



Tick-Borne Rickettsial Disease Case Report



CDC# (1-4)

Use for: *Rocky Mountain spotted fever (RMSF), ehrlichiosis (human monocytic ehrlichiosis [HME]), and human granulocytic ehrlichiosis [HGE]).*

- PATIENT/PHYSICIAN INFORMATION -

Patient's name: _____ Date submitted: ____/____/____ (mm/dd/yyyy)
 Address: _____ Physician's name: _____ Phone no.: _____
 (number, street)
 City: _____ NETSS ID No.: (if reported)
 Case ID (13-18) Site (19-21) State (22-23)

- DEMOGRAPHICS -

1. State of residence: _____ 2. County of residence: (26-50) _____ 3. Zip code: (51-59) _____ 4. Sex: (60)
 Postal abrv: (24-25) Check, if history of travel outside county of residence within 30 days of onset of symptoms Male
 2 Female
 5. Date of birth: ____/____/____ (mm/dd/yyyy) 6. Race: (69) 1 White 3 American Indian Alaskan Native 5 Pacific Islander 7. Hispanic ethnicity: (70) 1 Yes
 (61-62) (63-64) (65-68) 2 Black 4 Asian 9 Not specified 2 No

8. INDICATE DISEASE TO BE REPORTED: (71) 1 RMSF 2 HME 3 HGE 4 Ehrlichiosis (unspecified, or other agent)

- CLINICAL SIGNS, SYMPTOMS, AND OUTCOMES -

9. Was a clinically compatible illness present? (72) (fever or rash, plus one or more of the following signs: headache, myalgia, anemia, thrombocytopenia, leukopenia, or elevated hepatic transaminases) 1 YES 2 NO 9 Unk 10. Date of Onset of Symptoms: ____/____/____ (mm/dd/yyyy)
 (73-74) (75-76) (77-80)
 11. Was an underlying immunosuppressive condition present? (81) 1 YES 2 NO 9 Unk Specify condition(s): _____
 12. Specify any life-threatening complications in the clinical course of illness: (82) 1 Adult respiratory distress syndrome (ARDS) 3 Meningitis/encephalitis
 2 Disseminated intravascular coagulopathy (DIC) 4 Renal failure 9 None
 8 Other: _____
 13. Was the patient hospitalized because of this illness? (83) (If yes, date) 1 YES 2 NO 9 Unk ____/____/____ (mm/dd/yyyy)
 (84-85) (86-87) (88-91)
 14. Did the patient die because of this illness? (92) (If yes, date) 1 YES 2 NO 9 Unk ____/____/____ (mm/dd/yyyy)
 (93-94) (95-96) (97-100)

- LABORATORY DATA -

15. Name of laboratory: _____ City: _____ State: _____ Zip: _____
 Below, indicate Y (Yes) or N (No), **ONLY** if the test or procedure was performed. **Lack of selection** indicates that the test or procedure was not performed.

16. Serologic Tests	COLLECTION DATE (mm/dd/yyyy)		COLLECTION DATE (mm/dd/yyyy)		17. Other Diagnostic Tests ?	Positive?
	Serology 1	Serology 2*	Serology 1	Serology 2*		
	Titer	Titer	Titer	Titer		
IFA - IgG	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (117)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (118)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (119)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (120)	PCR	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (133)
IFA - IgM	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (119)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (120)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (121)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (122)	Morulae visualization*	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (134)
Other test: (121-130)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (131)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (132)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (133)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (134)	Immunostain	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (135)
	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (131)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (132)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (133)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (134)	Culture	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (136)

* Visualization of morulae not applicable for RMSF.

* Was there a fourfold change in antibody titer between the two serum specimens? 1 YES 2 NO (137)

- FINAL DIAGNOSIS -

18. Classify case based on the CDC case definition (see criteria below): (138) 1 RMSF 2 HME 3 HGE
 4 Ehrlichiosis (unspecified, or other agent): _____
 (139-148)

(149) 1 CONFIRMED
 2 PROBABLE

State Health Department Official who reviewed this report:
 Name: _____ Title: _____ Date: ____/____/____ (mm/dd/yyyy)

COMMENTS:

Confirmed RMSF: A clinically compatible case with 1) a fourfold change in antibody titer to *Rickettsia rickettsii* antigen by IFA, CF, latex agglutination, microagglutination, or indirect hemagglutination antibody test in two serum samples, or 2) a positive PCR assay, or 3) immunostaining of antigen in a skin biopsy or autopsy sample, or 4) isolation and culture of *R. rickettsii* from a clinical specimen.

Probable RMSF: A clinically compatible case with 1) a single positive antibody titer by IFA ($\geq 1:64$ if IgG); or 2) a single CF titer $\geq 1:16$; or 3) a single titer $\geq 1:128$ by a latex agglutination, indirect hemagglutination antibody, or microagglutination test; or 4) a fourfold rise in titer or a single titer $> 1:320$, by Proteus OX-19 or OX-2 test.

Confirmed Ehrlichiosis: A clinically compatible case with 1) a fourfold change in antibody titer to antigen from an *Ehrlichia* species by IFA in two serum samples, or 2) a positive PCR assay, or 3) the visualization of morulae in white blood cells with a single serum positive antibody titer by IFA, or 4) immunostaining of antigen in a skin biopsy or autopsy sample, or 5) isolation and culture of an *Ehrlichia* species from a clinical specimen.

Probable Ehrlichiosis: A clinically compatible case with 1) a single positive antibody titer by IFA, or 2) the visualization of morulae in white blood cells.



