



# Babesiosis Case Report Form

Patient's name: \_\_\_\_\_ Date submitted: \_\_\_\_\_ (mm/dd/yyyy)

Address: \_\_\_\_\_ Clinician's name: \_\_\_\_\_ Clinician's Phone no.: \_\_\_\_\_

City: \_\_\_\_\_ NETSS ID No.: (if reported) 

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Case ID Site State

**Classify case based on the CDC case definition:**    **Confirmed**    **Probable [specify:**    **(a)**    **(b)i**    **(b)ii]**    **Suspect**

**Demographic and Clinical Data**  
For dates, be as specific as possible. However, approximates [e.g., mm/yyyy] are acceptable.

State of residence:	County of residence:	Zip code:	Sex: Male Female Unknown	Date of birth:  (mm/dd/yyyy)	Age:  years months days
Race (check all that apply): White Black/African American		Alaska Native or American Indian Asian	Pacific Islander Not specified	Ethnicity: Hispanic/Latino Not Hispanic/Latino Unknown	

Was the case-patient symptomatic?    Yes    No    Unk If yes, date of onset: _____ (mm/dd/yyyy)	Is the case-patient asplenic?    Yes    No    Unk If splenectomy, date of surgery: _____ (mm/dd/yyyy)
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**Clinical Manifestations**

Yes    No    Unk	Yes    No    Unk	Yes    No    Unk
Fever	Headache	Myalgia
Anemia	Chills	Arthralgia
Thrombocytopenia	Sweats	

Other clinical manifestations (specify): \_\_\_\_\_

Specify any complications in the clinical course of infection:

Acute respiratory distress	Congestive heart failure	Renal failure	None
Disseminated intravascular coagulation (DIC)	Myocardial infarction	Other: _____	

Was the case-patient hospitalized (at least overnight) for this infection?    Yes    No    Unk If yes, number of days: _____	Did the case-patient die?    Yes    No    Unk If yes, date of death: _____ (mm/dd/yyyy) Was the death related to the infection?    Yes    No    Unk
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Did the case-patient receive antimicrobial treatment for this infection?    Yes    No    Unk

If yes, which drugs (select all that apply)?    Clindamycin    Quinine    Atovaquone    Azithromycin    Other: \_\_\_\_\_

**Epidemiologic Factors**

Was the case-patient's infection transfusion associated?    Yes    No    Unk

Was the case-patient a blood donor identified during a transfusion investigation?    Yes    No    Unk

**In the eight weeks before symptom onset or diagnosis (use earlier date), did the case-patient:**

Engage in outdoor activities?    Yes    No    Unk    If yes, which:    Camping    Hiking    Hunting    Yard work  
Other: \_\_\_\_\_

Spend time outdoors in or near wooded or brushy areas?    Yes    No    Unk

Notice any tick bites?    Yes    No    Unk    When and where (geographic location)? \_\_\_\_\_

Travel out of?    County    State    Country    When and where? \_\_\_\_\_

**Laboratory Testing for Babesia**  
Please include available results, especially those relevant to case classification.

Test	Babesia species	Date specimen collected	Titer	Result	Test	Babesia species	Date specimen collected	Result
IFA - total antibody (Ig)				Pos    Neg Indeterminate	Blood Smear	N/A		Pos    Neg Indeterminate
IFA - IgG				Pos    Neg Indeterminate	PCR			Pos    Neg Indeterminate
IFA - IgM				Pos    Neg Indeterminate	Other (specify):			Pos    Neg Indeterminate
Immunoblot			N/A	Pos    Neg Indeterminate	Other (specify):			Pos    Neg Indeterminate

Public reporting burden of this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. 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. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Information Collection Review Office, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-XXXX).



# Babesiosis Case Report Form

Date submitted: \_\_\_\_\_ (mm/dd/yyyy)

Clinician's name: \_\_\_\_\_ Clinician's Phone no.: \_\_\_\_\_

NETSS ID No.: (if reported) --  
Case ID Site State

Classify case based on the CDC case definition: **Confirmed** **Probable [specify: (a) (b)i (b)ii]** **Suspect**

### Demographic and Clinical Data

For dates, be as specific as possible. However, approximates [e.g., mm/yyyy] are acceptable.

State of residence: \_\_\_\_\_ County of residence: \_\_\_\_\_ Zip code: \_\_\_\_\_ Sex: Male Female Unknown Date of birth: \_\_\_\_\_ (mm/dd/yyyy) Age: \_\_\_\_\_ years \_\_\_\_\_ months \_\_\_\_\_ days

Race (check all that apply): White Black/African American Alaska Native or American Indian Asian Pacific Islander Not specified Ethnicity: Hispanic/Latino Not Hispanic/Latino Unknown

Was the case-patient symptomatic? Yes No Unk If yes, date of onset: \_\_\_\_\_ (mm/dd/yyyy) Is the case-patient asplenic? Yes No Unk If splenectomy, date of surgery: \_\_\_\_\_ (mm/dd/yyyy)

### Clinical Manifestations

Yes No Unk Yes No Unk Yes No Unk  
Fever Headache Myalgia  
Anemia Chills Arthralgia  
Thrombocytopenia Sweats  
Other clinical manifestations (specify): \_\_\_\_\_

