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Diagnosing intestinal parasite infections

Faecal Dx* antigen testing clinical reference guide

IDEXX

Screen every dog at least twice a year

The Companion Animal Parasite Council (CAPC) guidelines recommend including faecal antigen testing to ensure the widest breadth of detection of intestinal parasites.¹⁻³ Faecal antigen testing can identify infections that can be missed by using other methods.⁴

Gain client compliance with CAPC recommendations

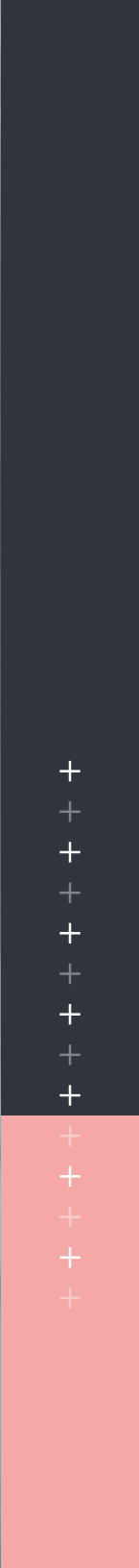
CAPC recommends faecal screening at least twice a year for adult dogs but at least four times during the first year of a dog's life. A dog's health and lifestyle may warrant more frequent testing. Let clients know that simply being outside puts a dog at risk. Some parasites can burrow into a dog's skin or feet. Dogs can also swallow parasites while grooming, nursing or eating contaminated soil or faeces. Clients should also know that some infections can spread from pets to people.⁵

Recommend year-round, broad-spectrum parasite control

A parasite-control program that is effective against intestinal parasites, heartworms (as appropriate), ticks (as appropriate) and fleas provides maximum value for your clients and the best protection for your patients. Make sure your clients understand that they need to keep their pets protected all year long.⁵

Diagnose and treat infections earlier with Faecal Dx* antigen testing

CAPC recommends including faecal antigen testing to diagnose infections, treat patients earlier and reinforce the proper use of parasite-control products.¹⁻³ Faecal antigen testing identifies prepatent and single-sex infections, providing critical insights for patient management.¹⁻³



Faecal screening for healthy adult dogs

Diagnose hookworm, roundworm, whipworm and flea tapeworm infections using Faecal Dx* antigen testing. Because the testing detects antigens, positive results confirm the presence of worms in the intestinal tract. This allows you to diagnose infection when worms are not shedding eggs or when caused by worms of a single sex.¹⁻³

