** Tick-Borne Rickettsial Disease Case Report **

** 1. State of residence:**

<table>
<thead>
<tr>
<th>Postal abrv:</th>
<th>(24-25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of travel outside county of residence within 30 days of onset of symptoms?</td>
<td>1 YES</td>
</tr>
</tbody>
</table>

** 2. County of residence:**

| (26-50) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

** 3. Zip code:**

| (51-59) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

** 4. Sex:**

| (60) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 Male | 2 Female | 9 Unk |

** 5. Date of birth:**

| (61-62) | (63-64) | (65-68) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

** 6. Race:**

| (69) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 White | 2 Black | 9 Unk |

** 7. Hispanic ethnicity:**

| (70) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 Yes | 2 No | 9 Unk |

** 8. Indicate Disease (Presumed) To Be Reported:**

| (71) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 Ehrlichiosis/Anaplasmosis - Undetermined | 2 E. ewingii | 9 Unk |

** 9. Was a clinically compatible illness present?**

| (72) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

** 10. Date of Onset of Symptoms:**

| (73-80) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

** 11. Was an underlying immunosuppressive condition present?**

| (81) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

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

| (82) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 Adult respiratory distress syndrome (ARDS) | 2 Meningitis/encephalitis | 9 None |

** 13. Was the patient hospitalized because of this illness?**

| (83) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

** 14. Did the patient die because of this illness?**

| (84) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

** 15. Name of laboratory:**

| (85) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

** 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**

| (86-87) | (88-91) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

** 17. Other Diagnostic Test?**

| (92) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

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

| (93-94) | (95-96) | (97-100) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

** 19. State Health Department Official who reviewed this report:**

| (101-10) | (103-12) | (105-16) |
| History of travel outside county of residence within 30 days of onset of symptoms? | 1 YES | 2 NO | 9 Unk |

** COMMENTS:**

** Confirmed SFR (including RMSF):** A clinically compatible case with evidence of a fourfold change in IgG antibody titer reactive with *Rickettsia tickelliae* or other SFR antigens by IFA between paired serum specimens, one taken during the first week of illness and a second 2-4 weeks later, OR detection of *Rickettsia* DNA in clinical specimen by amplification of a specific target by PCR assay, OR demonstration of SFR antigen by immunofluorescence assay or immunoblot assay, OR detection of *Rickettsia* species in a clinical specimen by culture, OR identification of morulae in the cytoplasm of monocytes.

** Probable SFR (including RMSF):** A clinically compatible case with evidence of elevated IgG or IgM antibody reactive with *Rickettsia tickelliae* or other SFR antigens by IFA, enzyme-linked immunosorbent assay (ELISA), or other diagnostic support criteria.

** Note:** Current commercially available ELISA tests cannot evaluate changes in antibody titer. IFA tests may be unreliable because they lack specificity. IgM antibody may persist for lengthy periods of time. When sera demonstrate elevated antibody response to multiple infectious agents among rickettsial species, and between rickettsial 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* antigens by IFA between paired serum specimens (one taken during the first week of illness and a second 2-4 weeks later) OR detection of *Ehrlichia chaffeensis* or *Anaplasma phagocytophilum* DNA in a clinical specimen via amplification of a specific target by PCR assay, OR demonstration of *Ehrlichia* or *Anaplasma* in a biopsy/autopsy specimen by immunostain or PCR assay, OR isolation of *Ehrlichia chaffeensis* or *Anaplasma 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 *Ehrlichia chaffeensis* or *Anaplasma phagocytophilum* or E. ewingii antigen by IFA, enzyme-linked immunosorbent assay (ELISA), dot-ELISA, or other assays in other formats (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. IFA tests may be unreliable because they lack specificity. IgM antibody may persist for lengthy periods of time. When sera demonstrate elevated antibody response to multiple infectious agents among rickettsial species, and between rickettsial and anaplasmal species, the greater antibody response is generally directed at the actual agent involved.

