GREYHOUND RACING VICTORIA

Attendant and Trainer Education Pack

UNIT TWO – OWNER TRAINER

Booklet 8 – Greyhound Health



Greyhound Racing Victoria
Attendant and Trainer Education Pack

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Becoming an Owner Trainer Booklet Series

In order to become an Owner Trainer, you must have first obtained registration as an Attendant. To complete the Attendant training you must read the following 6 short booklets and complete a practical assessment and online assessment in FastTrack.

Booklet 1: Introduction

Booklet 2: Greyhound Basics

Booklet 3: At the Race Track - Kennelling, Preparing for Racing, Boxing and Catching

Booklet 4: At the Race Track – After the Race

Booklet 5: Occupational Health and Safety

Booklet 6: Completing the Assessment

To become an Owner Trainer, you must read the following five booklets and complete the online assessment in FastTrack.

Booklet 7: Setting Up an Optimal Training Environment

Booklet 8: Greyhound Health

Booklet 9: Education and Training

Booklet 10: Nominating

Booklet 11: Preparing a Greyhound for Re-Homing

If you wish to become a Public Trainer you must also complete the following two booklets and assessment:

Booklet 12: The Public Trainer

Booklet 13: Advanced Knowledge

Greyhound health

8.1 Requirements to keep a greyhound healthy

In order for your greyhound(s) to remain healthy, there are a number of things that need to be attended to regularly. These preventative health care matters ensure that your greyhound is always in the best possible condition and help to prevent injury and disease.



Preventative health care includes things such as worming and vaccinations, controlling external parasites and maintaining skin and feet in the best possible condition. Ignoring these things can lead to problems, not just with the individual greyhound, but disease which may spread throughout your kennels and affect other greyhounds.

Vaccination

Vaccination involves injecting an animal with a modified version of a dangerous disease. The modification means the virus

or bacteria can no longer trigger the full-blown disease, but will still stimulate the body's immune response, creating immunity against the disease. By vaccinating an animal, we can prepare the body for the time where it may be exposed to the real disease. This means that the body fights off the disease much quicker and more effectively than an animal that has no vaccination protection. Vaccines however are never 100% effective.

Currently, the Racing Rules state that the registration of a litter will not be processed unless it is accompanied by vaccination certificates showing vaccination of each pup to a C3* level at 6-8 weeks of age and to a C5* level at 10-16 weeks of age. You also cannot name (for racing) a greyhound unless the application is accompanied by a vaccination certificate showing a C5* vaccination was given after the greyhound turned 12 months of age.

* the 'C' refers to Canine (for dogs), while the number refers to the number of diseases included in the vaccine.

A C3 vaccination includes:

- 1. Canine Parvovirus
- 2. Canine Infectious Hepatitis
- 3. Canine Distemper

These are the three 'killer' diseases of dogs, that thankfully are seen far less commonly since the advent of compulsory vaccination in the greyhound industry.

 Canine Parvovirus is the most common and causes a very nasty 'gastroenteritis' (very severe vomiting and foul-smelling, bloody diarrhoea). It is most commonly seen in young puppies and has been known to kill entire litters.

- 2. Canine Distemper is not common as a result of vaccination. Signs include weepy eyes and nose (thick yellow pus), vomiting and diarrhoea, and can lead to central nervous system damage that is irreversible.
- 3. Canine Infectious Hepatitis is a disease that causes damage to a greyhound's liver. Symptoms include jaundice, vomiting and loss of appetite.

A C5 vaccination includes Canine Parvovirus, Infectious Hepatitis and Distemper (C3), PLUS Canine Cough which has two parts (making five in total):

- Canine Parainfluenza
- Bordetella bronchiseptica

Canine Cough (sometimes called Kennel Cough) is a very complex disease which can be caused by over 20 different viruses, bacteria and other microorganisms. However, the most important two (and the two we can vaccinate against) are Canine Parainfluenza (virus) and Bordetella brochiseptica (bacteria). This explains why sometimes a trainer can have an outbreak of Canine Cough even though they have fully vaccinated against it. At least in these cases, not all greyhounds will contract the disease, and those that do, will have much milder symptoms and shorter recovery times.

Canine Cough is contracted when a dog inhales air containing the disease, usually coughed out by an infected dog. The symptoms of a dry hacking cough can take a week to develop, but in the meantime, the infected greyhound is spreading the disease to every other greyhound in the same breathing space. Therefore, the risk of spread within a kennel environment is very high. The disease is not generally fatal (unless pneumonia develops) but can be severely debilitating and can take a few

weeks for the symptoms to resolve. In stressed (where the immune system is weak) or older dogs, it can spread to a chest infection or pneumonia.

The Canine Cough vaccine can be given either as an intra-nasal (in the nose) vaccine, oral vaccine or by an injection under the skin. Research shows that the intra-nasal and oral vaccines can be more effective (and faster-acting) than the injectable vaccine because they act directly on the inside surface of the dog's nose and throat, which is where the infection enters the body. However, the oral vaccine only gives protection against the Bordetella bronchiseptica, so vaccination against Canine Parainfluenza has to be given separately by injection (either as part of a C4 or on its own). The intranasal vaccine can provide immunity within 72 hours of dosing and can reduce the severity of disease in a Canine Cough outbreak.