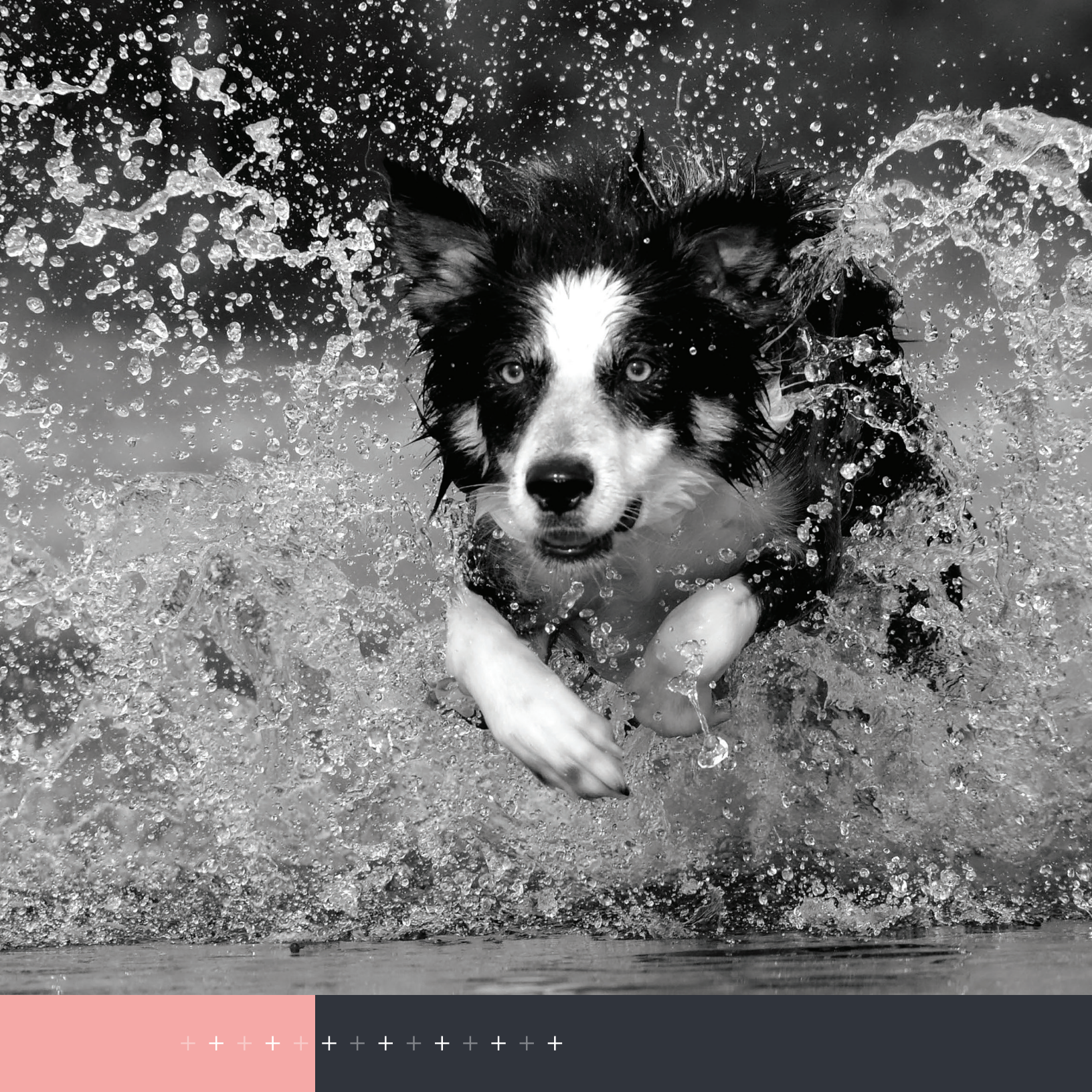
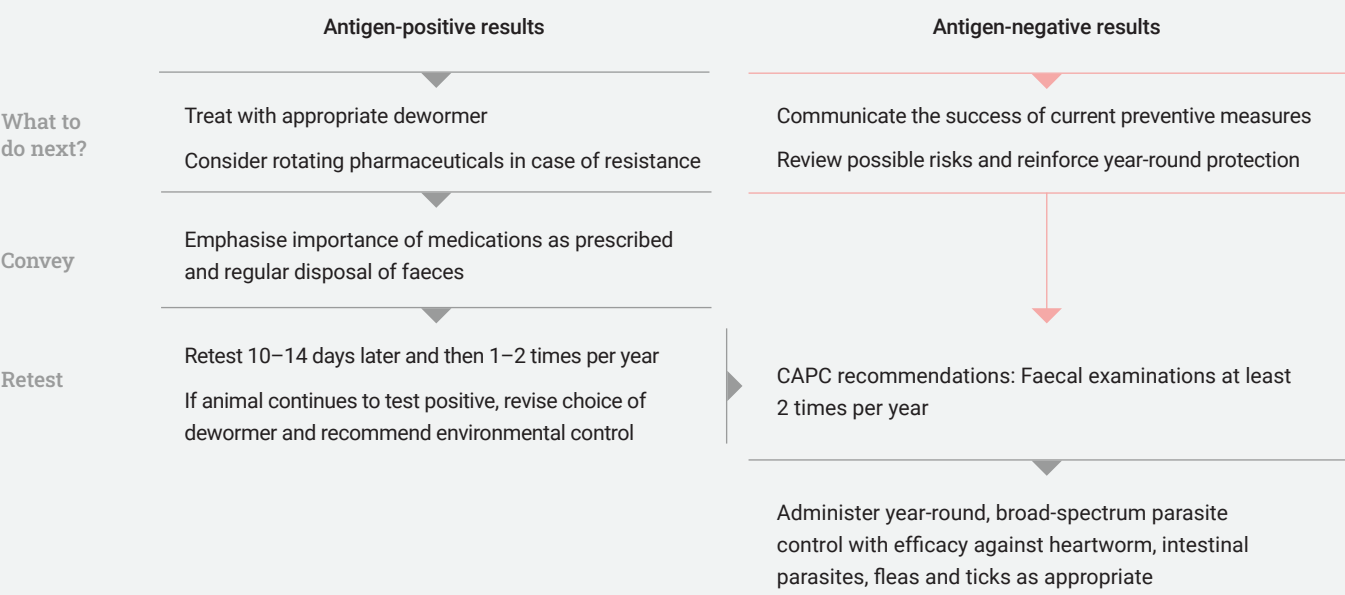
Faecal screening is not only important in dogs with gastrointestinal disease but even in healthy dogs on a regular deworming regime for a number of reasons, including these:

- + Variable client compliance
- + Whilst dewormers are very effective, they have no residual action, so pets can be reinfected

Testing allows detection of asymptomatic infections, allowing a treatment regime to be tailored to the individual pet, minimising the spread of infections to other pets or even family members.

Use the following algorithm to guide next steps based on your patient’s Faecal Dx antigen testing results.

What to do with your Faecal Dx antigen testing results





Did you know?