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- PATIENT/PHYSICIAN INFORMATION -

Date submitted: ___/___/___ (mm/dd/yyyy)
Physician's name: _____ Phone no.: _____
NETSS ID No.: (if reported)
Case ID (13-18) Site (19-21) State (22-23)

- DEMOGRAPHICS -

1. State of residence: _____ Postal abrv: (24-25)
2. County of residence: (26-50) _____
 Check, if history of travel outside county of residence within 30 days of onset of symptoms
3. Zip code: (51-59) _____
4. Sex: (60) Male Female
5. Date of birth: ___/___/___ (mm/dd/yyyy) (61-62) (63-64) (65-68)
6. Race: (69) White American Indian Alaskan Native Pacific Islander Black Asian Not specified
7. Hispanic ethnicity: (70) Yes No

8. INDICATE DISEASE TO BE REPORTED: (71) RMSF HME HGE Ehrlichiosis (unspecified, or other agent)

- CLINICAL SIGNS, SYMPTOMS, AND OUTCOMES -

9. Was a clinically compatible illness present? (72) (fever or rash, plus one or more of the following signs: headache, myalgia, anemia, thrombocytopenia, leukopenia, or elevated hepatic transaminases) YES NO Unk
10. Date of Onset of Symptoms: ___/___/___ (mm/dd/yyyy) (73-74) (75-76) (77-80)
11. Was an underlying immunosuppressive condition present? (81) YES NO Unk
Specify condition(s): _____
12. Specify any life-threatening complications in the clinical course of illness: (82) Adult respiratory distress syndrome (ARDS) Meningitis/encephalitis Disseminated intravascular coagulopathy (DIC) Renal failure None Other: _____
13. Was the patient hospitalized because of this illness? (83) (If yes, date) YES NO Unk ___/___/___ (mm/dd/yyyy) (84-85) (86-87) (88-91)
14. Did the patient die because of this illness? (92) (If yes, date) YES NO Unk ___/___/___ (mm/dd/yyyy) (93-94) (95-96) (97-100)

- LABORATORY DATA -

15. Name of laboratory: _____ City: _____ State: _____ Zip: _____
Below, indicate Y (Yes) or N (No), **ONLY** if the test or procedure was performed. **Lack of selection** indicates that the test or procedure was not performed.

16. Serologic Tests	COLLECTION DATE (mm/dd/yyyy)		COLLECTION DATE (mm/dd/yyyy)		17. Other Diagnostic Tests ?	Positive?
	Serology 1 Titer	(101-2) (103-4) (105-8) Positive?	Serology 2* Titer	(109-10) (111-12) (113-16) Positive?		
IFA - IgG	(_____) <input type="checkbox"/> YES <input type="checkbox"/> NO (117)	(_____) <input type="checkbox"/> YES <input type="checkbox"/> NO (118)			PCR	<input type="checkbox"/> YES <input type="checkbox"/> NO (133)
IFA - IgM	(_____) <input type="checkbox"/> YES <input type="checkbox"/> NO (119)	(_____) <input type="checkbox"/> YES <input type="checkbox"/> NO (120)			Morulae visualization*	<input type="checkbox"/> YES <input type="checkbox"/> NO (134)
Other test: (121-130)	(_____) <input type="checkbox"/> YES <input type="checkbox"/> NO (131)	(_____) <input type="checkbox"/> YES <input type="checkbox"/> NO (132)			Immunostain	<input type="checkbox"/> YES <input type="checkbox"/> NO (135)
					Culture	<input type="checkbox"/> YES <input type="checkbox"/> NO (136)

* Visualization of morulae not applicable for RMSF.

* Was there a fourfold change in antibody titer between the two serum specimens? YES NO (137)

- FINAL DIAGNOSIS -

18. Classify case based on the CDC case definition (see criteria below):
 RMSF HME HGE Ehrlichiosis (unspecified, or other agent): _____
(138) (139-148)

CONFIRMED PROBABLE

State Health Department Official who reviewed this report:
Name: _____ Title: _____ Date: ___/___/___ (mm/dd/yyyy)

COMMENTS:

Confirmed RMSF: A clinically compatible case with 1) a fourfold change in antibody titer to *Rickettsia rickettsii* antigen by IFA, CF, latex agglutination, microagglutination, or indirect hemagglutination antibody test in two serum samples, or 2) a positive PCR assay, or 3) immunostaining of antigen in a skin biopsy or autopsy sample, or 4) isolation and culture of *R. rickettsii* from a clinical specimen.

Probable RMSF: A clinically compatible case with 1) a single positive antibody titer by IFA ($\geq 1:64$ if IgG); or 2) a single CF titer $\geq 1:16$; or 3) a single titer $\geq 1:128$ by a latex agglutination, indirect hemagglutination antibody, or microagglutination test; or 4) a fourfold rise in titer or a single titer $> 1:320$, by Proteus OX-19 or OX-2 test.

Confirmed Ehrlichiosis: A clinically compatible case with 1) a fourfold change in antibody titer to antigen from an *Ehrlichia* species by IFA in two serum samples, or 2) a positive PCR assay, or 3) the visualization of morulae in white blood cells with a single serum positive antibody titer by IFA, or 4) immunostaining of antigen in a skin biopsy or autopsy sample, or 5) isolation and culture of an *Ehrlichia* species from a clinical specimen.

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15. Name of laboratory: _____ City: _____ State: _____ Zip: _____
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IFA - IgM	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (119)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (120)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (121)	(____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (122)	Morulae visualization*	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (134)
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- FINAL DIAGNOSIS -

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