You should discuss vaccination options with your veterinarian as they will be able to best advise which vaccine is best suited to your situation.



In terms of Canine Cough vaccination, the injectable all-in-one C5 vaccination, while more convenient than the injectable C3 plus separate intra-nasal or oral vaccine, requires a booster for the Canine Cough component approximately 4 weeks after

the first vaccination. This means that you need two vaccinations one month apart to ensure full immunity. This type of vaccination, although acceptable for racing, is NOT accepted for entry to the Victorian Greyhound Adoption Program (GAP). The intra-nasal Canine Cough vaccine with a C3 or the oral Canine Cough vaccine with a C4 are REQUIRED for entry to GAP.



GRV recommends the following minimum vaccination schedule (**= current mandatory vaccinations; KC = Canine Cough):

Age / Stage	Vaccination	Comment
6-8 weeks **	C3 Vaccination	These are the
	** (Injection)	minimum to
10-16 weeks	C5 Vaccination	complete the
**	**	"puppy
		course" of
	GRV	vaccinations.
	recommends:	
	C3 Injection	
	+ Intra-nasal KC	
	at 12-16 weeks	
12 months +	C5 Vaccination	
(naming) **	**	
	GRV	
	recommends:	
	C3 Injection	
	+ Intra-nasal KC	
2 years	Intra-nasal KC	
3 years	Intra-nasal KC	
4 years	C5 Vaccination	
	GRV	
	recommends:	
	C3 Injection	
-	+ Intra-nasal KC	
5 years	Intra-nasal KC	
6 years	Intra-nasal KC	of full CE average
7 years +	Continued pattern of full C5 every 3 years with KC in the two 'in-	
	between' years for the	
	greyhound's lifetime	
GAP Pre-	C5 Vaccination	C3 component
entry	as:	within the last
Assessment	43.	2½ years and
**	<u>either</u>	both KC
	C3 Injection	components
	+ Intra-nasal KC	within the last
	<u>or</u>	6 months
	C4 Injection	(minimum 10
	+ Oral KC	days prior) -
		see section
		13.4
Breeding	C5 Vaccination	
Registration	**	
(Pink Card) **	CDV	
	GRV	
	recommends:	
	C3 Injection	
	+ Intra-nasal KC	

Internal parasites

Internal parasites (commonly called 'worms') live in a greyhound's gastro-intestinal tract ('gut' = stomach and intestines) and/or blood stream. These parasites live and reproduce by 'stealing' their nutritional requirements (vital nutrients and energy) from your greyhound. They can also cause damage to the various organs of the greyhound. Basically, the money you are spending on good food and supplements goes out the window and your greyhounds will not be able to perform their best.

The most common group treated for are the 'intestinal' worms. This includes roundworm, hookworm, whipworm and tapeworm (flea tapeworm and hydatid tapeworm). These worms live inside or attached to the gut of the greyhound and can damage or irritate the lining of the gut. In addition, many of these parasites also present a zoonotic risk, that is, they can be transmitted from dogs to people.



Intestinal worms are controlled in most cases by dosing the greyhound with an 'all-wormer' tablet. Tablets are sized according to weight, and it is necessary to know the weight of each greyhound on the day of dosing so that you can ensure

they get the right dose. Worming should take place at least every 3 months for adult dogs but is commonly done monthly. This keeps worm numbers to a minimum and helps prevent environmental contamination with worm eggs.

It is important to be aware that many worming tablets may seem cheaper, but you need to check closely which worms they will treat, and how effectively.

In addition, those registered for use in dogs that contain the active ingredient levamisole have a low safety margin and can cause a positive swab.

Some worming products such as 3-in-1 or 4-in-1 tablets do not treat all of the different worms and may actually be a waste of money as the job is only half done. Many lesser products do not contain an active ingredient to kill the hydatid tapeworm which can cause serious disease if transmitted to humans. Hydatid tapeworm infection is usually introduced to dogs from the eating of raw meat and offal, especially from sheep. The new Code requires a veterinary-approved worming treatment plan if you feed your greyhounds offal.

Some kennels choose to use worming products that are not licensed for use in dogs. This is considered 'off-label use' and should only occur after discussion with your veterinarian. The new Code requires that any off-label use is pre-approved by your veterinarian in your Establishment Health Management Plan or in writing in a specific greyhound's Health Record.

Using a product off-label can be dangerous and has been fatal where dose rates are miscalculated. Off-label use also means you have no legal standing if things

go wrong. The main reason for using these products is to try to cut costs, but often what happens is that the dogs are either over-dosed, under-dosed, or by using the same product all the time, the parasites become resistant to the active ingredients.

Controlling gastro-intestinal parasitism in greyhounds is not limited to the use of anti-parasitic chemicals. Careful management of the environment and diet can greatly reduce exposure. Offal and raw meat have the potential to harbor infective parasites that are destroyed after cooking and in some cases freezing. Environments heavily contaminated with canine stools (faeces) will increase exposure to the parasites listed above. Frequent faecal collection and environmental sanitisation will reduce the amount of parasitic transmission from dog to dog. Sanitisation is much easier with solid floors (for example concrete) than grass or sand, which is why greyhounds on sand and grass often have much higher parasite burdens. Like any livestock industry, resting of external yards is recommended where and when possible to reduce potential parasite burdens (worm eggs are killed by heat, cold and sunlight).