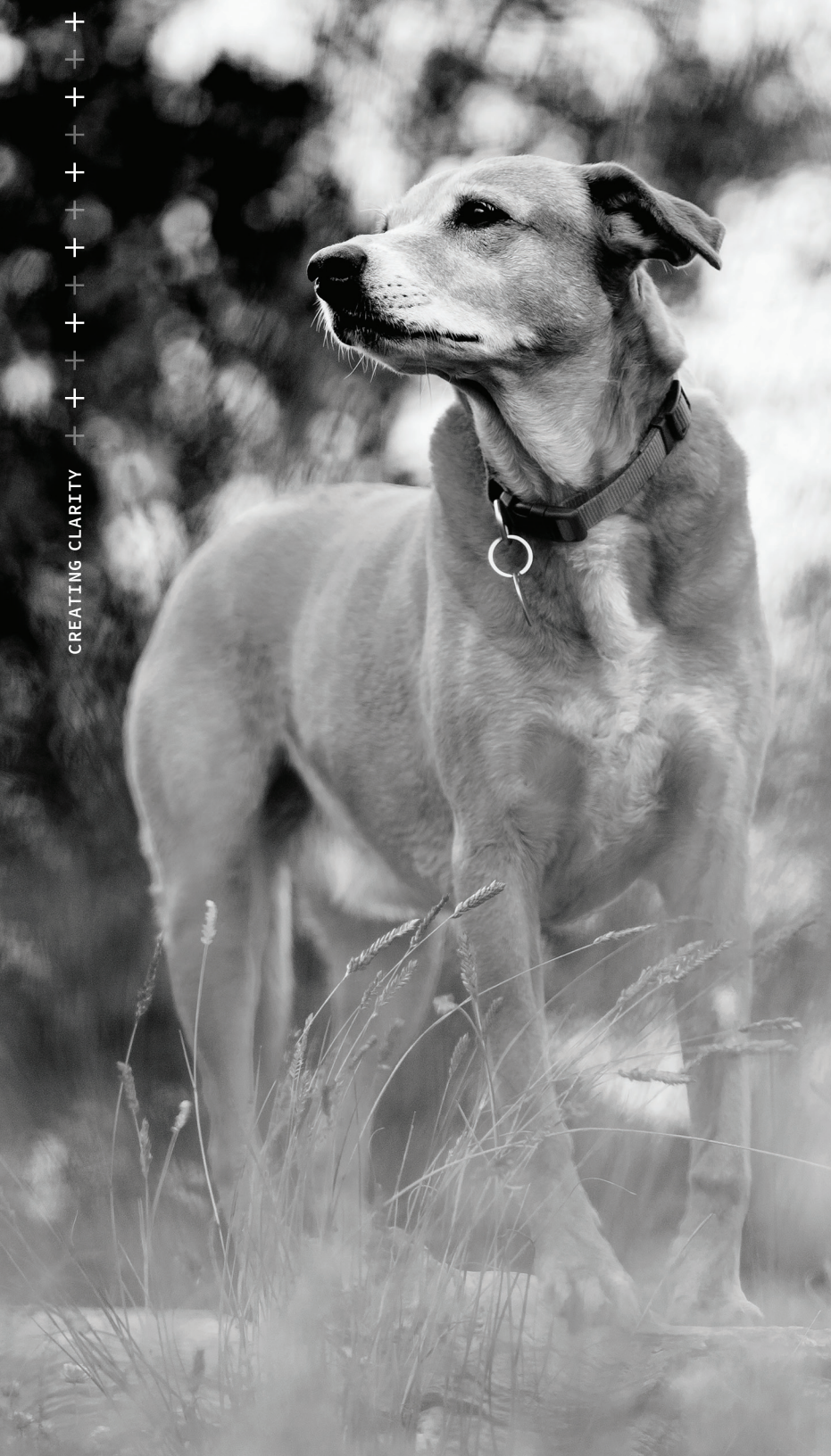
Treatment should be considered for patients that test positive by either antigen testing or egg/proglottid detection.

Reasons for specimens that are antigen positive and egg/proglottid negative may include the following:

- + Absence of eggs and proglottids during the prepatent period
- + Infections caused by single-sex worms
- + Intermittent egg/proglottid shedding

Reasons eggs and proglottids may be identified in specimens that are antigen negative may include the following:

