

Ehrlichiosis

Frequently Asked Questions

What is ehrlichiosis?

Ehrlichiosis (ER-lick-ee-OH-sis) is an illness caused by infection with either the bacterium *Ehrlichia* or *Anaplasma*. These bacteria are carried by ticks. Human ehrlichiosis is a newly recognized disease in the United States. The first human case in the United States was reported in 1986. However, prior to 1986 the bacterium was known to infect and cause illness in a wide variety of wild and domestic animals.

How is ehrlichiosis spread?

Ehrlichiosis is spread by the bite of an infected tick. In New Jersey, the most commonly infected ticks are the deer tick (or black-legged tick, *Ixodes scapularis*) and the lone star tick (*Amblyoma americanum*). Ehrlichiosis is not spread from person to person. It is not necessary to avoid someone who is ill with ehrlichiosis.

Who gets ehrlichiosis?

Anyone who is bitten by a tick carrying the bacteria can become infected, although most cases have occurred among adults. People who spend a lot of time outdoors in tick-infested areas from April through October are at greatest risk of becoming infected. Proper removal of a tick from the skin within 48 hours of being bitten can reduce the risk of infection (For more information on tick removal, see "How can ehrlichiosis be prevented" below).

What are the symptoms of ehrlichiosis?

The early symptoms of ehrlichiosis may resemble those of various other infectious and non-infectious diseases. The most common symptoms may include:

- Fever
- Headache
- Muscle aches
- Weakness

Some people may also have:

- Nausea
- Vomiting
- Skin rash

It is unclear if all people infected with the bacteria become ill. It is possible that many infected people develop an illness so mild they do not seek medical attention or perhaps have no symptoms at all. However, although the illness is usually mild, severe and even life-threatening illness can occur.

Symptoms can start anywhere from 1 to 3 weeks after a bite from an infected tick. Not all tick bites will result in infection. It appears that *Ehrlichia*- or *Anaplasma*-infected ticks require 24 to 48 hours of attachment to the skin before humans can become infected.

How is ehrlichiosis diagnosed?

If a health care provider suspects ehrlichiosis, samples of the patient's blood will be examined for the presence of the bacteria. However, treatment decisions should be based on other clinical findings as well as potential exposure information (epidemiologic tools), and should never be delayed while waiting for laboratory confirmation.

What is the treatment for ehrlichiosis?

Ehrlichiosis can be successfully treated with an appropriate antibiotic. Treatment should begin when there is strong suspicion of ehrlichiosis. (NOTE – it is very important to finish your antibiotics, even if you begin to feel better, unless otherwise directed by your health care provider.)

How can ehrlichiosis be prevented?

You can reduce your risk by taking these actions to avoid tick bites, or to safely remove a tick if you are bitten:

- Avoid wooded areas with tall grass, dense shrubs, and leaf litter, where ticks like to hide.
- Make your yard less attractive to ticks by mowing lawns and trimming trees.
- Wear solid, light-colored clothing. This will make it easier to find a tick on your clothes.
- Tuck your pants into your socks and wear a long-sleeved shirt. This will help prevent a tick from attaching to your skin.
- Use EPA-registered insect repellents on yourself and your pets. Repellents that contain DEET can be used on clothing and exposed skin. The other type of repellent contains permethrin and should **ONLY** be used on clothing. Always read and follow label directions carefully.
- Check yourself for ticks frequently when you are in tick-infested areas. Check again after returning and again before going to bed. Don't overlook some of ticks' favorite hiding places – on the scalp, behind the ears, under the arms, on the ankles, and in the groin.

What should I do if I find a tick?

- If you find a tick, remove it immediately before it attaches to the skin. Do not squeeze or crush it with bare hands.
- If a tick has already attached to the skin, use tweezers to grasp it by the head (not just the body) as close to the skin as possible. Pull steadily until the tick pulls out (expect some resistance).
- Never squeeze an attached tick, burn it, or cover it with Vaseline or any other substance. Doing so could cause force fluid from the tick into your skin.
- After removing a tick, disinfect the bite area and tweezers with alcohol, and wash your hands with soap and hot water.

How should I dispose of a tick?

Place the tick in a sealed container or small plastic bag and put it in the trash. Do not flush ticks down the toilet because they can easily survive in the water.

Where can I get more information?

- Your health care provider
- Your local health department
- NJ Department of Health www.nj.gov/health
- Centers for Disease Control and Prevention
www.cdc.gov/ncidod/dvrd/ehrlichia/Index.htm

This information is intended for educational purposes only and is not intended to replace consultation with a health care provider.
Adapted from Centers for Disease Control and Prevention.