You will note that both the new and existing Codes require all sleeping areas and indoor kennels to have impervious flooring. This is to enable easy disinfection and sanitisation, reducing the risk of parasitic and disease transmission between dogs.

Parasite resistance (where the worms become resistant to the drugs used to control them) is a developing problem, so it is recommended that you plan a worming program that helps avoid the problem of resistance developing.

It is important that you speak to your veterinarian to discuss an appropriate worming schedule for the greyhounds in your care; that is one that is safe, effective and minimises the chances of promoting resistance in the worms.

Dosing a greyhound with a tablet

Although many greyhounds can be fooled into 'eating' a tablet by smearing it with butter, wrapping it with meat, or wedging it into a piece of meat, there will eventually come a time where you will have to dose a greyhound by hand. Maybe the greyhound is not eating, or maybe they have become suspicious of food treats containing tablets.

To dose a greyhound by hand, you need to first get the tablet organised in your dominant hand holding it between your thumb and forefinger. Then, standing beside the dog, place your other hand over the bridge of the dog's nose, grasping the upper jaw in your hand. If you gently lift the dog's nose upwards, you will find that its mouth will open slightly. You can then use the free fingers on your tablet holding hand to push the lower jaw down, and then quickly place the tablet as far back in the mouth as you can before shutting the dog's mouth and holding it closed until the dog swallows. If you are not sure about how to do this, ask your veterinarian to demonstrate next time you seem them. Dosing dogs can be quite difficult, especially if they are not cooperative, so it is a skill you will need to practise in order to avoid being bitten.

Heartworm

Heartworm is becoming an increasing problem in some areas of Australia. Once thought to only affect dogs in the northern states of Australia, it has slowly

spread into areas of Victoria.

Heartworm is different to the intestinal worms. It is spread by mosquito bites, meaning the dog can be infected without even having come into contact with another dog.

The immature heartworms (called 'microfilaria') travel around the body for a while before entering the blood stream and eventually moving to the heart.

Symptoms of heartworm infestation include the signs of heart failure — tiredness, intolerance to exercise, moist cough and shortness of breath.

The treatment for heartworm once a dog has advanced symptoms is quite unpleasant. So instead, a preventative treatment is given that will kill the heartworm before it gets to the heart. The preventative can be given as a daily or monthly tablet, or a once a year injection. It is advisable to discuss with your veterinarian the prevalence of heartworm in your local area and where your greyhounds travel.

Speak to your veterinarian to determine the best heartworm option for you greyhounds.

External parasites

By far the most common of the external parasite is the flea. These pesky 'hitch-hikers' jump on board the dog for a feed of blood, which is something they require to be able to lay their eggs. Most of the flea lifecycle (egg, larval and pupal stages) is actually spent in the environment, with the time spent actually infesting an animal (adult stage) only a tiny part of their lifecycle. Fleas tend to congregate on the dog's back near the top of the tail, and their bite causes a reaction in the skin

which is itchy and is similar to mosquito bites in people. The affected greyhound will then chew and scratch at the area in attempting to get some relief from the itching sensation, and in the process can cause quite significant damage to their skin. Greyhounds can also become allergic to flea bites (where the itchiness is much worse than with just a flea bite) with symptoms including long-term scratching, hair loss and reddened, thickened skin.



Fleas are generally not spread from dog to dog, but are usually picked up from a contaminated environment. Fleas like warm, dark moist places, and thrive in bedding and carpets. Once a flea has had a feed of blood, they lay hundreds of eggs which drop off into the area the dog inhabits. When the weather and conditions are right, these eggs hatch and larvae emerge. These larvae take some time to mature through the pupal stage, emerge as young adults, then jump onto any moving warm animal – even people!!

Cats and dogs share the same fleas, but cats are not required for a flea infestation to be established or maintained on a greyhound property because greyhounds pick flea infestations from the environment.

Treating fleas can be frustrating because by treating the dogs alone, you are not treating most of the stages of the flea lifecycle (eggs, larvae and pupae) that are in the environment. Also treating just the greyhounds will only kill the adult fleas on the dogs on that day and will do nothing to stop them being re-infested on returning to their kennels. Washing all of the bedding and cleaning the runs at the same time will go some of the way to help reduce the environmental contamination.

There are now many products on the market that continue to have a flea killing effect long after they are applied, with some working for up to a month. Some also contain active ingredients that inhibit the hatching of any eggs in the dog's environment. Alternatively, chewable tablets prevent flea infestations for up to three months. The beauty of these products is that they do not require the dog to have a bath and are far less toxic that some of the traditional flea shampoos and rinses.

Some products combine the treatment of intestinal worms, heartworm, fleas and even mites into a single spot-on or tablet, making treatment easier and more successful.