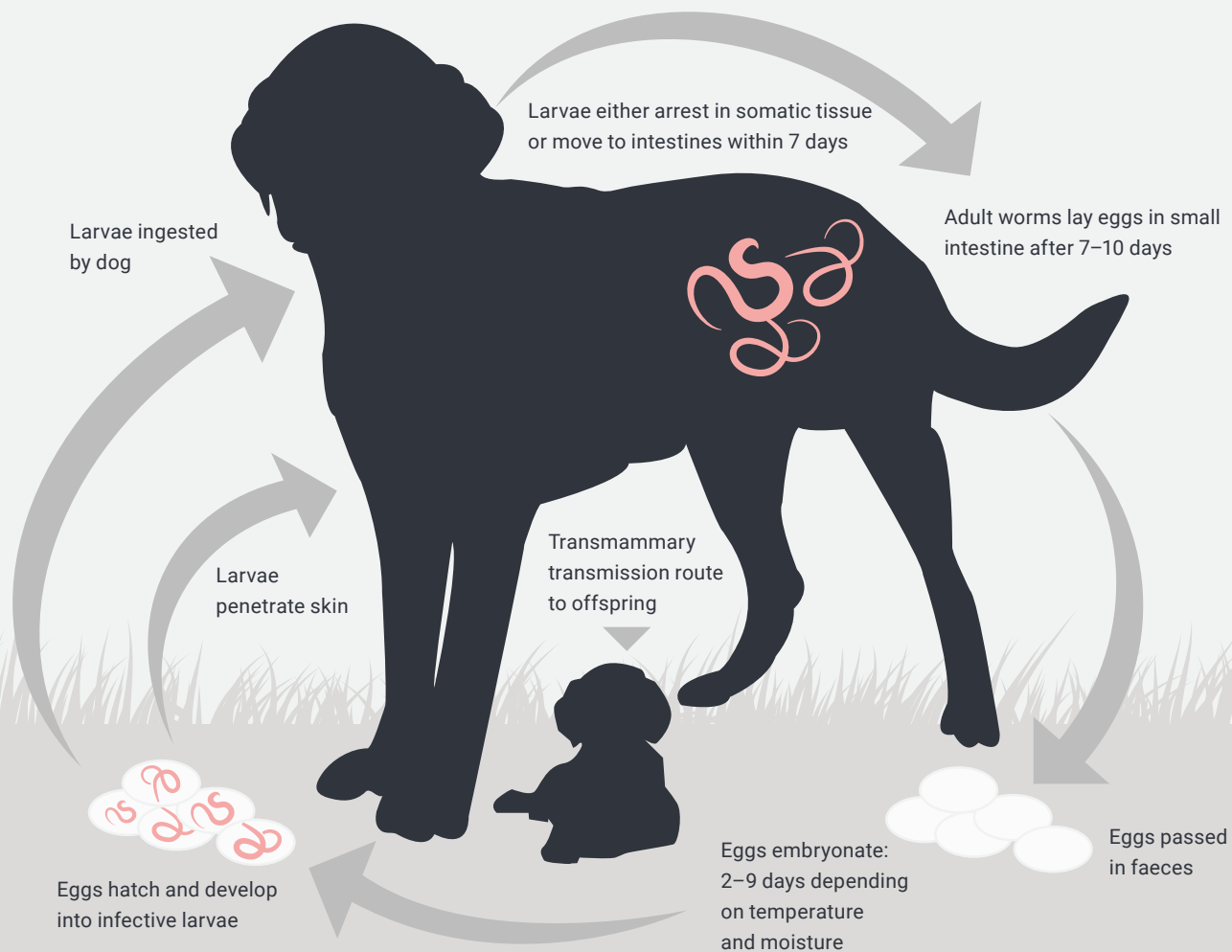
- + Ingestion of infected faeces (coprophagy)
- + Antigen quantity is below the level of detection



