

APPENDIX 16 - INFECTIOUS GASTROENTERITIS FACT SHEET

This information document aimed at clubs and participants, explains the importance of appropriate identification and management of infectious gastroenteritis in racing greyhound kennels.

What is Infectious Gastroenteritis?

Gastroenteritis is an umbrella term for conditions which cause inflammation in the stomach and intestine, which are characterised by symptoms including vomiting and diarrhoea. It is often caused by infection with bacteria, viruses or parasites. These infections are contagious and can spread rapidly around greyhound kennels. It is not uncommon to have mixed infections, where more than one “bug” is present in an unwell greyhound. Other non-infectious causes of gastroenteritis include changes in diet and certain medications.

How do dogs get Infectious Gastroenteritis?

Greyhounds can become infected with a virus, bacteria or parasite causing gastroenteritis from contact with the faeces of other dogs or animals. Within the industry, greyhounds attending race meets or trial sessions will come into close proximity with other greyhounds relatively frequently, increasing the risk of spread of a contagious disease. Many infected animals may not show signs of illness but can still spread infection in their faeces (called “carriers”). Contact with contaminated food, water or objects can all lead to infection. People working in different locations (or kennel blocks) may inadvertently spread disease (e.g. on hands, shoes, contaminated clothing).

Contaminated or spoilt food is also a common cause. The majority of greyhound trainers feed a raw meat diet which carries an increased risk of infectious gastroenteritis, particularly if meat is stored inappropriately (e.g. poorly refrigerated either prior to or after purchase), fed beyond its use by date or hygiene practices are inadequate (e.g. fridges or meal preparation areas are not cleaned and regularly disinfected).

Once infected, it usually takes one to five days until symptoms appear. Even once the symptoms have stopped and your greyhound seems healthy, it may still remain infectious to other dogs for up to two weeks, or even longer depending on the cause.

A table of the common causes of infectious gastroenteritis is given at the end of this appendix.

What are the symptoms of Infectious Gastroenteritis?

If gastroenteritis is caused by a viral, bacterial or parasitic infection, more than one greyhound may be affected. Symptoms can vary from very mild to severe. An affected greyhound may have one or more of these symptoms:

- Vomiting – the vomit may contain foamy, yellow bile, especially if the stomach is empty
- Diarrhoea – may vary from slightly softer than usual faeces to cow-pat consistency to very watery fluid diarrhoea; increased frequency of toileting is common
- Inappetence or decreased appetite
- Gagging or retching
- Tenderness around the abdomen
- Lethargy
- Dehydration is possible if the diarrhoea is severe or lasts more than 24 hours
- A fever may be present in some cases but is uncommon

How long does Infectious Gastroenteritis last?

Depending on the general health of your greyhound, the exact infectious agent(s) associated with the disease, and whether treatment is needed, Infectious Gastroenteritis can last anywhere from 24-48 hours to several days or even weeks.



Will Infectious Gastroenteritis need treatment?

Most cases of Infectious Gastroenteritis are mild and self-resolving. Often greyhounds can be managed at home with a bland diet, given little and often, to let the gastrointestinal tract rest and recover. However, Infectious Gastroenteritis can spread rapidly, affecting many or even all the greyhounds in the kennel. Early recognition and action will prevent other greyhounds becoming infected.

Some “bugs”, such as parvovirus, can cause very severe disease and death. Puppies are often more at risk of gastroenteritis, and, once unwell, can deteriorate rapidly. Greyhounds which become lethargic or dehydrated, continue to vomit for over 24 hours or have still have diarrhoea after 72 hours despite a bland diet, may require rehydration and supportive care under direction of a veterinarian. If you are unsure or have concerns about the health of your greyhound, always seek veterinary attention.

The use of antibiotics should only be at your veterinarian’s discretion. While antibiotics may be needed for certain bacterial infections, they are often unnecessary or not recommended, and cannot be used to treat viruses. Antibiotics if used incorrectly can disrupt the normal gut bacteria, actually delaying recovery and allowing other “bugs” to infect the gastrointestinal tract or increase the faecal shedding of certain infections (e.g. *Salmonella*). Different antibiotics have different effects and where decided, different types or dose rates may be prescribed depending on the condition. Inappropriate use of antibiotics also encourages antimicrobial resistance, which is of increasing concern to medical professionals. Antiparasitics will be a warranted treatment in some cases.

Your veterinarian may recommend obtaining a faecal sample from one or more of your greyhounds to test for the presence of possible causes. Identifying the cause will give information as to whether there is a high risk of spread (and to which animals), guide the best treatment if required, and the most effective management practices to avoid an outbreak.

How do I manage Infectious Gastroenteritis in my kennels?