The most cost-effective method of preventing flea infestations is to use flea treatment regularly. Tips for preventing flea infestations include:

- Clean housing and sleeping areas daily

 sweeping or washing away dust and cobwebs
- 2. Wash bedding and rugs weekly
- Provide regular flea prevention treatment according to label instructions
- 4. Change flea prevention treatment (active ingredient) every 1-2 years

The new Code requires all facilities to have a pest management program as part of their Establishment Health Management Plan.

Nail and foot care

A racing greyhound relies on good feet to propel itself around the track. Care and attention to the feet and nails is vital to ensuring top performance. Long, untrimmed nails can lead to unusual or abnormal forces being applied to the joints and ligaments of the feet and legs, predisposing the greyhound to an injury that could be career-ending, or injuries to other greyhounds.

Most greyhounds will wear down their nails naturally and will need little care. But if your greyhound has unusual nail wear, or is on soft surfaces most of the time, you may have to trim the greyhound's nails to ensure that they never get to a length that could cause problems with its stance or gait.



A good set of nail trimmers is an essential tool for anyone involved in the keep and care of greyhounds. There are different styles of nail trimmers including scissoraction and guillotine-action types.

Each toenail contains a 'quick' which is a fleshy core filled with blood vessels and nerves. The nail grows down over this quick and extends past it. Knowing where the quick ends is essential to ensuring that it is not cut whilst trimming the nail. For this reason, trimming the nails of a greyhound can be tricky if it has black nails. If you do cut the quick, the dog will usually react painfully, and you will cause

bleeding. The greyhound will remember this unpleasant experience and may become increasingly difficult to trim.

To locate the quick, have a look at the toenails and try to find a white nail. Usually the quick can be seen through the white nail as a pink area. Any trimming should be done to end at least a millimetre below the lowest point of the quick. Using sharp cutters is best as this minimises the crushing effect that some dogs find unpleasant.

If there are no white nails, the safest thing is to do is to turn the nail upside down and have a look at the underside of the nail. Usually you can see the nail extending past a central core area, and you can trim this section of the nail away quite safely. As you approach the central core, you can nibble small amounts off at a time until you are happy you have trimmed enough. It is always better to come back in a week and trim off a little more, than to cut into the quick and cause bleeding and pain.

Some people choose to use a small file instead of cutters. Filing the nails back can be an alternative to using cutters and is a quite efficient way to keep nails short. The down side to this method is that it is possible to create a lot of heat in the nail bed which can damage the sensitive tissue, and it is possible to file the nail too far back, exposing the quick. Filing can help reshape nails that grow unevenly, or those associated with toes that have been damaged (such as 'sprung' toes) and where the nail no longer curls towards the ground.

Foot care also includes checking the area under the feet (e.g. sand burns on webbing) between the toes (e.g. split webbings) and around the nail bases (e.g.

sand toe) regularly. Greyhounds who run on sand tracks are particularly prone to foot injuries especially to the webbing between the toes and around the nail bed.



Sandtoe

This is the traumatic inflammation and/or infection of the nail bed and is caused by the nail digging into the sand while running. Nail beds become swollen, reddened and may bleed or show some type of discharge. They become sensitive to touch. Occasionally the skin around the nailbed may split and flare outwardly.

If sandtoe occurs, gently clean the area with an antiseptic solution, wiping in a direction down the nail away from the nailbed. After cleaning, antiseptic creams can be applied.

If the inflammation or infection does not start to heal within 2-3 days of applying first aid, or you are unsure, seek veterinary assistance.

To protect the nail bed from becoming sore again, wrap several layers of a 2-3 mm wide tape around the nail close to the nail bed to act as a sand-deflector. Firstly, ensure that the nail is clean, dry and free from any oily cream to ensure that the tape sticks.

Sandburn

This is abrasions and/or cuts on the underneath skin of the feet, below the toe bones, which is evident when the toes are spread.



It is often caused by either abrasive sand runs or weak flexor tendons leading to overspread toes during exercise, which allows the foot to have direct contact to the sand causing friction between the sand and foot. Affected feet will be red, swollen and painful.

Small cuts and burns require cleaning and treatment to avoid infection using an antiseptic solution. A soft method of cleaning and treatment is preferred here to avoid any further damage to the sensitive area. Large or deep cuts should be seen by a veterinarian for advice on what the most appropriate treatment option is.

If the sandburn is not starting to heal within 2-3 days after you start treatment, then seek veterinary advice.

Strengthening the flexor tendons of the foot can be a good mechanism to aid in the prevention of sandburn as it will lessen the likelihood and ease of toe spread during exercise and exposure to

the sand. This can be done through physical massage.

Skin care and bathing

Healthy skin and a shining coat are indicators of good health and nutrition. Feeding good quality food with the correct types and balance of oils in it is the first step to maintaining coat condition. Greyhounds that are fed inappropriate diets may be missing essential nutrients for the production of hair and skin, and as a result will have a poor coat, often with dry, flaky skin.



Control of external parasites such as fleas will also impact on skin and coat condition. The damage that can be caused from even a few flea bites can be quite significant and can lead to ongoing problems with bacterial infection and 'hot-spots' (septic sores). Lack of sufficient bedding can also predispose a greyhound to skin damage and calluses or pressure sores, with their short coat and thin skin providing little protection against hard surfaces. This is especially true where the skin over bony areas takes the weight of the resting dog.

