

# CANINE EHRLICHIOSIS: guidelines for dog owners



## What is ehrlichiosis?

Canine ehrlichiosis (pronounced 'err-lick-ee-oh-sis') is a disease of dogs caused by infection with a bacterium called *Ehrlichia canis*. The bacterium is carried by ticks. In Australia, dogs can be infected with *E.canis* after being bitten by an infected brown dog tick. *E. canis* occurs worldwide, particularly in tropical and subtropical regions.

## What happens when a dog is infected with *E.canis*?

Some dogs become unwell 1–3 weeks after being bitten by an infected tick. This is called an acute infection and needs veterinary treatment. In countries where ehrlichiosis has been present for a long time, most dogs experience mild and treatable illness. However, in Australia, where the dog population has no previous exposure to the disease, there is a high rate of severe illness and death during the acute phase, especially if unwell dogs do not receive veterinary care.

Other dogs may be infected but show no signs of disease, which is known as subclinical infection, meaning it is a hidden infection. Infected dogs may clear the bacteria from the bloodstream or they may become subclinical carriers of the bacteria in the spleen and bone marrow, with no signs of illness, for months or years.

## Treatment

### ***Is my dog completely cured after treatment for acute ehrlichiosis?***

Most dogs who receive veterinary treatment for acute infection respond well and appear to make a full recovery.

Unfortunately, however, there is no straightforward way to monitor the long-term success of treatment of acute infection. There is no easy test to assess whether the bacteria remain in the tissues, but not

in the bloodstream. This is because the bacteria can hide in the tissues and be undetectable in blood tests.

## Is Chronic ehrlichiosis treatable?

Dogs with chronic ehrlichiosis have many different signs of disease. Infection with *E.canis* can look like other diseases such as pneumonia, some forms of cancer, other tick-borne diseases, and bleeding disorders including rodenticide poisoning. The disease is difficult or impossible to treat successfully.

Chronic ehrlichiosis gets progressively worse, because it becomes an autoimmune disease, where the tissues that produce both red and white blood cells are attacked from within the dog's body. When a dog has complete immune system failure, it is usually fatal, regardless of treatment. Your veterinarian is likely to recommend blood tests to check disease progression. These tests will assess your dog's immune system and organ function. The vet may recommend humane euthanasia, based on these blood test results and the severity of symptoms the dog is suffering.

## How do I protect my other dogs from infection?

There is no vaccine for ehrlichiosis. Use a registered product that both kills and repels ticks, at all times, for dogs that are at risk. This is the best protection against tick attachment. In brown dog tick-infested regions, if one of your dogs has potential or confirmed ehrlichiosis, prevent further transmission to other dogs in your household using registered systemic tick control products. Check dogs regularly for attached ticks, and keep long or fluffy coats clipped short so that you can find ticks more easily



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