Date submitted: 01/11/2010

1. State of residence: ________________________________
2. County of residence: ____________
3. Zip code: __________________________
4. Sex: __________________________
5. Date of birth: __________________________
6. Race: ______________
   - American Indian/Alaskan Native
   - Asian
   - Black
   - Other
   - Pacific Islander
   - not specified
7. Hispanic ethnicity: ______________
   - Yes
   - No
   - Unk
8. Indicate Disease (Presumed) To Be Reported: ______________
   - SFR (including RMSF)
   - Anaplasmosis - A. phagocytophilum
   - Ehrlichiosis - E. chaffeensis
   - Ehrlichiosis - E. ewingii
   - other
9. Was a clinically compatible illness present? ______________
   - Yes
   - No
   - Unk
10. Was there a fourfold change in antibody titer between the two serum specimens? ______________
   - YES
   - NO
   - Unk
11. Did the patient die because of this illness? ______________
   - YES
   - NO
   - Unk
12. Specify any life-threatening complications in the clinical course of illness: ______________
   - Adult respiratory distress syndrome (ARDS)
   - Disseminated intravascular coagulopathy (DIC)
   - Renal failure
   - Other: ______________
13. Was the patient hospitalized because of this illness? ______________
   - YES
   - NO
   - Unk
14. Other Diagnostic Test? ______________
   - PCR
   - Immunostain
   - Culture
15. Name of laboratory: ________________________________
16. Serologic Tests:
   - Serology 1: ______________
     - Titer: __________________________
     - Positive?: ______________
   - Serology 2: ______________
     - Titer: __________________________
     - Positive?: ______________
17. Other Diagnostic Test? ______________
   - PCR
   - Morulae visualization
   - Immunostain
   - Culture
18. Classify case BASED ON the CDC case definition (see criteria below):
   - SFR (including RMSF)
   - Anaplasmosis - A. phagocytophilum
   - Ehrlichiosis - E. chaffeensis
   - Ehrlichiosis/Anaplasmosis - Undetermined
   - Confirmed
   - Probable

**Notes:**
- Current commercially available ELISA tests cannot evaluate changes in antibody titer. IgM tests may be unreliable because they lack specificity. IgM antibody may persist for lengthy periods of time. When sera demonstrate elevated antibody responses to multiple infectious agents among tick-borne species, and between ehrlichial and anaplasmal species, the greater antibody response is generally directed at the actual agent involved.
- Confirmed Ehrlichiosis/Anaplasmosis: A clinically compatible case with evidence of a fourfold change in IgG antibody titer reactive with Ehrlichia Chaffeensis or Anaplasma phagocytophilum antigen by IFA between paired serum specimens (one taken during the first week of illness and a second 2-4 weeks later) or detection of E. chaffeensis or A. phagocytophilum DNA in a clinical specimen via amplification of a specific target by PCR assay, or demonstration of SFR antigen in a biopsy/autopsy specimen by IHC, or isolation of R. rickettsiae or other SFR species from a specimen in cell culture.
- Probable Ehrlichiosis/Anaplasmosis: A clinically compatible case with evidence of elevated IgG or IgM antibody reactive with E. chaffeensis or A. phagocytophilum antigen by IFA, enzyme-linked immunosorbent assay (ELISA), dot-ELISA, or latex agglutination (CDC uses an IFA IgG cutoff of ≥1:64 and does not use IgM ELISA test results as independent diagnostic support criteria.)
- Probable Ehrlichiosis or Anaplasmosis: A clinically compatible case with evidence of elevated IgG or IgM antibody reactive with E. chaffeensis or A. phagocytophilum antigen by IFA, enzyme-linked immunosorbent assay (ELISA), dot-ELISA, or assays in other formats (CDC uses an IFA cutoff of ≥1:64 and does not use IgM ELISA test results as independent diagnostic support criteria.)
- Probable Ehrlichiosis/Anaplasmosis: A clinically compatible case with evidence of elevated IgG or IgM antibody reactive with E. chaffeensis or A. phagocytophilum antigen by IFA, enzyme-linked immunosorbent assay (ELISA), dot-ELISA, or assays in other formats (CDC uses an IFA cutoff of ≥1:64 and does not use IgM ELISA test results as independent diagnostic support criteria.)
TICK-BORNE RICKETTSIAL DISEASE CASE REPORT

1. State of residence: ____________________________
   Postal abvr: _______ (24-25)

2. County of residence: ____________________________
   (86-90)

3. Zip code: ____________________________
   (81-85)

4. Sex: ____________________________
   Male   Female   Unk (60)

5. Date of birth: ____________________________
   (82-86)

6. Race: ____________________________
   White   Black   American Indian
   Asian   Pacific Islander   Not specified (69)

7. Hispanic ethnicity: ____________________________
   Yes   No   Unk (73-78)

8. Indicate Disease (Presumed) To Be Reported: ____________________________
   SFR (including RMSF)   Ehrlichiosis - E. chaffeensis   Anaplasmosis - A. phagocytophilum
   Ehrlichiosis/Anaplasmosis - Undetermined (71)