Many greyhound owners bath their dogs regularly and use products such as flea rinses which can leave the coat dry. A dog's skin produces natural oils that help maintain normal skin health and protection. Frequent washing, especially

with the wrong types of shampoos can



strip these oils leaving the skin dry and the hair dull. As a guide, washing once a fortnight is usually plenty unless there is a specific problem that needs to be addressed. In between baths, the coat can be maintained by brushing regularly to remove the dead hair from the coat. A rubber brush is often the best tool for short coats.

Whenever you bath your greyhounds, make sure that the products you use are designed for dogs. A dog's skin has a different pH to humans, so using human shampoo is not recommended. Ideally, use warm water, and make sure that you thoroughly rinse any shampoo from the dog's coat. If applying a flea rinse, this is applied after the shampoo has been rinsed out. A flea rinse is usually left in the coat, rather than rinsed out but check the instructions on the bottle.

Once you have finished bathing your greyhound, let it have a 'shake', then gently towel it dry. As greyhounds are fairly thin skinned, it is important that you thoroughly dry the dog after a bath to help prevent heat loss and chilling. In winter, it may be necessary to dry the greyhound using a dryer, or make sure that it is kept in a heated room until it is fully dry.



Be careful with putting a coat on a wet dog. Sometimes this can lead to skin problems as the skin stays damp or moist for longer because the surface water cannot evaporate. The coat can also become damp and cold, like wearing a wet towel. If you are concerned that the greyhound will get cold after a bath, it is better to make sure it is completely dry, and then put the coat on to keep it warm.

8.2 Identifying injuries and lameness

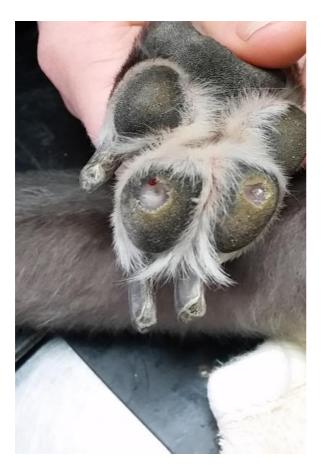
Identifying signs that your greyhound has suffered an injury or is unwell

The first skill in being able to tell when things might be wrong is knowing what your greyhound looks like when it is healthy and well. Once you have an appreciation of what 'normal' is, then you can become better at picking up the subtle changes in your greyhound's behaviour or gait that may suggest things are not normal, or that your greyhound is injured or unwell.

Some injuries are very obvious, even to someone who knows little about dogs. But some injuries can be so mild they take an experienced and watchful eye to detect. Being able to identify these minor

changes can mean that the injury is treated early and correctly, reducing the risk of it worsening and potentially ruining a very promising career.

Spend time each day watching each of your greyhounds; you will quickly notice the quirks and peculiarities of their behaviour and gait. You will also become better at noticing the little things that may indicate your greyhound is 'off-colour' or is feeling pain. Maybe your greyhound is not quite as keen to eat, maybe it is passing more urine than normal or taking longer than normal to do it, maybe it is licking or scratching at an area on their body, or maybe not moving about as much as normal.



If your greyhound is in work or training, then things such as trial times and sectional times may give a clue to a niggling injury that is affecting the greyhound's performance. You should

have a good idea of what times to expect, and if they suddenly change, it indicates a problem that needs investigation.

Early identification and rapid diagnosis and treatment by your veterinarian will hopefully reduce the length and severity of the illness or injury, prevent disease spread, and return your greyhound to fitness and racing sooner. Knowing the normal appearance and behaviour of your greyhound is essential in helping you to recognise signs that something may not be right.

Common signs of illness include:

- lack of appetite;
- lethargy (more tired than usual);
- coat appears rough or fluffed up (can be a sign of fever);
- hair loss;
- coughing;
- discharge from nose and/or eyes;
- vomiting and/or diarrhea;
- belly is distended or swollen
- urinating more or less frequently than normal:
- increased water consumption;
- performs poorly during training, trialling or racing;
- performance in second half of a race is poor, while first half was normal; and
- any changes in your greyhound's behaviour and habits.

Unwell greyhounds may display one or more of these symptoms. If you suspect your greyhound may be unwell, seek veterinary assistance as soon as possible.

Treatment may be as simple as a few days of rest, a minor change to their diet or environment, but a veterinarian is best qualified to assess, diagnose and provide treatment options for your greyhound.

Some of the things that you should

consider are:

- how sick is your greyhound;
- how long has your greyhound been sick:
- if not treated by a veterinarian, how long will your greyhound remain sick;
- what are your treatment options;
- are there any withholding periods associated with the treatment; and
- what are the potential risks to other greyhounds if the illness is contagious?

Assessing gait and movement

If you think something is not quite right with your greyhound, the first thing is to watch it moving. Lameness may be very obvious, with the greyhound not wanting to put weight on one of its legs; or it may be harder to see. Often the best way to assess the gait is to have someone else 'trot' the dog for you so you can watch it move. Trotting is a two-beat gait with two legs moving together at the same time.

Lameness may show up as a change to the rhythm of this beat, or you may notice an increased head bob on one of the two strides. The greyhound's body will be trying to protect the injured leg by taking some weight off it, and this leads to the head being lifted up as the sore leg touches the ground.

