

Preventing horrible, deadly tick toxicity in cats & dogs



Ticks are tiny arachnids (eight legs), with small heads and large, round grey coloured bodies. Of the many species in Australia, only one is of major concern to pet owners. This tick, *Ixodes holocyclus*, the Paralysis Tick, kills hundreds of dogs and cats in Australia every year but with thousands being treated successfully by vets.

Paralysis ticks are rarely seen in Canberra, however vet clinics across the ACT treat dogs and cats for ticks regularly. Why? Because Canberrans frequently visit the coast with their pets. Paralysis ticks are found naturally in a band about 20-30 kilometres wide along the eastern seaboard of Australia. This means that your pets are at risk if they travel anywhere close to the coastline (including Sydney, central and south coasts, Northern NSW and all of the Queensland coastline). It's important to realise that ticks can affect your pet even if you have not taken them to the coast – they can accidentally be brought back on items that have been to the coast (towels, shoes, bags etc). Don't forget this includes friends and relatives visiting you in Canberra!

What do ticks do when they attach to a dog or cat? Once attached to your pet's skin, paralysis ticks secrete a number of poisons in their saliva. While the main purpose of these substances is to allow the tick to continue to feed, the toxin (*holocyclotoxin*) affects the junctions between nerves and muscles, leading to muscle weakness and paralysis. The muscles of locomotion and respiration are affected.



What are the signs that your pet may have a paralysis tick? These can be really variable, and remember, pets often hide symptoms of being unwell (particularly the case with cats):

- Change in the sound of the voice
- Vomiting/regurgitation
- Increased breathing effort
- Generalised weakness
- Reduced coordination or staggering (first in the back legs, progressing towards the front legs). The weakness progresses until the animal cannot stand and is totally paralysed
- Respiratory and cardiovascular failure
- Death

The earliest signs develop about 3-4 days after tick attachment, and signs progress rapidly (walking to paralysed in 24 hours, dead in 2-3 days). While treatment is available, it is involved and can be expensive, and by no means guaranteed to save the pet. Preventing ticks from attaching in the first place saves pets' lives.

How can tick toxicity be prevented in your pet?

Preventing tick toxicity relies on two things:

- Using an **appropriate and safe insecticide**: Dog and cat products vary significantly. Products just for dogs are extremely toxic to cats, so do not use them under any circumstances.
- **Dog products**: Nexgard (monthly chew) and Bravecto (4 monthly chew) are very effective and cannot be washed off if your dog swims regularly. These should be given the day before your dog is taken to the coast. If you prefer a top-spot product, you can apply Advantix or Frontline top spots, however with the advent of oral preventatives, these products are potentially less reliable now (do not use Advantix in dogs that have contact with cats).
- **Cat products**: Frontline spray is THE ONLY product registered to prevent tick toxicity in cats. The top spot version of Frontline is not registered for ticks in cats. Frontline spray needs to be applied every 3 weeks and your vet can show you how to apply it. It should be applied 2 days before your cat goes to the coast.
- **Examining your pet every day** for ticks while at the coast, and for 3-7 days after your return is an essential part of preventing tick toxicity. No insecticides are 100% effective, so systematically searching your pet's coat daily is essential to reduce the risk of tick toxicity. Ticks are small and can hide just about anywhere, so be sure to look in ears, between feet, around the lips, eyes and anus as well as across the entire body. Be sure to remove collars prior to searching around the neck.

What should be done if you suspect a tick toxicity or you find a tick? You need to get to a vet if you suspect tick toxicity or you find a tick. Early removal and early treatment if your pet is already displaying symptoms greatly reduces the risk of complications and improves the chance of recovery. Tick toxicity does not resolve on its own – it requires tick anti-toxin to be administered (along with suitable pre-medications) by a vet. Untreated, tick toxicity symptoms progress to complete paralysis leading to an inability to breathe, swallow or move resulting in death.

When it comes to paralysis ticks – prevention is the key