North Carolina Babesiosis Surveillance Case Classification Algorithm for 2025 Case Definition

Refer to <u>NC CD Manual Babesiosis Case Definition</u> for detailed information

Use the table on the next page to determine which lab(s) the case has and then follow the decision tree below.

Always follow your CD investigation policy regarding # of attempts for records request and submit event to state as Suspect when maximum # of attempts are reached.



clinical information)

North Carolina Babesiosis Surveillance Case Classification Algorithm for 2025 Case Definition

		Qualifying Babesiosis laboratory tests that require investigation					
		Lab Test	Organism				
_			Babesia microti	Babesia divergens	Babesia duncani	Babesia spp.	Babesia organisms
	Confirmatory Labs	Intraerythrocytic organisms by light microscopy in Giemsa, Wright or Wright-Giemsa-stained blood smear					х
		DNA in whole blood specimen by polymerase chain reaction (PCR), NAAT or genomic sequencing in a sample taken within 60 days of illness onset	х	х	х	х	
		Serological evidence of a four-fold change in IgG-specific antibody titer to B. microti antigen by indirect immunofluorescence assay (IFA) in paired serum samples (one taken within two weeks of illness onset and a second taken two to ten weeks after acute specimen collection)	x				
	Presumptive Labs	Serologic evidence of an elevated IgG or total antibody reactive to B. microti antigen by IFA at a titer ≥1:256 in a sample taken within 60 days of illness onset	x				
	Supportive labs *specimens meeting supportive laboratory criteria should be collected within 60 days of illness onset	IFA total antibody or IgG antibody titer to B. divergens of greater than or equal to (\geq) 1:256		x			
		IFA total antibody or IgG antibody titer to B. duncani of greater than or equal to (≥) 1:512			х		

North Carolina Communicable Disease Manual Babesiosis Algorithm February 2025

Babesiosis

Confirmatory laboratory criteria

- Intraerythrocytic Babesia organisms by light microscopy; OR
- · Babesia spp. DNA by PCR, NAAT or genomic sequencing in a sample taken within 60 days of illness onset OR
- Serological evidence of a four-fold change in IgG-specific antibody titer to *B. microti* antigen by indirect immunofluorescence assay (IFA) in paired serum samples (one taken within two weeks of illness onset and a second taken two to ten weeks after acute specimen collection)

Presumptive laboratory criteria

Serologic evidence of an elevated IgG or total antibody reactive to B. microti antigen by IFA at a titer ≥1:256 in a sample taken within 60 days of illness onset

Supportive laboratory criteria

Serologic evidence of an elevated IgG or total antibody reactive to B. divergens antigen by IFA at a titer ≥1:256; OR
Serologic evidence of an elevated IgG or total antibody reactive to B. duncani antigen by IFA at a titer ≥1:512

Confirmatory case definition

·Confirmatory laboratory results and meets at least one of the objective or subjective clinical evidence criteria

Probable case definition

Presumptive lab and at least one of the objective clinical evidence criteria (subjective criteria alone are not sufficient)

Suspect case definition

• Supportive laboratory evidence with or without clinical criteria or confirmatory/ presumptive lab evidence and LHD unable to obtain clinical information.