Trotting the greyhound in a circle, first to the left, then to the right may also assist as added pressure is placed on certain areas of the body when cornering, and sometimes this can help highlight an injury.

Watching the video of a race or trial may help assess if anything looks abnormal in the greyhound's galloping gait such as running wide, slowing into the corner, 'throwing' a leg, 'flicking' the tail or a shortening stride.

Feeling for injuries - examining your greyhound

Not all injuries will lead to changes in gait or movement. So, you also need to get into the habit of examining your greyhound by feeling with your hands and fingers. If you follow a set procedure, you can examine the greyhound from head to toe in a relatively short time. By doing it in the same order each time you will find that you don't miss anything along the way.



There are suggested examination techniques in the book 'The Care of the Racing and Retired Greyhound' – both for examining for common muscle injuries and for a more thorough evaluation. There are also a number of videos at https://greyhoundcare.grv.org.au/video-archive/. You can also ask your greyhound veterinarian to give you a demonstration of how to perform the examination and what to feel for.

When you are examining a greyhound, you should be looking for soreness, heat, swelling, or changes in shape and feel. Tense tight muscles are often protecting an injury, reduced range of movement of a joint indicates pain or damage, and hot,

painful areas indicate active inflammation.

You should assess both sides of the body and can use one to compare to the other. For example, if you think there might be swelling in the right front leg – you can compare it to the left front leg.

Micro-fractures

Micro-fractures or hairline fractures are tiny fractures of the bones, occurring when the forces placed on the bone are greater than the strength of the bone. They often occur in a younger greyhound beginning its training because its bones are still growing and hardening.

Micro-fractures are also common in greyhounds at their peak, while training and racing frequently, particularly those that race and train on circular tracks. The forces applied to the bones while running around curves is greater than when greyhounds run on a straight.

The stresses put on a greyhound's body in its day-to-day racing life can also contribute to micro-fractures. Common contributing factors of micro-fractures include:

- training and/or racing on hard surfaces, which increases the forces on the bones;
- training and/or racing too often, preventing the bone from having enough time to heal;
- high intensity training involving tight or multiple turns.

Micro-fractures may go unnoticed initially, but generally present in a greyhound as:

- mild heat, pain and swelling in the area of the fracture;
- mild lameness;
- affected gait; and/or
- poor cornering.

Symptoms will vary between greyhounds, and the number and location of the micro-fractures.

If you have concerns that your greyhound may be suffering from micro-fractures, seek veterinary advice.

Treating micro-fractures is all about **REST!**

Bones can heal and strengthen given plenty of rest and providing the microfractures are very minor. This means resting your greyhound from its normal racing and training activities; in some cases, a greyhound may need periods of isolation to prevent it from becoming excited and/or causing additional stress on the bone. If the area of the microfracture is swollen or hot, you may want to apply icepacks to the affected area for 5-7 minutes, 3-4 times per day until the swelling and/or heat reduces.

However, if you do not see an improvement within 24-48 hours, seek veterinary attention. The heat in your greyhound's leg could also indicate an infection and may require antibiotic treatment; or that the micro-fracture is in fact a large fracture that requires different treatment.

Always seek veterinary advice if you suspect your greyhound has a micro-fracture.

Your veterinarian will provide advice:

- on rest periods and when your greyhound is likely ready to resume training or racing;
- on medication and/or treatments to support fracture healing;
- regarding a review of your greyhound's diet, exercise, training and racing regime to try and establish how the micro-fractures occurred and

- how to prevent them from occurring in the future; and
- on alternative exercise options such as swimming that will help you to keep your greyhound fit while they are healing.

Your veterinarian will also discuss with you the process of re-introduction to trialling, training or racing.

There are many things to do to prevent your greyhound developing micro-fractures including:

- feeding a nutritionally balanced diet that is appropriate to the age and activity level of your greyhound - for example, a pup requires a different diet from an adult in full race training, as does a young dog learning to chase and beginning its racing career;
- seeking low impact exercise options for building and maintaining your greyhound's fitness between races and while recovering from injury - for example swimming;
- having your training facilities assessed by a GRV track expert to determine whether your surface is too hard or too soft; and
- regular examination of your greyhounds for soundness and adaptation of training program if issues arise.

When to get professional help

If you detect a change, it is important that you note it on the greyhound's record and change any training program accordingly. You will probably need to have the injury examined by your veterinarian so that they can assess the extent of the damage and give you advice on the best way to rehabilitate the greyhound.

If you ignore the injury, it is likely that a minor problem may worsen very quickly into a more serious, potentially careerending one if the greyhound continues to trial or race.



You may also need to pay more attention to the 'warm-up' and 'cool-down' techniques that you use. Some trainers are so busy with so many greyhounds that they forget that each individual needs to be properly warmed-up prior to running. We would not expect a football player or other elite athlete to jump straight out of the car and go straight into hard exercise. These days a considerable amount of time is spent stretching and warming up the muscles to help prevent injuries. Once the race or game is over, a similar amount of time is spent cooling-down.