9. Was a clinically compatible illness present? ____________________________
   YES   NO   Unk (70)

10. Date of Onset of Symptoms: ____________________________
    (79-83)

11. Was an underlying immunosuppressive condition present? ____________________________
    YES   NO   Unk (72)

12. Specify any life-threatening complications in the clinical course of illness: ____________________________

13. Was the patient hospitalized because of this illness? ____________________________
    YES   NO   Unk (82-84)

14. Did the patient die because of this illness? ____________________________
    YES   NO   Unk (85-86)

15. Name of laboratory: ____________________________
   City: ____________________________
   State: ____________________________
   Zip: ____________________________

16. Serologic Tests

   COLLECTION DATE (mm/dd/yyyy)
   Titer
   IFA - IgG
   101-103
   104-106
   __ __ __ __ __ __ __ __ (mm/dd/yyyy)

   Positive?
   YES   NO 9 Unk (117)

   IFA - IgM
   123-126
   __ __ __ __ __ __ __ __ (mm/dd/yyyy)

   Positive?
   YES   NO 9 Unk (118)

   Other test:
   __ __ __ __ __ __ __ __ (137)

   Positive?
   YES   NO 9 Unk (119)

   * Was there a fourfold change in antibody titer between the two serum specimens? YES   NO (130)

17. Other Diagnostic Test

  PCR
   YES   NO (133)

   Morulae visualization*
   YES   NO (134)

   Immunostain
   YES   NO (135)

   Culture
   YES   NO (136)

   * Visualization of morulae not applicable for SFR.

18. Classify case BASED ON the CDC case definition (see criteria below):

   SFR (including RMSF)
   YES   NO (138)

   Anaplasmosis - A. phagocytophilum
   YES   NO (139)

   Ehrlichiosis - E. chaffeensis
   YES   NO (140)

   Ehrlichiosis/Anaplasmosis - Undetermined
   YES   NO (141)

   Confirmed Ehrlichiosis/Anaplasmosis: A clinically compatible case with evidence of a fourfold change in IgG antibody titer reactive with Ehrlichia Chaffeensis or Anaplasma phagocytophilum antigen by IFA between paired serum specimens (one taken during the first week of illness and a second 2-4 weeks later) OR detection of E. chaffeensis or A. phagocytophilum DNA in a clinical specimen via amplification of a specific target by PCR assay. OR demonstration of ehrlichial or anaplasmal antigen in a biospy/autopsy specimen by IHC, OR isolation of E. chaffeensis or A. phagocytophilum from a clinical specimen in cell culture.

   Probable Ehrlichiosis/Anaplasmosis: A clinically compatible case with evidence of elevated IgG or IgM antibody reactive with E. chaffeensis or A. phagocytophilum antigen by IFA, enzyme-linked immunosorbent assay (ELISA), dot-ELISA, or latex agglutination (CDC uses an IFA IgG cutoff of ≥1:64 and does not use IgM test results as independent diagnostic support criteria).

   Note: Current commercially available ELISA tests cannot evaluate changes in antibody titer. IgM tests may be unreliable because they lack specificity. IgM antibody may persist for lengthy periods of time. When sera demonstrate elevated antibody responses to multiple infectious agents among rickettsial species, and between ehrlichial and anaplasmal species, the greater antibody response is generally directed at the actual agent involved.

   Confirmed Ehrlichiosis/Anaplasmosis: A clinically compatible case with evidence of a fourfold change in IgG antibody titer reactive with Ehrlichia Chaffeensis or Anaplasma phagocytophilum antigen by IFA between paired serum specimens (one taken during the first week of illness and a second 2-4 weeks later) OR detection of E. chaffeensis or A. phagocytophilum DNA in a clinical specimen via amplification of a specific target by PCR assay. OR demonstration of ehrlichial or anaplasmal antigen in a biospy/autopsy specimen by IHC, OR isolation of E. chaffeensis or A. phagocytophilum from a clinical specimen in cell culture.

   Probable Ehrlichiosis/Anaplasmosis: A clinically compatible case with evidence of elevated IgG or IgM antibody reactive with E. chaffeensis or A. phagocytophilum antigen by IFA, enzyme-linked immunosorbent assay (ELISA), dot-ELISA, or latex agglutination (CDC uses an IFA IgG cutoff of ≥1:64 and does not use IgM test results as independent diagnostic support criteria.) OR identification of morulae in the cytoplasm of monocytes or macrophages (Ehrlichiosis) or in the cytoplasm of neutrophils or eosinophils (Anaplasmosis) by microscopic examination.

   State Health Department Official who reviewed this report:

   Name: ____________________________
   Title: ____________________________
   Date: ____________________________ (mm/dd/yyyy)

COMMENTS:

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).
**Tick-Borne Rickettsial Disease Case Report**

**Use for:** Spotted fever rickettsiosis (SFR) including Rocky Mountain spotted fever (RMSF), Ehrlichiosis (E. chaffeensis, E. ewingii, & undet.), and Anaplasmosis (A. phagocytophilum & undet.).

Visit [http://www.cdc.gov](http://www.cdc.gov) and use "Search" for complete Case Definition(s) or visit the disease web site(s) for a fillable/downloadable PDF version of this Case Report.

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