

Tick-Borne Illness Update



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With tick season upon us, testing for tick-borne illnesses is increasing. Clinical suspicion of tick-borne disease should be based on patient characteristics including illness during tick season with symptoms such as fever, chills, headache, muscle aches, joint pain, neck pain, skin rash, Bell's palsy, heart rhythm disturbances, hypotension, jaundice, sepsis, and possible tick exposure. If these criteria are met there is risk for Lyme disease, anaplasmosis, and babesiosis. Endemic areas for Lyme disease, anaplasmosis, and babesiosis include the Northeastern and Upper Midwestern United States, into Canada.

If the patient presents with a classic erythema migrans "bullseye" rash, no testing is necessary, treatment for Lyme can be initiated while monitoring for symptoms of additional tick-borne illness. If there is no rash and clinical suspicion is high testing may be appropriate and should include a Lyme serology test, which reflexes to western blot if serology testing is positive or equivocal. Lyme serology can be insensitive in the first few weeks of infection, so repeat testing might be warranted. If there is concern for Babesia, a blood parasite exam should be ordered to look for the presence of Babesia in the red blood cells. If there is concern for Anaplasma, the best test is a PCR.

THE APPROPRIATE TESTING FOR EACH DISEASE IS:

Lyme disease (*Borrelia burgdorferi*): Lyme Antibody (Lab test code: LYMAB, EPIC test code: LAB3035)

Babesiosis: Parasite Exam, Blood (Lab test code: BPEX, EPIC test code: LAB2545).

Anaplasma: Ehrlichia/Anaplasma, Molecular Detection, PCR, Blood (Lab test code: EHRPCR, EPIC test code: LAB3614).

SEND OUT ORDERS TO MAYO ARE DISCOURAGED FOR THE FOLLOWING TESTS:

Lyme Disease, Molecular Detection, PCR

Lyme Disease, Molecular Detection, PCR, Blood

Babesia microti IgG Antibodies, Serum

Babesia species, Molecular Detection, PCR, Blood (except for kidney donors)

Tick-Borne Panel, Molecular Detection, PCR, Blood

Tick-Borne Disease Antibodies Panel, Serum.

Please let us know if you have any questions, 847-5121.

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