Warm-up exercises for greyhounds may include light jogging or brisk walking, rubbing or massage, and even gentle stretches. In cold weather, the greyhound may also wear a warm coat right up to the time of racing to maximise the circulation to the muscles. There are warm coats available for use at each of the club tracks. You should never just get a greyhound out of the car or trailer and run them, nor should you just put it back in the car straight afterwards without making sure they have cooled down - even if you have another one to run!

Learning more about anatomy and body structure

Good trainers take the time to learn about anatomy and body structure as this helps them better understand what they are trying to achieve. There are numerous text books and articles that can help you learn about the important role the big muscle groups play in propelling the greyhound along the track at such high speeds.



You do not need to know the name of every muscle, bone or tendon, but you should understand where the important ones are and what they do. You should also be aware of the common injuries seen in racing dogs and try to do everything you can to prevent your greyhound from getting injured. After all, every injury puts your training back, or slows the greyhound's times, meaning that you will no longer be competitive and more importantly it's bad for the greyhound's welfare.

8.3 Basic greyhound first aid

What should I do if my greyhound is injured?

First aid for animals is basically the same as first aid for people. Anyone who has done a human first aid course can apply their knowledge to their greyhounds. The aim is to maintain the basic bodily functions needed for survival, whilst recognising what is injured and protecting it from further damage.



Luckily, in most cases, the injuries suffered by a greyhound will be minor, but it is important to be able to recognise which injuries you can deal with yourself, and which injuries need to be seen by a veterinarian. Some trainers try to cut corners by treating injuries themselves, but they may be neglecting the greyhound's welfare and adversely affecting its future performance if they fail to do the right thing. This is especially true with injuries that may look very minor but may have underlying damage to the muscles. In the best interests of the greyhound's welfare, you should always have access to a simple First Aid Kit.

If in doubt seek veterinary attention!

Danger first

As with human first aid, the first thing to do prior to assisting an injured animal is to check for danger. With animals, often the biggest danger is that of getting bitten whilst trying to help. Greyhounds are generally very placid animals, but all animals can bite if they are in pain. A muzzle is often the first thing required when tending to an injured animal. Luckily, muzzles are something all greyhound owners and trainers have ready access to.

So, the injury seems serious...

If the greyhound has broken a bone, is bleeding, or seems to be unable to stand or sit up, then you will need to take it immediately to the veterinarian. Once a muzzle has been applied, transfer the greyhound to the car or trailer and head off to the veterinarian ('Load and Go!'). If possible, pressure can be applied to any wound that is bleeding, and this can be finger or hand pressure, or a pressure bandage. If you are close to a veterinarian and can move the greyhound there gently, do not bother to splint or apply a support bandage to an injured or broken leg, as this can cause a lot of pain, and will have to be removed before the veterinarian can examine the injury. Instead, try to gently support the injured leg as you load the greyhound into the car. If you are further from a veterinarian, then splinting (or applying a support bandage to) the leg may be warranted.

Make sure the greyhound has comfortable bedding for the journey, and do not offer any food or water, just in case it needs to be sedated or anaesthetised once it gets to the veterinary clinic.

If you have trouble lifting the greyhound, it may be possible to fashion a stretcher from a heavy towel or blanket. This can be slid under the greyhound, and then used to lift and carry it to the car using two or more people.

Bite wounds, punctures, and lacerations

The biggest problem with most seemingly minor skin wounds is the risk of infection, especially if it gets deep into the muscle layers. Infection can take hours or days to become fully established after initial contamination.



If wounds are seen and treated early on, the risk of infection is greatly reduced. In cases of deep wounds – such as punctures from dog fights – antibiotics need to be started within the first 6 hours (the 'golden period') to have the best chance of preventing serious infection.

Waiting until the wound 'looks' infected a day or two later before seeking veterinary assistance is not the best way to manage a wound.

By the time the area around the wound is red and swollen, a lot of tissue damage has been triggered, and recovery time is much longer. The damage may lead to scar tissue which will permanently change the area and its ability to function normally.

If your greyhound has a wound, start by gently cleaning any foreign matter from the wound. Avoid using strong disinfectants, especially those that sting. Often, good old-fashioned salty water ('saline solution') is as good as anything – and it is safe if the dog decides to lick at the wound!

You can buy saline solution at most chemists, and some first aid kits contain small vials of it. However, you can also make your own saline solution at home. You will need plain table salt, a sterile jar with a lid, measuring cup, teaspoon, a pan with a lid and timer. To prepare the solution you can follow these steps:

- Wash your hands well with warm water and soap, rinse with warm water and dry;
- 2. Wash the pan and lid with warm water and soap and rinse well with water;
- 3. Measure 1 litre of water and pour it into the pan;
- 4. Add 2 level teaspoons of table salt to the water and heat until dissolved;
- 5. Remove the pan from the heat and allow to cool to room temperature, keeping the lid on;
- 6. Pour the saline into the sterile jar and close tightly.

Once the jar is opened, discard it within 48 hours.

If the wounds appear to be deeper than just the skin, or if there is a large tear that might require stitching, the wound should be inspected by a veterinarian as soon as possible. If required, the veterinarian may prescribe antibiotics or anti-inflammatory medications to assist in healing. They will also be able to give you advice about the

recovery time and rehabilitation needed to ensure your greyhound returns to normal functioning.

