



# 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.: \_\_\_\_\_  
 City: \_\_\_\_\_ NETSS ID No.: (if reported)            
Case ID (13-18) Site (19-21) State (22-23)

## - DEMOGRAPHICS -

**1. State of residence:**   (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)  
 1 Male  
 2 Female  
**5. Date of birth:** \_\_\_\_/\_\_\_\_/\_\_\_\_ (mm/dd/yyyy)  
(61-62) (63-64) (65-68)  
**6. Race:** (69) 1 White 3 American Indian Alaskan Native 5 Pacific Islander  
 2 Black 4 Asian 9 Not specified  
**7. Hispanic ethnicity:** (70) 1 Yes  
 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)		
	Serology 1 Titer	(101-2) / (103-4) / (105-8) Positive?		Serology 2* Titer	(109-10) / (111-12) / (113-16) Positive?	
IFA - IgG	(_____) 1 YES 2 NO (117)		(_____) 1 YES 2 NO (118)			
IFA - IgM	(_____) 1 YES 2 NO (119)		(_____) 1 YES 2 NO (120)			
Other test: (121-130)	(_____) 1 YES 2 NO (131)		(_____) 1 YES 2 NO (132)			

17. Other Diagnostic Tests ?	Positive?	
PCR	1 YES	2 NO (133)
Morulae visualization*	1 YES	2 NO (134)
Immunostain	1 YES	2 NO (135)
Culture	1 YES	2 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): \_\_\_\_\_

(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.

Public reporting burden of this collection of information is estimated to average 10 minutes per response. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Please send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to CDC/ATSDR Reports Clearance Officer, 1600 Clifton Rd., NE (MS D-74); Atlanta, GA 30333; ATTN: PRA (0920-0009).



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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  
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4. Sex: (60)  
1 Male  
2 Female  
5. Date of birth: \_\_\_/\_\_\_/\_\_\_ (mm/dd/yyyy)  
(61-62) (63-64) (65-68)  
6. Race: (69)  
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2 Black 4 Asian 5 Pacific Islander 9 Not specified  
7. Hispanic ethnicity: (70)  
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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)  
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Specify condition(s): \_\_\_\_\_  
12. Specify any life-threatening complications in the clinical course of illness: (82)  
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(84-85) (86-87) (88-91)  
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1 YES 2 NO 9 Unk \_\_\_/\_\_\_/\_\_\_ (mm/dd/yyyy)  
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15. Name of laboratory: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
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Other test: (121-130)	(_____) 1 YES 2 NO (131)			(_____) 1 YES 2 NO (132)		

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

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(138)  
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4 Ehrlichiosis (unspecified, or other agent): \_\_\_\_\_  
(139-148)

1 CONFIRMED (149)	Name: _____
2 PROBABLE	Title: _____ Date: ___/___/___ (mm/dd/yyyy)

State Health Department Official who reviewed this report:

## COMMENTS:

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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.

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DEPARTMENT OF HEALTH & HUMAN SERVICES  
Centers for Disease Control  
and Prevention (CDC)  
Atlanta, Georgia 30333

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Form Approved  
OMB 0920-0009

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ehrlichiosis (human monocytic ehrlichiosis [HME]), and human granulocytic ehrlichiosis [HGE].

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IFA - IgM	(____) 1 YES 2 NO (119)	(____) 1 YES 2 NO (120)	Morulae visualization*	1 YES 2 NO (134)		
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