Hookworms: from infection to presentation¹

Ancylostoma caninum life cycle

Prepatent period for adult dogs: 14–21 days



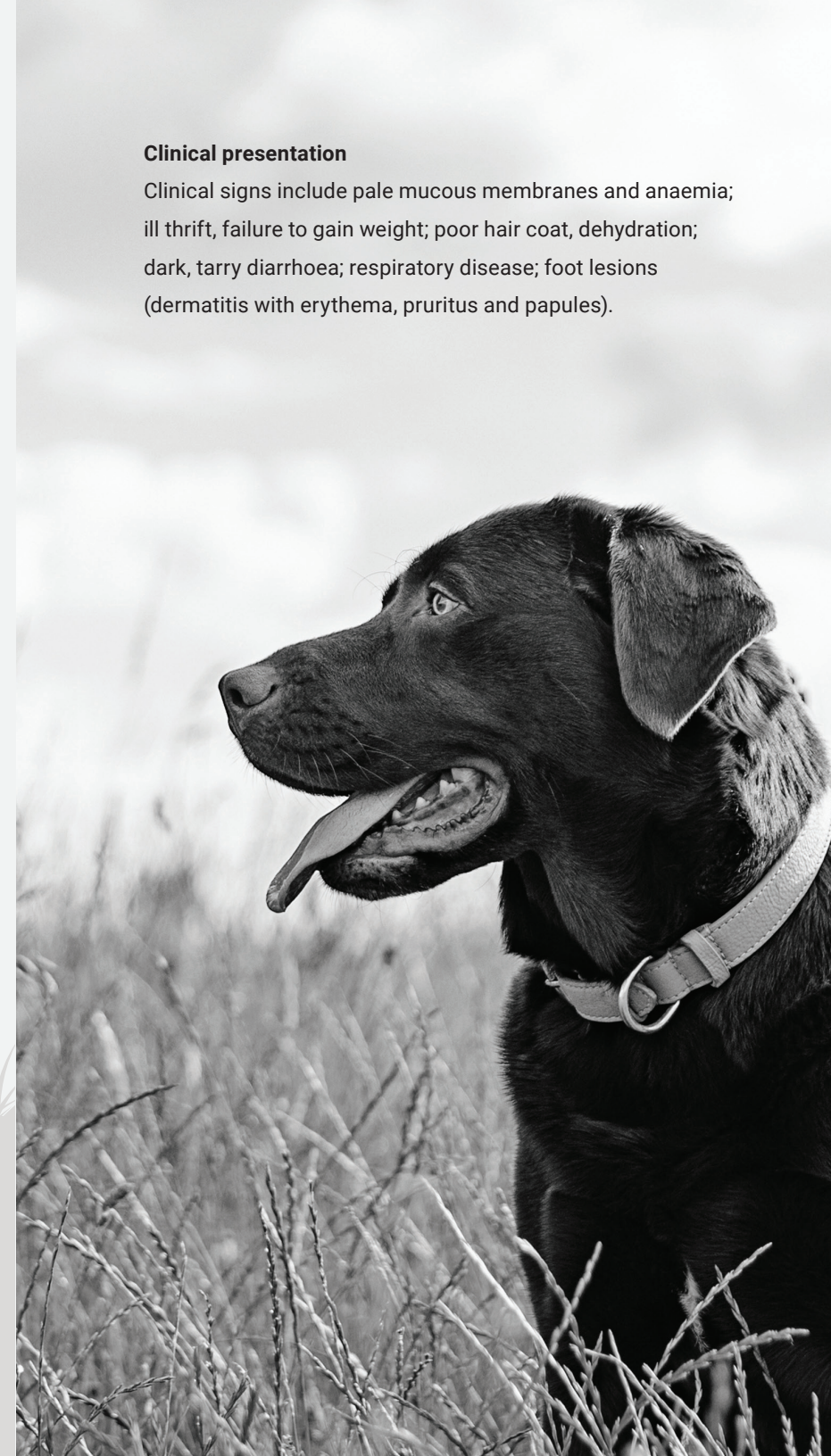
Clinical presentation

Clinical signs include pale mucous membranes and anaemia; ill thrift, failure to gain weight; poor hair coat, dehydration; dark, tarry diarrhoea; respiratory disease; foot lesions (dermatitis with erythema, pruritus and papules).



Did you know?

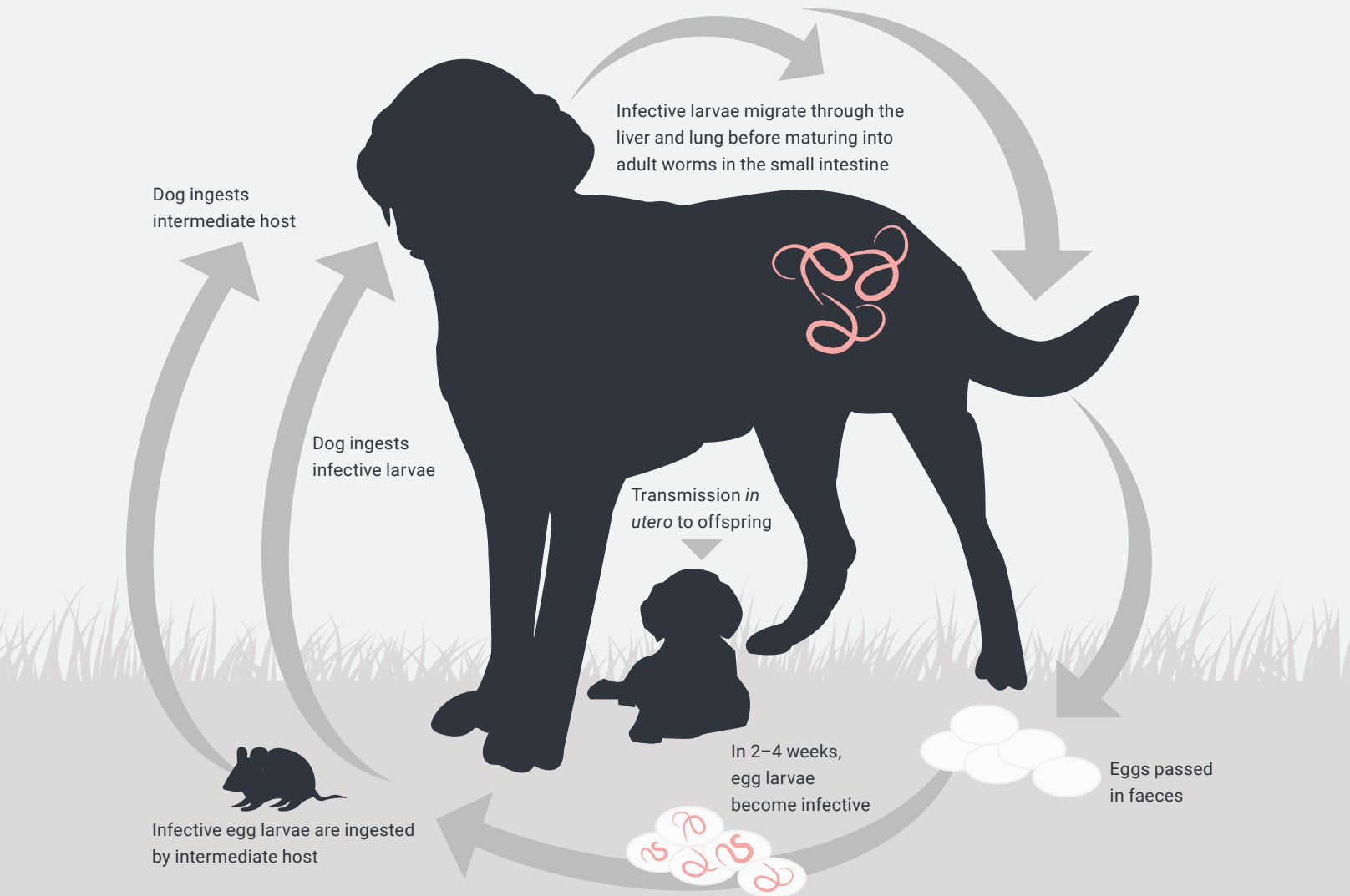
- + Because hookworms have short prepatent periods and the potential for arrested larvae, even pets receiving monthly deworming may have adult worms in their intestinal tract between monthly doses.¹
- + 10.2% of specimens from a recent dog park study in Australia, were infected by hookworm. This number varied significantly by climate, reaching 46% in tropical areas.⁶
- + Puppies as young as 10–12 days of age may start shedding eggs if they've been infected through nursing.¹
- + Due to the zoonotic risk and reinfection potential in this parasite, it is important to detect infections before they start shedding eggs into the environment.¹