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1. State of residence: __________  2. County of residence: __________
Postal abrv: __________ (24-25) History of travel outside county of residence within 30 days of onset of symptoms: 1 YES 2 NO 9 Unk

3. Zip code: __________ (65-69)  4. Sex: (60) 1 Male 9 Unk 2 Female

5. Date of birth: __________ (81-85)  6. Race: (66) 1 White 2 Black 3 American Indian 4 Asian 5 Pacific Islander 6 Other:

7. Hispanic ethnicity: (70) 1 Yes 2 No 9 Unk

8. Indicate Disease (Presumed) To Be Reported: (71) 1 SFR (including RMSF) 2 Ehrlichiosis - E. chaffeensis 3 Anaplasmosis - A. phagocytophilum 4 Ehrlichiosis/Anaplasmosis - Undetermined

9. Was a clinically compatible illness present? (81) 1 YES 2 NO 9 Unk
Specify condition(s): ____________________________________________________________

10. Date of Onset of Symptoms: __________ (73-80)  1 YES 2 NO 9 Unk

11. Was an underlying immun suppressive 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 5 Other:

13. Was the patient hospitalized because of this illness? (83) 1 YES 2 NO 9 Unk (if yes, date) __________ (84-87)

14. Did the patient die because of this illness? (84) 1 YES 2 NO 9 Unk (if yes, date) __________ (88-91)

City: __________  17. Other Diagnostic Test?
State: __________  18. Classify case BASED ON the CDC case definition (see criteria below):
Zip: __________ * Visualization of morulae not applicable for SFR.

<table>
<thead>
<tr>
<th>Serologic Tests</th>
<th>Collection Date (mm/dd/yyyy)</th>
<th>Titer</th>
<th>Positive?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serology 1</td>
<td>(101-2) (102-4) (104-6)</td>
<td>YES</td>
<td>NO (117)</td>
</tr>
<tr>
<td>Serology 2*</td>
<td>(109-10) (111-12) (115-16)</td>
<td>YES</td>
<td>NO (118)</td>
</tr>
<tr>
<td>Other test:</td>
<td>(121-130)</td>
<td>YES</td>
<td>NO (119)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>YES</td>
<td>NO (120)</td>
</tr>
</tbody>
</table>

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

19. Date of Onset of Symptoms: __________ (93-96) 1 YES 2 NO 9 Unk (if reported)

20. Date of Death: __________ (97-100) 1 YES 2 NO 9 Unk (if reported)

21. Name: __________  22. Title: __________  23. Date: __________ (mm/dd/yyyy)
### Tick-Borne Rickettsial Disease Case Report

**Title:** Tick-Borne Rickettsial Disease Case Report  
**Date:** 01/11/2010  
**State:**  
**Local Health Department Official who reviewed this report:**  
**Date:**  

#### 1. State of residence:  
**Postal abrv:**  
**City:**  
**History of travel outside county of residence within 30 days of onset of symptoms:** 

#### 2. County of residence:  
**City:**  
**Race:** 

#### 3. Zip code:  
**State:**  
**Sex:**  
**Date of Onset of Symptoms:** 

#### 4. Date submitted:  
**Phone no.:**  
**Site:**  
**State:**  

#### 5. Date of birth:  
**Race:** 

#### 6. Race:  
**White**  
**Black**  
**American Indian**  
**Alaskan Native**  
**Asian**  
**Pacific Islander**  
**Other:**  
**Unk**  

#### 7. Hispanic ethnicity:  
**Yes**  
**No**  
**Unk**  

#### 8. Indicate Disease (Presumed) To Be Reported: 

#### 9. Was a clinically compatible illness present?  
**Yes**  
**No**  
**Unk**  
**Specify condition(s):**  

#### 10. Date of Admission to Hospital:  
**Yes**  
**No**  
**Unk**  

#### 11. Was an underlying immunosuppressive condition present?  
**Yes**  
**No**  
**Unk**  
**Specify condition(s):**  

#### 12. Other Diagnostic Test?  
**PCR**  
**Molecular visualization**  
**Immunostain**  
**Culture**  
**Positive?**  

#### 13. Was there a fourfold change in antibody titer between the two serum specimens?  
**Yes**  
**No**  

#### 14. Did the patient die because of this illness?  
**Yes**  
**No**  
**Unk**  

#### 15. Name of laboratory:  
**City:**  
**State:**  
**Zip:**  

#### 16. Serologic Tests  
**Titer**  
**Positive?**  
**COLLECTION DATE (mm/dd/yyyy)**  
**IFN - IgG**  
**IFN - IgM**  
**Other test:**  

#### 17. Other Diagnostic Test?  
**Positive?**  

#### 18. Classify case BASED ON the CDC case definition (see criteria below):  
**Confirmed Ehrlichiosis/Anaplasmosis:**  
**Probable Ehrlichiosis/Anaplasmosis:**  
**Unconfirmed Ehrlichiosis/Anaplasmosis:**  

#### Comments:  
**Confirmed Ehrlichiosis/Anaplasmosis:**  
**Probable Ehrlichiosis/Anaplasmosis:**  
**Unconfirmed Ehrlichiosis/Anaplasmosis:**  

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