

Ehrlichiosis in dogs (Ehrlichia canis)

What is ehrlichiosis?

Ehrlichiosis is a disease of dogs that occurs when a brown dog tick infected with the bacteria *Ehrlichia canis* bites a dog. *E. canis* occurs around the world, particularly in tropical and subtropical regions.

E. canis was confirmed for the first time in Australian dogs in May 2020 in the Kimberley region of Western Australia and June 2020 in the Northern Territory.



Check your dog for ticks daily in tick-prone areas.

The Department of Primary Industries and Regional Development (DPIRD) is carrying out surveillance for the disease and has conditions on dogs moving out of northern WA to reduce the risk of the disease spreading to southern WA (see the webpage agric.wa.gov.au/dogmovements for more information).

Infection with *E. canis* (ehrlichiosis) is a notifiable disease in Australia.

If you think a dog has ehrlichiosis, you must call your private vet, <u>DPIRD vet</u>, the Pest and Diseases Information Service on (08) 9368 3080 or the Emergency Animal Disease hotline on 1800 675 888 (available after hours).

How do dogs become infected?

Dogs develop ehrlichiosis after being bitten by a brown dog tick (*Rhipicephalus sanguineus*) infected with *E. canis*. The brown dog tick is widely distributed worldwide and is present across northern Australia (see photo at right).

Dogs do not directly transmit the disease directly to each other. The disease is maintained by a cycle of transmission between ticks and dogs.



Signs of *E. canis* infection

Ehrlichiosis has three possible phases of disease: an 'acute' phase or early signs of disease, a 'subclinical phase' where there are no obvious visible signs of disease, and a 'chronic' or long-term stage. The severity of the disease varies considerably.

Acute phase

Initial signs of infection are non-specific and may last for 2–4 weeks.

The dog may show:

- fever
- lethargy
- swollen lymph nodes
- be off their food
- weight loss
- unusual bleeding or bruising.

Acute disease develops about 1–3 weeks after the tick bite, but the chronic form of ehrlichiosis may not appear until months or years later.

Subclinical phase

Some dogs that recover from the acute phase no longer look sick, as may some dogs that have mild or even no obvious early signs. The subclinical phase can last for months to years. These dogs may recover, remain infected without visible disease signs, or progress to the chronic form of the disease.

Chronic phase

Only some infected dogs will go on to relapse and develop the chronic form of ehrlichiosis. Chronic disease signs are similar to those in the acute phase but are more severe. They can include:

- fever
- weakness
- weight loss
- unusual bleeding or bruising, including blood from the nose
- pale gums
- runny eyes and nose.

Infected dogs may be more likely to develop other infections at the same time. This form of the disease can be fatal.



Tips for controlling ticks:

- Treat dogs for ticks regularly.
 Speak to your vet about the treatment that is right for your dog and follow the packet instructions or the treatment may not work.
- If you find ticks on your dog, also treat the places where they sleep in your house and yard. Brown dog ticks are often found in gardens and households.
- Check dogs for ticks every day (especially around the neck, head, ears, armpits, belly and in between toes) and carefully remove ticks.

Diagnosis, treatment and prevention

Your vet will take blood samples for testing to confirm a diagnosis of ehrlichiosis. Blood tests are needed as the disease can look like other tick-borne diseases in WA such as anaplasmosis in dogs.

Ehrlichiosis is treated with antibiotics, supportive care and may require hospitalisation depending on the severity of the infection. Early treatment by your vet provides the best chance of recovery.

To help prevent ehrlichiosis occurring:

- Treat your dogs for ticks regularly, as well as their bedding and the yard, so they are not reinfected by their environment.
- Talk to your vet about the tick treatment that is right for your dog some products are longer lasting and/or quicker acting. Follow the packet instructions.
- Check your dogs for ticks regularly (especially around the neck, head, ears, armpits and belly) and carefully remove any ticks. This is important as tick treatments may not always kill the tick fast enough to stop the dog becoming infected. Your vet can advise on the best methods of tick removal.

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Human health and ehrlichiosis

While infected dogs do not directly transmit ehrlichiosis to people, in rare cases, infected ticks may transmit *E. canis* to people. See the <u>WA Department of Health website</u> for <u>information on human health implications</u> associated with ticks, as well as prevention, removal and first aid advice.

Dog movement conditions

While surveillance is being carried out to determine the distribution of *E. canis*, conditions for dog movements out of the Kimberley have been put in place to reduce the spread of the disease. See the webpage agric.wa.gov.au/dogmovements for more information.

More information

More information is available on the DPIRD website at agric.wa.gov.au/ehrlichiosis.

Important disclaimer

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