

Worms and Deworming in greyhounds:

Ensuring optimal health and performance



Greyhounds most often become infected with worms by consuming worms or eggs from their environment. Worm eggs can survive for long periods in the ground, often for many years, resulting in repeated exposure and infection. Ask your vet about how to test faeces for worm eggs.

Types of worms:

1. Roundworms (*Toxocara sp.*):
 - Roundworms have a thin, spaghetti-like appearance – usually about 10 - 12cm long.
 - They can be spread from a dam to her puppies during pregnancy via the placenta, or via milk when lactating.
 - Symptoms of roundworm infection include weight loss, weakness, vomiting, diarrhoea, coughing or mucus in the stool, and stunted growth.
 - Most spot-on or chew flea and tick all-wormers will also treat these types of intestinal worms.
2. Hookworms (*Ancylostoma sp.* And *Uncinaria sp.*):
 - A clean, hygienic kennel environment minimises the risk of hookworm infestation.
 - Hookworm can be spread from a dam to her puppies during pregnancy via the placenta, or via milk when lactating.

- Larvae enter through the skin into the circulation, and they travel through the lungs, often causing damage to lung tissue. This can affect athletic performance in greyhounds and affected dogs may cough.
 - Hookworm eggs can last in the environment and can be difficult to treat once established. Resistance to deworming products can be a problem, although immunity does develop after infection.
 - Symptoms of hookworm include lethargy, anaemia (severe in pups), poor appetite, and black or dark stools that contain digested blood.
 - Puppies often die before shedding eggs in their stool.
3. Tapeworms (*Dipylidium sp.*)
- Can infect a greyhound when it eats larvae from an infected host (e.g. fleas or rodents).
 - Tapeworm infection often has no obvious symptoms, though small, rice-like segments may be found around the greyhound's anus or in the faeces. Mature tapeworms will cause a puppy to eat more than normal without gaining weight.
 - Specific all-wormer products registered for use in dogs are required to treat tapeworms. If your greyhound has or recently had fleas, you must also treat for tapeworm.
4. Whipworms (*Trichuris sp.*):
- Whipworms live in a greyhound's digestive tract, causing bowel inflammation.
 - Carers may notice mucus and/or blood in the greyhound's stool, weight loss, or diarrhoea.
5. Coccidia:
- *Coccidia* are a parasite that can live in a puppy's intestines.
 - It can cause explosive watery diarrhoea, vomiting, fever, weight loss and/or loss of appetite and a failure to thrive in litters of pups.
 - They require specific diagnosis and specific medication to treat. Veterinary advice should be sought.
6. Neospora:
- *N. caninum* is a protozoan parasite which can infect the cells and tissues of a wide range of warm-blooded mammals and occurs worldwide. Domestic dogs and wild dogs are the main hosts ('definitive hosts') for this parasite. Infected dogs shed the parasite in their faeces, which can result in the infection of other dogs or other mammals (i.e. cattle, sheep, horses and many other species) which are known as 'intermediate hosts'.
 - Infection can occur in dogs via the following routes:
 - ❖ by consuming contaminated food or water containing the parasite;
 - ❖ by ingesting infected tissues/meat from an 'intermediate host' (e.g. cattle, sheep, horses, goats, deer);

- ❖ infection can be passed from a dam to her puppies via the placenta prior to birth or via the dam's milk following whelping.
 - Most adult dogs will not show any symptoms when they are infected. However, symptoms are often observed in infected puppies or young dogs, particularly those less than 6 months of age. The most severe infections tend to occur in young puppies and can be fatal.
 - Symptoms in puppies typically involve abnormalities of the nerves and muscles. Symptoms can include partial or complete paralysis of the front or hind legs.
 - Dogs should not be fed raw or undercooked meat, particularly beef. Where possible meat should be cooked to destroy any Neospora parasites which may be contained within the meat tissue. There is some evidence that freezing meat for several days prior to feeding will reduce the risk of infection with Neospora, as freezing can destroy the parasite cells contained within the meat.
 - It is recommended that greyhound breeders should freeze and cook the meat they feed to breeding females and to puppies, to reduce the likelihood of Neospora infection in this particularly at-risk group. Practice good hygiene when providing food and water to your greyhounds.
7. Heartworm:
- Is potentially the most serious of the parasites that affect greyhounds and can be fatal. It is transmitted via mosquitoes.
 - Symptoms include coughing, lethargy and fatigue – all common signs of heart failure. Whilst this disease does not occur in New Zealand and all greyhounds are tested prior to import, it is important to understand this disease if you regularly travel greyhounds to Australia or import greyhounds to New Zealand.

Why is deworming so important?

Generally, worms diminish the capacity for greyhounds to gain their optimum nutritional requirements and thrive, and they can lead to a loss of body and coat condition, diarrhoea, anaemia (reduced red blood cell numbers), and even intestinal blockages and blindness. High worm burdens likely affect racing performance due to their impact on welfare. Some worms can even be passed onto humans and are a risk to human health.

Administering deworming treatments is a compulsory requirement under the GRNZ Health and Welfare Standards: *Standard 9: Prevention of Infectious Disease:*

9.4 Internal and external parasites must be controlled through routine preventative treatments.



Some worms are resistant to medications commonly used to treat them, ask your veterinarian about ideal deworming schedules in your region.

Below is a typical worming schedule for greyhounds:

Age/ life stage	When to Treat
Puppies (2-12 weeks of age)	<p>Treat every 2 weeks from 2 weeks of age. Liquid deworming preparations registered for use in puppies are recommended until 8 weeks.</p> <p>Tablets registered for use in puppies can be given from 8 weeks.</p>
Puppies (12 weeks to 6 months of age)	Treat monthly with an all-wormer registered for use in puppies.
Rearing and racing greyhounds (>6 months old)	<p>Treat at least every three (3) months with an all-wormer registered for use in dogs.</p> <p>Ask your vet if you have specific worms (like hookworm) eggs on faecal tests or other parasites on your property which may be resistant to treatment.</p>
Breeding females	<p>Use an all-wormer registered for use in dogs prior to breeding a female. Ask your veterinarian about using an all-wormer registered for use in dogs about 10 days prior to whelping.</p> <p>Use an all-wormer registered for use in dogs every two (2) weeks during lactation. Then treat at least every three (3) months once no longer breeding.</p>

[Click here to view the recent parasite research conducted in New Zealand by Massey University and supported by GRNZ.](#)