Alabama Department of Public Health Alabama Emergency Response Technology (ALERT) Health Alert Network (HAN) May 29, 2024

Consider Tick-borne Disease Testing in Patients with Exposure to Tick Bites

Because of the warm, southern climate, ticks in all life stages may be active year-round in Alabama, but are most active from March to October. All people who spend time outdoors, either in their backyard or the wilderness, are at risk of exposure to ticks and contracting a tickborne illness. Consider tick-borne disease testing in patients with exposure to tick bites.

Spotted fever rickettsiosis is the most commonly reported human tick-borne disease in Alabama. The best known and most severe form of the illness is Rocky Mountain spotted fever (RMSF) caused by the bite of an American Dog (Wood) Tick. Several other tickborne diseases occur in Alabama including anaplasmosis, babesiosis, ehrlichiosis, tularemia, and Lyme disease. An illness called Alpha-gal allergy, also known as the red meat allergy, is an emerging tick-borne condition in the Southeast.

Reporting Tick-borne Diseases

Tick-borne diseases are reportable in Alabama. Healthcare providers should report all cases of spotted fever rickettsiosis, anaplasmosis, babesiosis, ehrlichiosis, and Lyme disease within 3 days of diagnosis using the online <u>REPORT Card for Reportable Diseases and Conditions</u>. Tularemia must be reported within 4 hours of clinical suspicion by calling the Alabama Department of Public Health (ADPH) Infectious Diseases & Outbreaks Division at 1-800-338-8374 as it is crucial to rule this pathogen out as a case related to a terroristic agent.

Clinical Diagnosis of Tick-borne Diseases

Many tick-borne diseases can be difficult to diagnose due to the non-specific signs and symptoms in the early stages of illness. Signs and symptoms can vary from patient to patient and can resemble other, more common diseases. Some signs and symptoms may include:

- Fever
- Chills
- Muscle and joint pains
- Malaise
- Rash (erythema migrans for Lyme disease cases)
- Headache

Nonetheless, early consideration of tick-borne diseases in the differential diagnosis and empiric treatment is crucial to prevent severe illness and even death. If a tick-borne illness is suspected,

consider antibiotic treatment before test results are available since it may take weeks for confirmatory results.

Always take a thorough patient history, including:

- Recent tick bite. Many people do not remember being bitten. Do not rule out a tick-borne infection if your patient does not remember a tick bite.
- Exposure to areas where ticks are commonly found, including wooded areas or brushy areas with high grasses and leaf litter.
- Travel history to areas where tick-borne diseases are endemic.

Testing for Tick-borne Diseases

Order diagnostic tests for patients with illness compatible with the tick-borne disease(s) suspected such as RMSF, Lyme disease, ehrlichiosis, etc. The Centers for Disease Control and Prevention (CDC) recommends that the decision to initiate antibiotic therapy for RMSF or Lyme disease be made based on clinical signs and symptoms and a careful patient history. A confirmatory diagnosis can be established later using specialized laboratory tests. Never delay or withhold treatment pending the receipt of laboratory test results, or on the basis of initially negative results. Information on testing can be found on the following CDC web pages. About Rocky Mountain Spotted Fever Clinical Care of Lyme Disease About Ehrlichiosis About Anaplasmosis About Babesiosis About Tularemia