Sick greyhound(s) must be isolated from all other dogs on your property. Remember that because infections can be spread before symptoms appear, if one greyhound becomes unwell, it may be best to prevent all greyhounds in that shared zone from coming into contact with other greyhounds. It is also important to note that even after a greyhound appears to have recovered, it still might be contagious to other greyhounds.

If multiple greyhounds are affected or any greyhounds become unwell in themselves, your veterinarian can provide you with information about treatment options, isolation and quarantine options.

The kennel area where your sick greyhound was being kept must be completely disinfected with hospital grade disinfectant. Remember, the disease travels from dog to dog through contact with infected faeces or contaminated material, and many of the “bugs” can survive in the environment (e.g. on water bowls, in contaminated bedding, etc.). The whole kennel facility must be disinfected and all bedding, drinking and feeding utensils, and lures washed in hot, soapy water. Any outdoor housing or yards where the affected greyhound has been should also be cleaned and wherever possible, healthy dogs should not use these yards until cleaned and rested. The order of cleaning must proceed from healthy to sick populations and from the young or vulnerable to adult and robust greyhounds.

Greyhounds that have vomiting and/or diarrhoea must be scratched from races and not taken to trial or training facilities or GAP intakes, and not brought to the Club facilities as they pose a risk of infection to other greyhounds. You or your veterinarian must also alert the relevant Controlling Body to help monitor for any potential outbreak, to reduce the risk and minimise the impact of any outbreak, particularly when multiple animals are affected.

Can Infectious Gastroenteritis be prevented?

The best way to prevent gastroenteritis is by maintaining strict hygiene practices and biosecurity, thorough disinfection and cleaning. Some “bugs”, such as parvovirus, can survive for a long time in the environment and are resistant to drying, heating or cooling. Repeated cleaning of contaminated environments to physically remove all organic debris and dirt followed by disinfection may be required.

Because infectious disease can often spread when greyhounds come together in high densities or close proximity, it is essential that Clubs, veterinary clinics, trial tracks, etc maintain good hygiene and biosecurity. A summary of essential hygiene and biosecurity practices is shown in the table below.

The feeding of cooked meat that is fit for human consumption, or dry food (kibble), will reduce the risk of infectious disease, providing high hygiene standards are implemented and maintained in food-preparation and storage areas. If raw meat is fed, minimise the risks by sourcing fresh or frozen meat from a trusted supplier, store meat correctly (either frozen or below 4°C), and regularly clean and disinfect the fridge and meal preparation areas.

Maintaining current vaccination against several serious viral diseases that affect the gastrointestinal tract (e.g. parvovirus and distemper) is important to prevent disease. Regular worming performed according to manufacturer’s or your veterinarian’s instructions is also essential.

Hygiene	Biosecurity
Wash your hands frequently.	Isolate affected animals – avoid unnecessary movement of unwell greyhounds off the property.
Wear gloves and protective clothing.	Quarantine animals that have been in contact with affected animals.
Staff attending affected greyhounds should minimise contact with unaffected greyhounds. If staff are handling both healthy and affected greyhounds, handle the unwell animals last.	Limit introduction of new arrivals and quarantine new arrivals to monitor for signs of disease.
Promptly remove any faeces or faecal contaminated material from kennels and outdoor yards. Once solid debris is removed by thorough cleaning, disinfection with a hospital grade disinfectant is more effective.	Monitor the health of all greyhounds on the property – contact your veterinarian if you have any concerns.
Clean and disinfect all equipment, including transport vehicles.	Limit movement of greyhounds - scratch affected greyhounds from races, do not take affected greyhounds to trials, training facilities or GAP intakes, and consider scratching those in-contact with affected greyhounds.

My greyhound has Gastroenteritis, can I use my own medicine?

No. Always seek veterinary advice prior to administering any medication, including gastro (e.g. anti-diarrhoeal or anti-nausea) medicines. Every year several greyhounds test positive to gastro medicines generally purchased over the counter at a pharmacy. In some cases, the prohibited substance given will remain in the system well after the symptoms have resolved.

Table 1: Infectious Gastroenteritis – Most common infectious agents routinely identified on diagnostic testing (e.g. Faecal PCR panel).

