

## Babesiosis

### Definition:

Babesiosis is caused by a parasite in the *Babesia* family. Babesia is transmitted by the bite of an infected tick.

### Signs and symptoms:

Symptoms of Babesia include: fever, anemia, thrombocytopenia, chills, sweats, headache, myalgia, or arthralgia. Babesiosis can be a severe, life-threatening disease particularly in people who do not have a healthy spleen, have a weak immune system, have other serious health conditions (such as liver or kidney disease), or are elderly.

### Transmission:

Babesiosis is primarily transmitted to a person through the bite of an infected deer tick (*Ixodes scapularis*). This tick is endemic in the state of Maine, and can be found throughout the state. In order to transmit Babesia the tick must be attached for 24-36 hours. Babesiosis can also be transmitted by receiving transfusions from a blood donor who has a Babesia infection.

### Diagnosis:

Babesiosis is diagnosed by clinical symptoms and laboratory tests. A blood test is necessary for confirmation. Co-infections with other tick borne diseases may occur and should be considered.

### Role of the School Nurse:

#### Prevention

- Provide education to students and staff regarding prevention efforts including: Wearing protective clothing, using insect repellent, using caution in tick infested areas, and performing daily tick checks.
- School nurse should encourage the use of insect repellents when outside (following local policy guidelines), and always performing a tick check when returning indoors.
  - School nurses can apply insect repellent with parental permission (see <http://www.maine.gov/agriculture/pesticides/schoolipm/what/whats-new.htm>)
- If a tick is found, the school nurse should remove the tick using tweezers or a tick spoon. Identification of the tick may be useful.
- Tick cards are available for identification at: <http://www.maine.gov/dhhs/boh/ddc/epi/vector-borne/posters/index.shtml>
- Whole ticks in safe containers may be given to the parents.
- Testing of the tick is not recommended.

#### Treatment Recommendations

- If symptoms are noted, the child should be referred to their primary care provider for treatment.
- Several effective treatments are available and are usually prescribed for at least 7-10 days.

#### Exclusions

- There is no need to exclude students from school for Babesiosis.
- Educational modifications may be warranted in children with a positive diagnosis.

#### Reporting Requirements

- Babesiosis is a reportable disease.

**Resources:**

- Maine CDC Babesiosis website (including fact sheet) <http://www.maine.gov/dhhs/boh/ddc/epi/vector-borne/babesiosis/index.shtml>
- Tick-borne Disease in Maine: A Physician's Reference Guide <http://www.maine.gov/dhhs/boh/ddc/epi/vector-borne/index.shtml>
- Insect Repellent Finder (including time of protection) <http://cfpub.epa.gov/oppref/insect/index.cfm#searchform>
- Tick Submission information (for identification) <http://www.mmcri.org/home/webSubContent.php?list=webcontentlive&id=109&catID=4&subCatID=19>
- Federal CDC Babesiosis website <http://www.cdc.gov/parasites/babesiosis/>