HELPFUL HINTS:
Follow up for Suspect Cases of Tickborne Disease

This information is intended to help you prioritize the follow up of suspect cases of tickborne disease based on laboratory test results that are reported to you. A “positive” result does not necessarily indicate presence of disease. For this reason, you should ALWAYS call the ordering provider first to confirm a diagnosis before contacting the patient. If you are not able to confirm a diagnosis with the physician and choose to follow up with the patient, be aware that the patient may not have been given a diagnosis of a tickborne disease by the doctor. If the patient has NOT been given a diagnosis of infection with a tickborne disease, further case investigation is not required.

Is there a positive lab result for Rocky Mountain spotted fever (RMSF)?

YES

NO

Is there a positive lab result for Ehrlichiosis (HME)?

YES

NO

Is there a positive lab result for Human Granulocytic Anaplasmosis (HGA)?

YES

NO

Is there a positive lab result for Babesiosis?

YES

NO

- Babesiosis can be transmitted by blood transfusion. These suspect cases should be followed up promptly to determine if there is a history of blood transfusion or donation.
- Lab results indicating a + Babesia smear or + Babesia-specific PCR are most likely to represent true cases and should be prioritized for follow up over other suspect cases of babesiosis.
- Suspect cases with a single + Babesia-specific IFA antibody titer of <1:256 for total Ig or IgG are unlikely to represent a current case of disease and therefore investigation is not indicated.

- Because there are likely to be few B. miyamotoi cases and little information is available on patients with this disease, suspect cases should be an important second priority.
- Currently only PCR testing is available for this disease so a positive result is likely to represent true infection with the organism.

Is there a positive lab result for Borrelia miyamotoi?

YES

NO

- Because HGA is considered to be an “emerging” tickborne disease in many parts of Massachusetts, suspect HGA cases should be the next priority for follow up after suspect babesiosis and B. miyamotoi cases are investigated.
- Lab results indicating detection of A. phagocytophilum by PCR are most likely to represent true cases and should be prioritized for follow up over other suspect cases of HGA.
- Suspect cases with a single + A. phagocytophilum-specific IFA antibody titer of <1:80 for total Ig or IgG are unlikely to represent an acute case of disease and investigation is not indicated.

- Ehrlichia chaffeensis is transmitted by the lonestar tick. Because the lonestar tick is not commonly found in Massachusetts, true cases of ehrlichiosis are also rare. Suspect ehrlichiosis cases are therefore a lower priority for follow up than suspect babesiosis and HGA cases.
- Lab results indicating detection of E. chaffeensis by PCR are most likely to represent true cases and should be prioritized for follow up over other suspect cases of ehrlichiosis.
- Suspect cases with a single + E. chaffeensis-specific IFA antibody titer of <1:128 for total Ig or IgG are unlikely to represent a case of disease and do not need to be investigated.

- RMSF is a rare disease in Massachusetts. Since 2000, there have only been three confirmed cases in the state. This means that most suspect cases are not likely true cases and can be prioritized after other suspect tickborne disease cases.
- Suspect cases with a positive PCR test or single positive IFA (IgM or IgG) test for Rickettsia rickettsii or spotted fever group are more likely to represent a true case and should be followed up accordingly.
- If the only positive lab result for a suspect case is a NON-IFA serology (titer) result, no additional follow up is indicated.

The information above is intended as guidance only and local protocols for follow up may vary.

Updated December 2013