

## Ehrlichiosis

### What is ehrlichiosis and what causes it?

Ehrlichiosis (air-lick-ee-OH-sis) is a group of similar diseases caused by several different **bacteria** that attack the body's white blood cells (cells involved in the immune system that help protect against disease). The organisms that cause ehrlichiosis are found throughout the world and are spread by infected ticks. Symptoms in animals and humans can range from mild, flu-like illness (fever, body aches) to severe, possibly fatal disease.

### What animals get ehrlichiosis?

Many animals can be affected by ehrlichiosis, although the specific bacteria involved may vary with the animal species. Ehrlichiosis has been reported in dogs, coyotes, wolves, foxes, cats, cattle, sheep, goats, horses, llamas, deer, elk, and rodents.

### How can my animal get ehrlichiosis?

Animals become infected with the bacteria that cause ehrlichiosis after being bitten by an infected tick (**vector**). Less commonly, infection can also be transmitted through a blood transfusion in animals.

### How does ehrlichiosis affect my animal?

Disease from ehrlichiosis infection can vary depending on the bacteria involved. Signs are non-specific, such as reduced appetite, fever, swollen lymph nodes, depression, weight loss, vomiting and diarrhea.

Infected animals may recover on their own or the infection can persist to a long term (chronic) illness. This

can also have a wide range of signs including weight loss, prolonged fever, bleeding disorders, weakness, and loss of appetite.

### Can I get ehrlichiosis?

Yes. People can become infected with ehrlichiosis if they are bitten by an infected tick (**vector**). The disease is not spread by direct contact with infected animals. However, animals can be carriers of ticks with the bacteria and bring them into contact with humans. Ehrlichiosis can also be transmitted through blood transfusions, but this is rare.

Disease in humans varies from mild infection to severe, possibly fatal infection. Symptoms may include flu-like signs (chills, body aches and headache). In a small number of cases a skin rash may be seen. Severe cases may have a cough, difficulty breathing, prolonged fever, kidney problems, bleeding disorders, and possibly seizures or coma.

### Who should I contact, if I suspect ehrlichiosis?

#### In Animals –

Contact your veterinarian.

#### In Humans –

Contact your physician.

### How can I protect my animal from ehrlichiosis?

Ehrlichiosis is best prevented by controlling ticks. Inspect your pet frequently for the presence of ticks and remove them promptly if found. Use tick control products on your animal to reduce tick exposure.

### How can I protect myself from ehrlichiosis?

The risk for infection is decreased by preventing tick bites. When entering tick-prone areas, wear insect repellent, a long sleeved shirt, long pants and closed-toed shoes. Check frequently for ticks and remove them promptly if found. Removing a tick before it has been attached for more than 24 hours greatly reduces the risk of infection.

### For More Information

CFSPH Technical Fact Sheets. Ehrlichiosis at <http://www.cfsph.iastate.edu/DiseaseInfo/>

CDC website. Human Ehrlichiosis at <http://www.cdc.gov/ncidod/dvrd/ehrlichia/Index.htm>

**Ehrlichiosis**  
is caused by bacteria,  
spread by ticks, that attack  
cells of the immune system  
of many species.



Left photo American dog tick (From [www.discoverlife.org](http://www.discoverlife.org)). Right photo shows bacteria in a white blood cell (From [webmedic4u](http://webmedic4u))