of antigen by IHC, **OR**
- Positive cell culture to the above agents.

- **Probable Anaplasmosis\ Ehrlichiosis:**

- A clinically compatible case **AND**

- Evidence of elevated IgG or IgM antibody titer reactive with *Anaplasma phagocytophilum* or *Ehrlichia spp.* antigen by IFA, ELISA, dot-ELISA, or latex agglutination, **OR**
- Identification of morulae in the cytoplasm of monocyte or macrophages (Ehrlichiosis) or in the cytoplasm of neutrophils or eosinophils (Anaplasmosis) by microscope examination.

- **Confirmed SFR (including RMSF):**

- A clinically compatible case **AND**

- Evidence of a fourfold change in IgG antibody titer reactive with *Rickettsia rickettsii* or other SFR antigens by IFA, **OR**
- Detection of DNA using PCR assay, **OR**
- Detection of antigen by IHC, **OR**
- Positive cell culture to the above agent.

- **Probable SFR (including RMSF):**

- A clinically compatible case **AND**

- Evidence of elevated IgG or IgM antibody reactive with *R. rickettsii* or other SFR antigens by IFA, ELISA, dot-ELISA, or latex agglutination.