

# IDRS Infectious Disease Reporting System

Disease Reporting 24 Hours a Day

Columbus Public Health and Franklin County Public Health

## EHRlichiosis/ANAPLAsmosis

Ehrlichiosis is a disease caused by bacteria that are transmitted by the bite of an infected tick. Anaplasmosis is another disease in the same family that causes the same kind of illness. Of the four tick species that can infect humans with these diseases, two are found in Ohio.

### Symptoms

The early symptoms usually occur 5 to 11 days and up to 21 days after the tick bite. Symptoms include:

- Fever, chills, sweating
- Headache
- Muscle aches and general tired feeling
- Some people may have nausea, vomiting, diarrhea, cough, confusion, and occasionally a rash.
- Ehrlichiosis can be a severe illness if untreated, and may cause kidney problems, blood diseases, brain infections, breathing problems, seizures, or unconsciousness.

### Transmission

- Ehrlichiosis or anaplasmosis is acquired by the bite of an infected tick. Ticks remain attached to the victim and may take several hours to transmit the bacteria. If a person removes a tick in such a way that it becomes crushed and releases body fluids, bacteria can be released through the tick's body fluids.
- People who spend time in the outdoors in tick-infested environments especially woodlands and brushy areas, are at an increased risk of exposure. Dogs or other pets that frequent these types of areas may also bring infected ticks home.
- People cannot give ehrlichiosis or anaplasmosis to other people.
- A few human cases of anaplasmosis and ehrlichiosis originate in Ohio each year.

### Treatment

- Ehrlichiosis or anaplasmosis is diagnosed by a health care provider based on clinical symptoms. Blood tests for antibody levels can be used to confirm the infection.
- Appropriate antibiotic treatment should be initiated immediately to prevent severe illness.

### Prevention

- Most people will be exposed to tick-infested environments (woods, brushy areas, fields with high grass) at some point. Therefore, prevention measures should be aimed at personal protection:
  - Wear light-colored clothing — this will allow you to see ticks that are crawling on your clothing.
  - Tuck your pants legs into your socks so that ticks cannot crawl up the inside of your pants legs.
  - Apply insect repellent containing permethrin or DEET according to the product's directions.
  - Conduct "tick checks" on yourself and children every hour or two. Use a mirror to search all parts of your body. Remove any tick you find on your body. Check pets as well before allowing them indoors.
- Keep yard and play areas well mowed to discourage ticks.

### Additional Information

To remove an attached tick, grasp it with tweezers (NOT bare hands) as close as possible to the skin and pull with firm, steady pressure straight out. Do not twist or jerk the tick, as the mouthparts may break off. If tweezers are not available, protect fingers with rubber gloves or tissue paper. After removing the tick, disinfect the bite area and wash your hands. Contact your local health department for tick identification and testing.

All information is general in nature and is not intended to be used as a substitute for appropriate professional advice.



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