The location, size and depth of the wound and the amount of bleeding will guide you to provide appropriate care for your greyhound.

Small cuts and 'nicks' of less than 5-10mm in length with minimal bleeding can usually be treated at home without stitching. You should do the following things:

- clean the affected area with warm salty water, patting the wound dry with a clean cloth;
- 2. apply an antiseptic solution or cream, checking first with your veterinarian for the most appropriate product;
- place a small sterile gauze square from your first aid kit over the wound and bandage to hold the gauze in place to prevent the wound from becoming dirty;
- 4. the bandage should be changed daily until the wound has scabbed over;
- 5. if the wound does not scab over completely within 2-3 days of initial treatment you must seek veterinary help as the wound may have been deeper than you initially thoughts and your veterinarian may need to stitch it;
- 6. if the wound begins to swell, becomes swollen, painful or hot or begins to show signs of discharge, contact your veterinarian immediately as an infection may be developing.

Larger wounds (more than 10mm), and wounds that look deep or are accompanied by lameness, swelling, pain or sensitivity when touched, should be seen by a veterinarian as soon as possible as there may be additional injury in or around the site.

With any large wound, the area should be carefully cleaned with warm salty water, dried with sterile gauze or a clean cloth, covered in a gauze dressing and bandaged to minimise ongoing bleeding and possible contamination from soil or the environment.

Most of these types of wounds require stitches to speed up healing and minimise any downtime for the greyhound;

It is not acceptable to leave wounds that are large or deep without veterinary examination and treatment, or delay in seeking treatment.

For more information on wounds, applying first aid and seeking veterinary treatment you can find a Medical Fact Sheet – FAQ Wounds at:

https://fasttrack.grv.org.au/StewardsHear ing/GeneralAlert?Year=2018

Note: FastTrack is GRV's computerised racing system which also contains a lot of useful information.

There are also a range of **Injury and Illness Management Fact Sheets** at:

https://greyhoundcare.grv.org.au/

Other injuries

Because greyhounds tend to race around at high speed, even at home, they are prone to other injuries such as sprains, strains and muscle tears.

Maintaining your yards in a safe condition may help to prevent some of these, but it is inevitable that at some stage your greyhound will injure itself in the course of having some exercise. These types of injuries can influence a greyhound's future race career, so it is vital that they

are dealt with appropriately.

Any signs of swelling or lameness should be noted and immediately examined. Knowing which injuries will respond to rest and treatment, and which need to be seen by a veterinarian is an acquired skill. If you are not sure, it is better that the greyhound is taken to a veterinarian for a professional opinion.

All trainers should have a working relationship with a veterinarian that has a special interest in the treatment of greyhounds, while also maintaining a good relationship with their local veterinarian (if they are a different person), particularly in case of emergency.



Track leg

Track leg is one relatively common injury, and is the common name for swelling on the inside of the tibia (the main hindleg bone between the knee and hock). In most cases, it occurs on the left leg, and is less common in the right leg, and in rare cases, will occur on both legs. It is caused by the outer point of the elbow on the same side of the body colliding with the inside of the tibia as the greyhound runs and is most common with circle racing. Usually it is due to some injury that

unbalances the running style such that the elbow turns out or the hindleg inadequately arcs around the elbow.

Track leg ranges in seriousness from mild to severe, and the treatment varies accordingly:

Mild track leg is described as a little puffiness after one or two glancing blows during a run:

If you notice minor swelling, treat your greyhound's leg with an icepack held in place for 5-7 minutes, 3-4 times daily; magnetic field therapy on low settings until the swelling subsides can be useful;

It is important you consult your veterinarian if you are unsure of the severity or treatment options or do not have access to magnetic field therapy.

Moderate track leg shows more significant and obvious swelling with subsequent thickening and scarring. Treatment of moderate track leg requires a veterinarian who will assess your greyhound. The most common treatment is:

- Draining the fluid and then treatment to reduce thickening and ongoing fluid build-up; for example, by injecting the site with an anti-inflammatory and bandaging the site for 1-2 days;
- Application of anti-inflammatory preparations after the bandages are removed.

Severe track leg presents as a break or rupture of the skin with bleeding and ongoing oozing from the site. Treatment of severe track leg must be undertaken by a veterinarian. However, for any wound you should offer initial wound first aid, as described earlier until you can get

veterinary help.

In all cases, treatment also involves attempting to identify and correct the cause for the abnormal gait leading to the development of the track leg.

To minimise ongoing damage to the area during running and racing, a track leg tape can be applied. This tape, usually a 50 - 75mm Elastoplast strapping, often with some form of padding placed over the site under the bandage is applied over the area before trials and races. A GRV Steward must endorse the application of tape prior to racing and record the approval in your greyhound's weight card and on FastTrack.

In all cases, remember to check with the with-holding requirements of any medications that you use, or that your veterinarian dispenses.

You are now ready to proceed to Booklet 9.

Greyhound Racing Victoria

46-50 Chetwynd Street, West Melbourne VIC 3003

Ph: 03 8329 1100 Fax: 03 8329 1000

Email: admin@grv.org.au Web: www.grv.org.au