

## What is ehrlichiosis?

Ehrlichiosis is an illness caused by a bacteria called *Ehrlichia* that is passed to humans and animals through the bite of an infected tick. Two different forms of human ehrlichiosis primarily occur in the U.S., human monocytic ehrlichiosis (HME) and human granulocytic anaplasmosis (HGA). HME is the most common form of ehrlichiosis reported in Oklahoma. Dogs and horses are the domestic animals most frequently diagnosed with ehrlichiosis.

## How is ehrlichiosis spread?

Ehrlichiosis is acquired from the bite of an infected tick. The main tick vectors are *Amblyomma americanum* ("lone star tick") transmitting HME and *Ixodes scapularis* ("black-legged deer tick") transmitting the HGA agent. Ehrlichiosis is not spread from one person to another, or from contact with an infected animal.

## Who is at risk for ehrlichiosis?

All persons are susceptible to ehrlichiosis, but persons who spend long amounts of time outdoors are more likely to have exposure to infected ticks. There is a seasonal risk for becoming infected with ehrlichiosis because the ticks are most active and numerous during the spring and summer months. Most cases of ehrlichiosis occur between the months of May and September.

## What are the symptoms of ehrlichiosis?

The symptoms of ehrlichiosis generally include fever, headache, chills, loss of appetite, nausea, vomiting, and muscle pain. In addition, some persons (about 20%) may also develop a rash. Persons who are over the age of 50, or who have weakened immune systems appear to be at higher risk of severe disease. Death can occur if appropriate diagnosis and treatment is not received.

## How soon do symptoms appear?

Symptoms of ehrlichiosis can appear as soon as five days and as long as 14 days after the bite of an infected tick. If symptoms of illness appear within 14 days of the tick bite, immediately inform your health care provider of your tick bite exposure and the date on which the tick was removed.

## What is the treatment for ehrlichiosis?

Treatment for ehrlichiosis with certain antibiotics such as doxycycline, is very effective in treating the disease. Overall, an estimated two to three percent of persons with ehrlichiosis will die due to the infection. Although ehrlichiosis can be severe, preventive antibiotic therapy in persons who are not ill following a tick bite is not recommended.

## What is the best protection from ehrlichiosis?

Avoiding tick bites is the best way to reduce your risk of developing ehrlichiosis or other tickborne illnesses. Personal tick bite prevention precautions include:

1. Wear light colored clothing to make ticks easier to see.
2. Wear long-sleeved shirts and long pants tucked into socks to deprive ticks of attachment sites.
3. Wear closed-toe shoes - not sandals.
4. Hikers and bikers should stay in the center of trails to avoid grass and brush.
5. Check for ticks AT LEAST once per day; particularly along waistbands, in the armpits and groin area. Don't forget the back and the hair!
6. Use a tick repellent with DEET on skin and clothing according to directions.
7. Use a tick repellent with permethrin ON CLOTHING ONLY and as directed by the label.

## How should a tick be removed?

Any tick should be removed as soon as possible. The best way is to use tweezers to grab the tick as close to the skin as possible and pull it straight out. Do not squeeze the tick's body when removing it. Do not handle ticks with bare hands. Wash hands thoroughly after removing a tick.

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