



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: _____ 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 1 Male
 2 Female
 5. Date of birth: ____/____/____ (mm/dd/yyyy) 6. Race: (69) 1 White 3 American Indian 5 Pacific Islander 7. Hispanic ethnicity: 1 Yes
 (61-62) (63-64) (65-68) 2 Black 4 Asian 9 Not specified (70) 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) ____/____/____ (mm/dd/yyyy)
 1 YES 2 NO 9 Unk (84-85) (86-87) (88-91)
 14. Did the patient die because of this illness? (92) (If yes, date) ____/____/____ (mm/dd/yyyy)
 1 YES 2 NO 9 Unk (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	Positive?		Serology 2*	Positive?			
IFA - IgG	(_____) 1 YES 2 NO (117)	(_____) 1 YES 2 NO (118)	(_____) 1 YES 2 NO (119)	(_____) 1 YES 2 NO (120)	PCR	1 YES 2 NO (133)		
IFA - IgM	(_____) 1 YES 2 NO (119)	(_____) 1 YES 2 NO (120)	(_____) 1 YES 2 NO (121)	(_____) 1 YES 2 NO (122)	Morulae visualization*	1 YES 2 NO (134)		
Other test: (121-130)	(_____) 1 YES 2 NO (131)	(_____) 1 YES 2 NO (132)	(_____) 1 YES 2 NO (133)	(_____) 1 YES 2 NO (134)	Immunostain	1 YES 2 NO (135)		
	(_____) 1 YES 2 NO (131)	(_____) 1 YES 2 NO (132)	(_____) 1 YES 2 NO (133)	(_____) 1 YES 2 NO (134)	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): _____

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

State Health Department Official who reviewed this report:

COMMENTS:

CDC CASE DEFINITION

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
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 2 Black 3 American Indian Alaskan Native 4 Asian 5 Pacific Islander 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) 2 Disseminated intravascular coagulopathy (DIC) 3 Meningitis/encephalitis 4 Renal failure 8 Other: _____ 9 None
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	Positive?		Serology 2* Titer	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): _____ (139-148)

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

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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Other test: (121-130)	(_____) 1 YES 2 NO	(131)	(_____) 1 YES 2 NO	(132)	(_____) 1 YES 2 NO	(133)

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