



# 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 Titer	(101-2) / (103-4) / (105-8) Positive?	Serology 2* Titer	(109-10) / (111-12) / (113-16) Positive?		
IFA - IgG	(_____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (117)	(_____) 1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (118)	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)	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)	Immunostain	1 <input type="checkbox"/> YES 2 <input type="checkbox"/> NO (135)		
			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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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 -

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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: \_\_\_\_\_  
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IFA - IgG	(___) <input type="checkbox"/> YES <input type="checkbox"/> NO (117)	(___) <input type="checkbox"/> YES <input type="checkbox"/> NO (118)	(___) <input type="checkbox"/> YES <input type="checkbox"/> NO (119)	(___) <input type="checkbox"/> YES <input type="checkbox"/> NO (120)
IFA - IgM	(___) <input type="checkbox"/> YES <input type="checkbox"/> NO (119)	(___) <input type="checkbox"/> YES <input type="checkbox"/> NO (120)	(___) <input type="checkbox"/> YES <input type="checkbox"/> NO (121)	(___) <input type="checkbox"/> YES <input type="checkbox"/> NO (122)
Other test: (121-130)	(___) <input type="checkbox"/> YES <input type="checkbox"/> NO (131)	(___) <input type="checkbox"/> YES <input type="checkbox"/> NO (132)	(___) <input type="checkbox"/> YES <input type="checkbox"/> NO (133)	(___) <input type="checkbox"/> YES <input type="checkbox"/> NO (134)

17. Other Diagnostic Tests ?	Positive?
PCR	<input type="checkbox"/> YES <input type="checkbox"/> NO (133)
Morulae visualization*	<input type="checkbox"/> YES <input type="checkbox"/> NO (134)
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)

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 RMSF  HME  HGE  
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State Health Department Official who reviewed this report: (149)  
Name: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_ (mm/dd/yyyy)

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**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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