Roundworms: from infection to presentation²

Toxocara canis life cycle

Prepatent period for adult dogs: 21–35 days



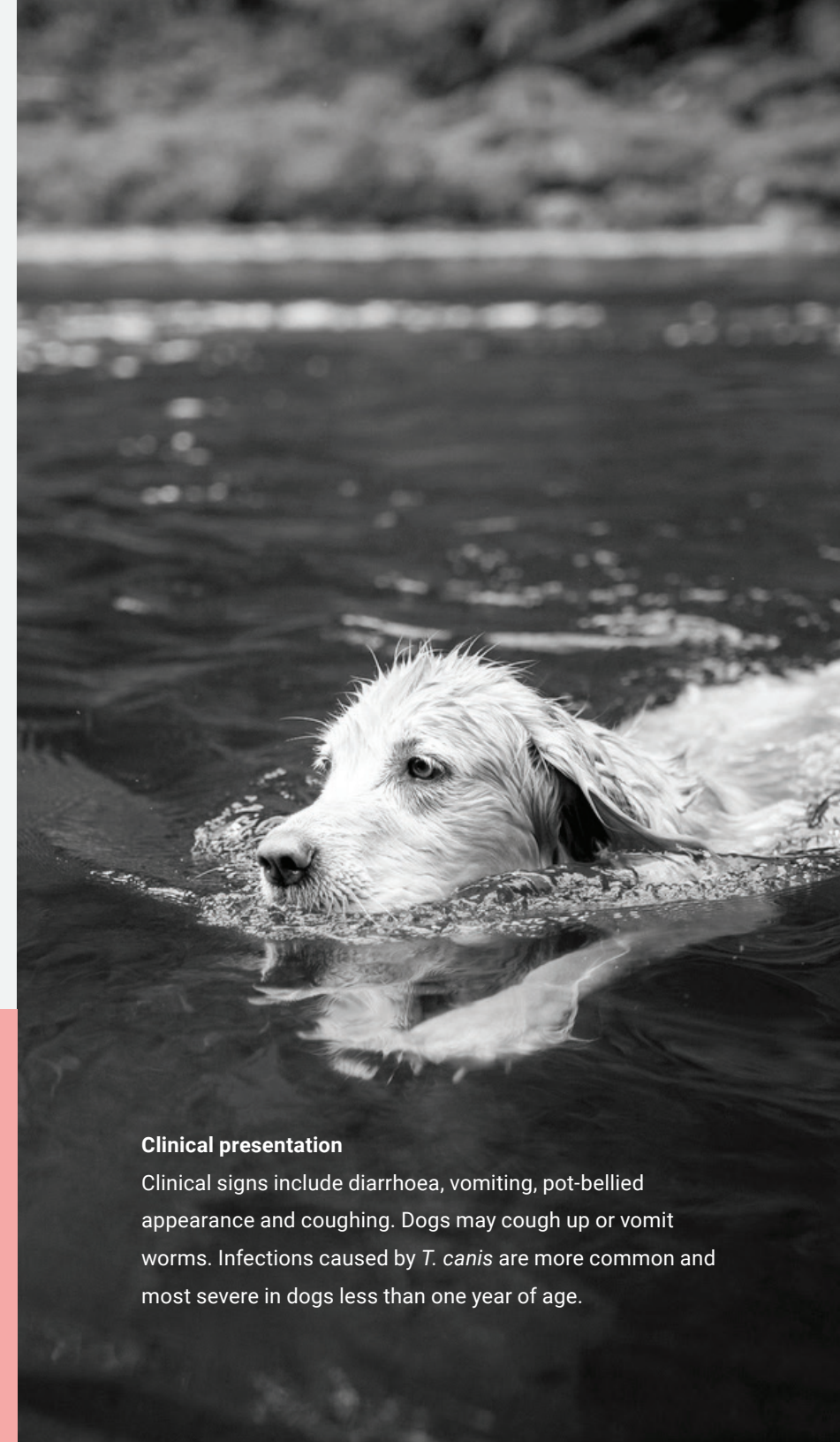
Did you know?