Agent	Transmission	Incubation period*	Infectious period*	Symptoms	Diagnosis	Susceptibility to disinfection	Treatment	Preventable by vaccination or other means?
Canine Parvovirus (Virus)	Faeco-oral spread	4-7 days	<10 days	Haemorrhagic diarrhoea, vomiting, anorexia, depression and dehydration.	Faecal sample. Rapid test available in most vet clinics.	Resistant in environment, physical cleaning followed by a disinfectant: sodium hypochlorite (1:32) or potassium peroxymono-sulfate such as Virkon®	Supportive care, prevent secondary infection	Vaccination available and required under Greyhounds Australasia Rules and Code of Practice
Canine Distemper Virus (Virus)	Primarily aerosol, but can be spread in other body secretions	1-2 weeks	Usually 2 weeks, up to 90 days (even once signs disappear).	Fever, discharge from eyes and nose, depression, anorexia, gastrointestinal and neurological abnormalities.	Samples from eyes, discharges	Yes – use hospital grade. Does not survive in warm or dry environments, can survive in cold.	Supportive care and fluid therapy, antibiotics may be needed for secondary infection.	Vaccination available and required under Greyhounds Australasia Rules and Code of Practice
Coronavirus (Virus)	Faeco-oral spread	1-4 days	Up to 10 days (even once clinical signs disappear).	Vomiting, diarrhoea, lethargy, fever uncommon.	Faecal sample	Readily destroyed in environment through use of routine disinfectants.	Supportive care, may need treatment for secondary infection.	Vaccination available. Consult with your veterinarian.
Salmonella (Bacteria)	Faeco-oral spread; contaminated meats		Prolonged – most animals become low level carriers once resolved. Repeat faecal samples to assess.	Range from asymptomatic to severe disease. Diarrhoea, vomiting, fever.	Faecal sample	Susceptible to most hospital grade disinfectants.	Antibiotics if systemic illness. Antibiotics may prolong shedding.	No
Campylobacter (Bacteria)	Faeco-oral spread; contaminated meats; can be part of the normal gut bacteria.	1-5 days	Many asymptomatic carriers, common after resolution of symptoms, shedding can be prolonged. Repeat faecal sample to assess.	Vomiting, anorexia, mild to severe diarrhoea. Fever rare. Some greyhounds may have no symptoms.	Faecal sample	Sensitive to heat, drying, most routine disinfection.	Antibiotics if systemic illness. Antibiotics may decrease shedding.	No
E. coli (Bacteria)	Usually part of the normal gut bacteria. Enterotoxigenic and enteropathogenic forms associated with disease.	1-5 days	Many asymptomatic carriers, common after resolution of symptoms, shedding can be prolonged.	Diarrhoea, some strains may cause haemorrhagic diarrhoea and systemic illness.	Faecal sample	Susceptible to most hospital grade disinfectants.	Supportive care, antibiotics required in certain cases.	No

<i>Clostridia</i> (Bacteria)	Usually part of the normal gut bacteria. Overgrowth (due to other infection, stress, diet) can cause diarrhoea.	Normal gut bacteria. Symptoms usually associated with secondary overgrowth.	Normal gut bacteria shed in faeces.	Diarrhoea (watery to haemorrhagic), vomiting, anorexia.	Faecal sample	Spores are very resistant in environment. Rigorous mechanical cleaning and disinfection	Fluids as needed, antibiotics	No
<i>Giardia</i> (Parasite)	Faeco-oral spread	3-10 days	Several days to weeks, can be intermittent. Cysts can survive several weeks in environment.	Many infected animals appear normal. Range from self-limiting diarrhoea to diarrhoea with mucus and weight loss. Young or animals with other illness most affected.	Faecal sample	Removal of faecal material, readily killed with quaternary ammonium disinfectants. Susceptible to drying.	Specific antibiotics (metronidazole) or antihelmintics (fenbendazole).	No
<i>Coccidia</i> (Parasite)	Faeco-oral spread	5-15 days depending on the species, commonly 10-14 days	Up to 3-4 weeks, some animals are asymptomatic carriers.	Normally none. Diarrhoea in young, old or animals with other illnesses.	Faecal sample	Prompt removal of faecal material to break cycle of oocysts in faeces. Oocysts can survive in environment and resistant to disinfectants - steam cleaning can be used.	Antimicrobials inhibit replication but do not kill the parasite.	No
<i>Roundworms</i> <i>Hookworms</i> <i>Whipworms</i> (Parasites)	Faeco-oral spread	Depends on species: 2-8 weeks.	4-6 months if not treated. Appropriate anti-parasitic treatment will resolve infectiousness.	Range from no symptoms to profuse diarrhoea. Pot-belly appearance, poor condition, vomiting possible.	Faecal sample. May see worms in faeces.	Prompt removal of faecal material will decrease spread as time is required to the worm eggs to hatch. Rodent control is important to minimise interaction with intermediate hosts.	Appropriate antihelmintics (anti-parasitics)	Regular worming with an appropriate anti-helminthic

*The incubation period is the length of time from exposure (infection) to the infectious agent until clinical signs develop. The infectious period is the length of time an animal is infectious to other animals after exposure to an infectious agent. The animal may be infectious prior to developing clinical signs and the length of time from infection until the animal becomes infectious is known as the latent period.