Specify any complications in the clinical course of infection:  
Acute respiratory distress Congestive heart failure Renal failure None  
Disseminated intravascular coagulation (DIC) Myocardial infarction Other: \_\_\_\_\_

Was the case-patient hospitalized (at least overnight) for this infection? Yes No Unk If yes, number of days: \_\_\_\_\_ Did the case-patient die? Yes No Unk If yes, date of death: \_\_\_\_\_ (mm/dd/yyyy) Was the death related to the infection? Yes No Unk

Did the case-patient receive antimicrobial treatment for this infection? Yes No Unk If yes, which drugs (select all that apply)? Clindamycin Quinine Atovaquone Azithromycin Other: \_\_\_\_\_

### Epidemiologic Factors

Was the case-patient's infection transfusion associated? Yes No Unk Was the case-patient a blood donor identified during a transfusion investigation? Yes No Unk  
**In the eight weeks before symptom onset or diagnosis (use earlier date), did the case-patient:**  
Engage in outdoor activities? Yes No Unk If yes, which: Camping Hiking Hunting Yard work  
Spend time outdoors in or near wooded or brushy areas? Yes No Unk  
Notice any tick bites? Yes No Unk When and where (geographic location)? \_\_\_\_\_  
Travel out of? County State Country When and where? \_\_\_\_\_

### Laboratory Testing for Babesia

Please include available results, especially those relevant to case classification.

Test	Babesia species	Date specimen collected	Titer	Result	Test	Babesia species	Date specimen collected	Result
IFA - total antibody (Ig)				Pos Neg Indeterminate	Blood Smear	N/A		Pos Neg Indeterminate
IFA - IgG				Pos Neg Indeterminate	PCR			Pos Neg Indeterminate
IFA - IgM				Pos Neg Indeterminate	Other (specify):			Pos Neg Indeterminate
Immunoblot			N/A	Pos Neg Indeterminate	Other (specify):			Pos Neg Indeterminate

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## Case Definition

### **Confirmed case:**

A case that has confirmatory laboratory results and meets at least one of the objective or subjective clinical evidence criteria, regardless of the mode of transmission (can include clinically manifest cases in transfusion recipients or blood donors).

### **Probable case:**

(a) A case that has supportive laboratory results and meets at least one of the objective clinical evidence criteria (subjective criteria alone are not sufficient); or

(b) A case that is in a blood donor or recipient epidemiologically linked to a confirmed or probable babesiosis case (as defined above) and:

- i. has confirmatory laboratory evidence but does not meet any objective or subjective clinical evidence criteria; or
- ii. has supportive laboratory evidence and may or may not meet any subjective clinical evidence criteria but does not meet any objective clinical evidence criteria.

### **Suspect case:**

A case that has confirmatory or supportive laboratory results, but insufficient clinical or epidemiologic information is available for case classification (e.g., only a laboratory report was provided).

### *Clinical evidence*

- Objective: one or more of the following: fever, anemia, or thrombocytopenia.
- Subjective: one or more of the following: chills, sweats, headache, myalgia, or arthralgia.

### *Epidemiologic evidence for transfusion transmission*

Epidemiologic linkage between a transfusion recipient and a blood donor is demonstrated if all of the following criteria are met:

(a) In the transfusion recipient:

- i. Received one or more red blood cell (RBC) or platelet transfusions within one year before the collection date of a specimen with laboratory evidence of *Babesia* infection; and
- ii. At least one of these transfused blood components was donated by the donor described below; and
- iii. Transfusion-associated infection is considered at least as plausible as tick-borne transmission; and

(b) In the blood donor:

- i. Donated at least one of the RBC or platelet components that was transfused into the above recipient; and
- ii. The plausibility that this blood component was the source of infection in the recipient is considered equal to or greater than that of blood from other involved donors. (More than one plausible donor may be linked to the same recipient.)

### *Laboratory criteria for diagnosis*

#### Laboratory confirmatory:

- Identification of intraerythrocytic *Babesia* organisms by light microscopy in a Giemsa, Wright, or Wright-Giemsa–stained blood smear; or
- Detection of *Babesia microti* DNA in a whole blood specimen by polymerase chain reaction (PCR); or
- Detection of *Babesia* spp. genomic sequences in a whole blood specimen by nucleic acid amplification; or
- Isolation of *Babesia* organisms from a whole blood specimen by animal inoculation.

#### Laboratory supportive:

- Demonstration of a *Babesia microti* Indirect Fluorescent Antibody (IFA) total immunoglobulin (Ig) or IgG antibody titer of greater than or equal to ( $\geq$ ) 1:256 (or  $\geq$ 1:64 in epidemiologically linked blood donors or recipients); or
- Demonstration of a *Babesia microti* Immunoblot IgG positive result; or
- Demonstration of a *Babesia divergens* IFA total Ig or IgG antibody titer of greater than or equal to ( $\geq$ ) 1:256; or
- Demonstration of a *Babesia duncani* IFA total Ig or IgG antibody titer of greater than or equal to ( $\geq$ ) 1:512.

## Notes: