

HOOKWORM IN GREYHOUNDS

In recent years multi drug resistant hookworm have been identified. The two species of hookworm affect dogs in Australia: *Ancylostoma* and *Uncinara*. Hookworm can be deadly in large numbers. The worms have sharp, hook-like mouthparts that attach to the intestinal wall of their host and feed on their blood.

A dog may become infected when it swallows hookworm larvae. The larvae can also penetrate the skin and migrate to the intestine where they mature and complete their lifecycle. If a pregnant dog has hookworms, the pregnancy may reactivate the larvae. These larvae will enter the female's bloodstream and infect the puppies in utero, or they can get infected from the mother's milk.

The most significant problems related to hookworms are intestinal diseases or anaemia (blood loss). Blood loss results from the parasites ingesting blood from the intestinal capillaries and in sufficient quantities can be serious and life threatening.

Symptoms of hookworm

Pale gums, diarrhoea or weakness are common symptoms of hookworm infection. Some dogs experience significant weight loss, bloody diarrhoea, loss of appetite, difficulty breathing, lethargy and poor coat condition. Young animals are generally more severely affected. Skin irritation and itching, especially of the paws, can occur in heavily infested environments as the larvae burrow into the skin causing itchiness and discomfort.



Adult hookworms do not infect humans. However, the larvae can burrow into human skin or be ingested orally. This causes itchy inflammation of the skin and in very rare occasions hookworm will penetrate deeper tissues and partially mature in the human intestine which may result in inflammation of the small and large intestine (enterocolitis). Direct contact of human skin to hookworm infested soil is required for cutaneous transmission.

Fortunately, this does not occur often if optimal hygiene practices are carried out i.e. hand washing, wear gloves when cleaning up after pets, keep beds and bowls free of faecal contamination and, promptly picking up and disposal of pet's faecal matter. A regular worming schedule should be applied to all pets with effective, commercially available anthelmintics to minimise risks.

Worming schedule

Age of pet	Worming schedule
6-12 weeks	Every fortnight
12 weeks – 6 months	Every month
6 months onwards	Every 3 months for the lifespan of the pet

Resistant hookworms can spread through the dog (including greyhound) population and hookworms affect all breeds. The GAP team works proactively actively monitoring, testing and undertaking preventative measures for all dogs in the GAP team's care for the duration of their stay and post adoption. As part of our commitment to maintain the highest standards and levels of care the GAP team also educate the community and all potential adopters.

There are three classes of anthelmintic drugs routinely used to treat hookworm infection in dogs. They are Benzimidazoles (fenbendazole), Macrocyclic Lactones (milbemycin) and Tetrahydropyrimidines (pyrantel). An individual use or combination of these drugs were considered to reliably eliminate hookworm infections if used appropriately.

To check for resistance, GAP performs a faecal egg count on entry and 10 to 14 days after the administration of an anthelmintic. A drop in the number of eggs indicates how effective the treatment has been and the next step in treatment can then be determined. Each dog is treated and repeatedly tested throughout their stay with GAP and treatments are modified as required to maintain good health and minimise environmental contamination that risks other animals and humans.

When entering a new home and family, it is an exciting time for you and your greyhound. All of the change and excitement can also be stressful for owners and greyhounds. In times of stress, it is important to ensure you are managing your dog's needs as this can often be a trigger for reinfection of hypobiotic hookworms. GAP will provide you with any medication considered necessary to settle your new pet into your home. Please be aware of signs to watch for and ensure you are doing your utmost to prevent environmental contamination both on your property and in public places.

Please talk to GAP staff or your local veterinarian if you have any questions.

