



## Anaplasmosis

### Definition:

Anaplasmosis is an infection caused by the bacterium *Anaplasma phagocytophilum*. It is most commonly transmitted by the bite of an infected deer tick (*Ixodes scapularis*).

### Signs and symptoms:

Symptoms of anaplasmosis can range from mild to very severe and may include: fever, headache, muscle pain, malaise, chills, nausea, abdominal pain, cough, and confusion. Severe symptoms may include: difficulty breathing, hemorrhage, renal failure, or neurological problems. It can be fatal if not treated correctly. People who are immunocompromised or elderly are at higher risk for severe disease.

### Transmission:

Anaplasmosis is primarily transmitted to a person through the bite of an infected deer tick; this tick is endemic throughout Maine. Rarely, it can also be transmitted by receiving blood transfusions from an infected donor.

### Diagnosis:

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

### Role of the School Nurse:

#### Prevention

- Provide education on prevention efforts including: wearing protective clothing, using an EPA-approved repellent, using caution in tick-infested areas, and performing daily tick checks.
- Encourage the use of EPA-approved repellents when outside (following local policy guidelines), and always performing a tick check when returning indoors.
  - School nurses can apply repellent with parental permission
- If a tick is found, the school nurse should remove the tick using tweezers or a tick spoon.
  - Tick identification cards are available at: [www.maine.gov/dhhs/order](http://www.maine.gov/dhhs/order).
  - Testing of the tick is not recommended. Whole ticks in safe containers may be given to parents.

#### Treatment Recommendations

- If symptoms are noted, the child should be referred to his or her primary care provider for treatment.
- Antibiotic treatments are available and are usually prescribed for 10 - 14 days.

#### Exclusions

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

#### Reporting Requirements

- Anaplasmosis is reportable within 48 hours of recognition or strong suspicion of illness.

### Resources:

- Maine CDC Anaplasmosis website (including fact sheet): [www.maine.gov/dhhs/anaplasmosis](http://www.maine.gov/dhhs/anaplasmosis)
- Tickborne Disease Manual for Healthcare Providers: [www.cdc.gov/ticks/hcp/data-research/tickborne-disease-reference-guide](http://www.cdc.gov/ticks/hcp/data-research/tickborne-disease-reference-guide)
- Tick identification and testing: [www.ticks.umaine.edu](http://www.ticks.umaine.edu)
- Federal CDC Anaplasmosis website: [www.cdc.gov/anaplasmosis/](http://www.cdc.gov/anaplasmosis/)