- + Estimated prevalence of roundworm in Australia is 0.7% (according to a recent study).⁶
- + One female roundworm can produce 85,000 eggs per day, and these hard-shelled eggs can survive in the environment for years.² With Faecal Dx* antigen testing, you can detect infections before roundworms start laying eggs.
- + Due to the zoonotic risk and reinfection potential in this parasite, it is important to detect infections before they start shedding eggs into the environment.²
- + In puppies under 6 months of age, studies have shown more than 30% are infected and shedding *T. canis* eggs.²



Clinical presentation

Clinical signs include diarrhoea, vomiting, pot-bellied appearance and coughing. Dogs may cough up or vomit worms. Infections caused by *T. canis* are more common and most severe in dogs less than one year of age.





Clinical presentation

Many infections are subclinical. When present, clinical signs include diarrhoea streaked with mucous and fresh blood, weight loss, dehydration and anaemia. Extreme cases can result in death.

Did you know?

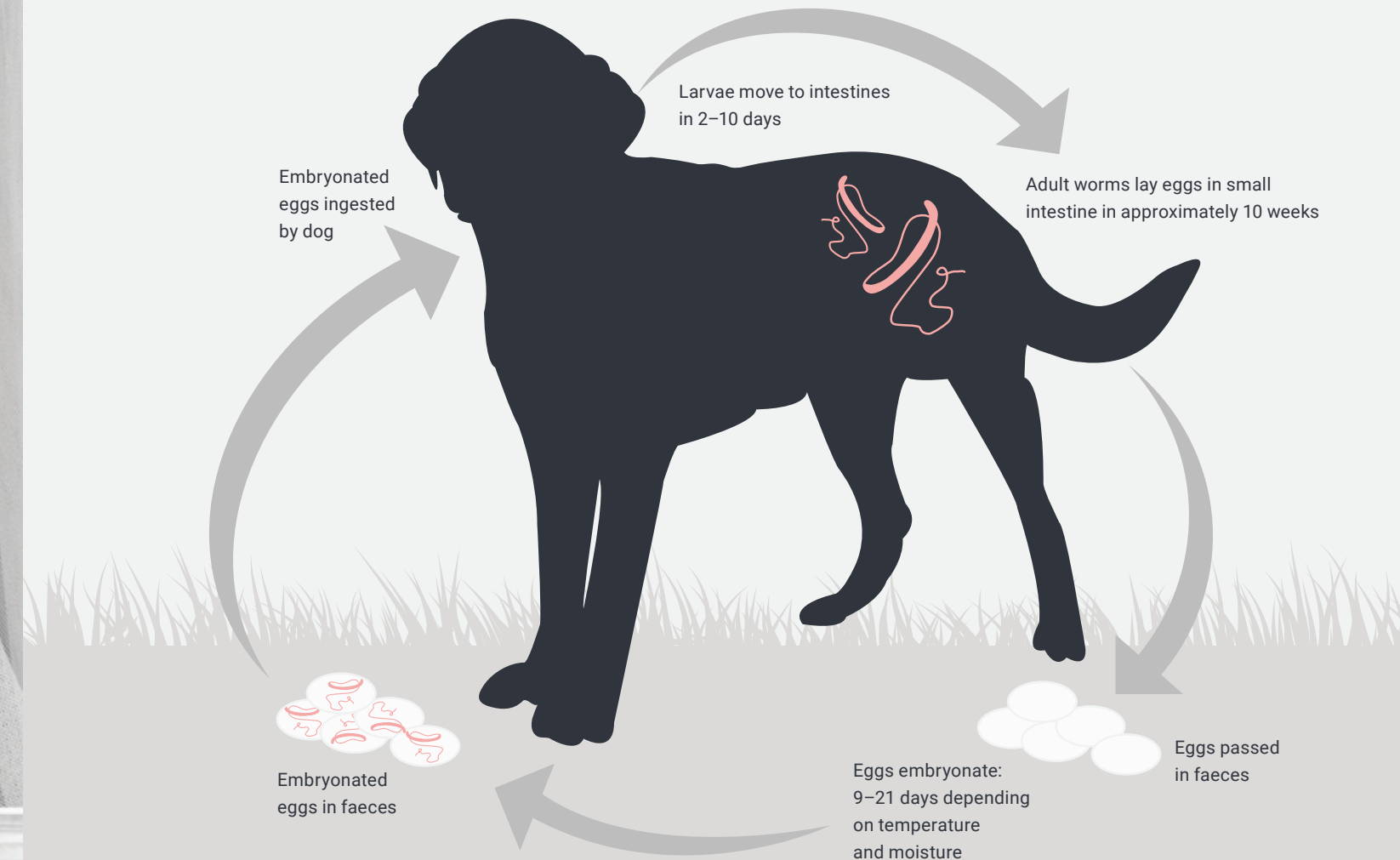
- + Estimated prevalence of whipworm in Australia is 1.3%, with a wide geographical distribution.⁶
- + A female whipworm can produce as many as 2,000 eggs per day, and these infective whipworm eggs can survive in the environment for several years.³ With Faecal Dx* antigen testing, you can detect infections before whipworms start laying eggs.
- + Due to their extended prepatent period, it's unlikely to find eggs being shed in very young puppies,³ but Faecal Dx antigen testing can identify these positive patients during the prepatent period for earlier diagnosis and treatment.



