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) ☐☐☐☐☐☐ – ☐☐☐ – ☐☐

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

Postal abrv: _____

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

Black/African American   Asian   Not specified

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

CDC SAFER·HEALTHIER·PEOPLE™

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:
Postal abrv: _____

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
   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
IFA – total antibody (Ig)				Pos Neg Indeterminate
IFA - IgG				Pos Neg Indeterminate
IFA - IgM				Pos Neg Indeterminate
Immunoblot			N/A	Pos Neg Indeterminate

Test	*Babesia* species	Date specimen collected	Result
Blood Smear	N/A		Pos Neg Indeterminate
PCR			Pos Neg Indeterminate
Other (specify):			Pos Neg Indeterminate
Other (specify):			Pos Neg Indeterminate

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 <u>not</u> 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 <u>not</u> 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
- <u>Objective</u>: one or more of the following: fever, anemia, or thrombocytopenia.
- <u>Subjective</u>: 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
    <u>Laboratory confirmatory</u>:
- 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.

    <u>Laboratory supportive</u>:
- Demonstration of a *Babesia microti* Indirect Fluorescent Antibody (IFA) total immunoglobulin (Ig) or IgG antibody titer of greater than or equal to (≥) 1:256 (or ≥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 (≥) 1:256; or
- Demonstration of a *Babesia duncani* IFA total Ig or IgG antibody titer of greater than or equal to (≥) 1:512.

Notes: