

Rickettsial Disease Diagnostic Testing and Interpretation

Rickettsial diseases are caused by closely related bacteria typically spread to people from infected fleas, ticks, and mites. Various laboratory methods exist for the diagnosis of rickettsial diseases. Methods differ in availability, type and timing of specimen collection, and interpretation of results. Molecular methods, such as polymerase chain reaction (PCR) tests, and serologic techniques, such as the indirect immunofluorescence antibody (IFA) assay, are the most commonly available testing methods for rickettsial diseases. See the below summary of test use and interpretation.

	PCR	IFA
Directly detects presence of pathogen	✓	
Detects antibodies to the pathogen		✓
Requires acute and convalescent samples to confirm disease		✓
Can confirm infection with only acute samples	✓	
Can be performed on many sample types	✓	
Sensitivity may be decreased following antibiotic therapy	✓	

Remember: If you suspect rickettsial infection in any person at any age, begin treatment with doxycycline. Do not wait for laboratory test results. Doxycycline is the treatment of choice for all rickettsial diseases in patients of all ages.



Centers for Disease Control and Prevention
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