Whipworms: from infection to presentation³

Trichuris vulpis life cycle

Prepatent period for adult dogs: 74–90 days



Clinical presentation

Infection may not always be apparent as many are subclinical. While flea tapeworms rarely cause disease, the passage of the proglottids may cause perianal irritation.



Did you know?

- + *D. caninum* is called the “flea tapeworm” because the flea is its intermediate host.⁷
- + Dogs and cats become infected by eating/ingesting an infected flea.⁷
- + Each segment (proglottid) of a flea tapeworm may contain up to 25–30 eggs.⁷
- + Reinfection with *D. caninum* is likely if flea infestations are not controlled.⁷
- + Dogs and cats may be infected with more than one species of tapeworm. The flea tapeworm is most commonly diagnosed.⁸

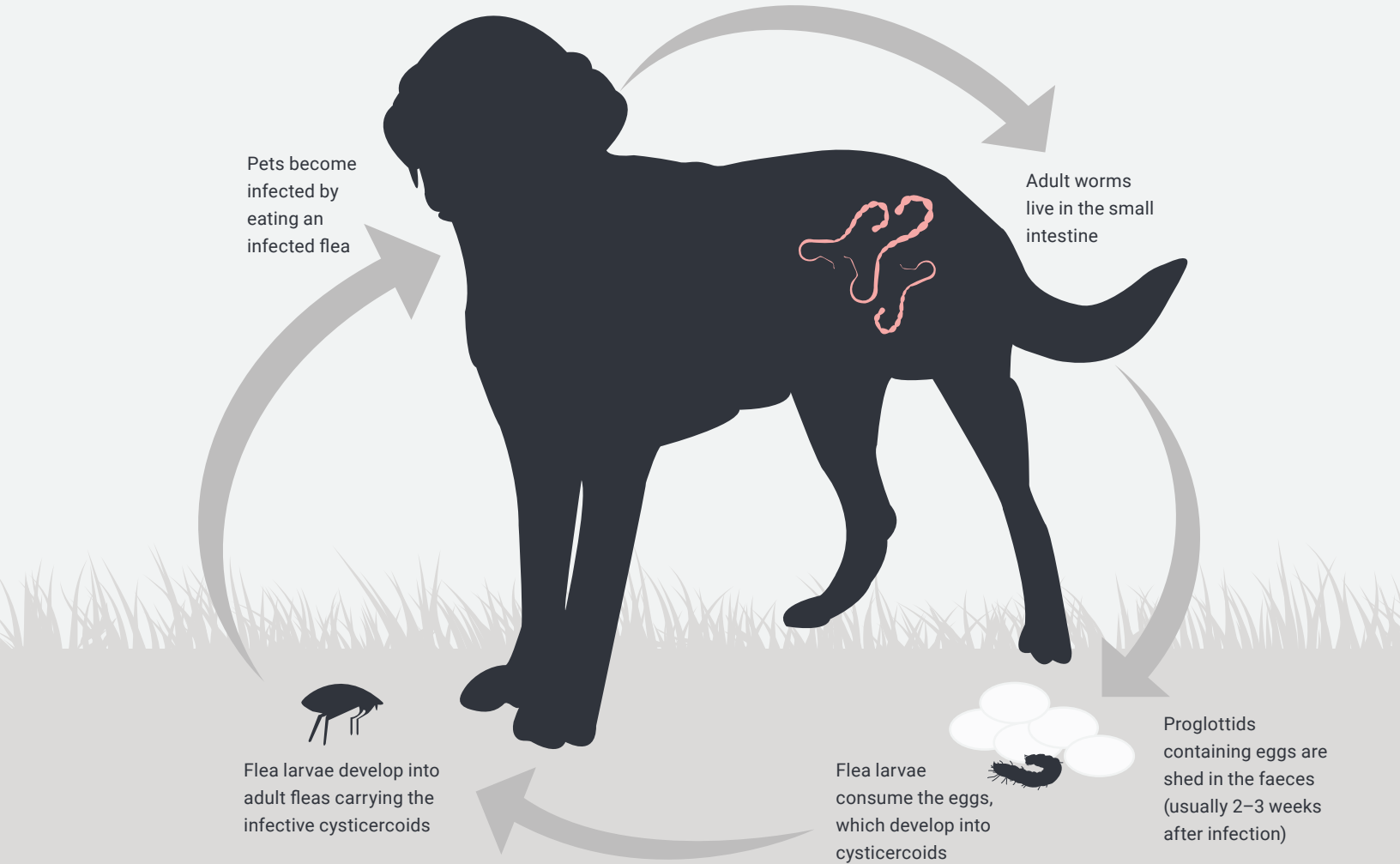


Flea tapeworm:
from infection to presentation⁷

Dipylidium caninum life cycle

Prepatent period for adult dogs: 14–35 days^{7,9}

This tapeworm can infect dogs and cats and is spread through ingestion of infected fleas.

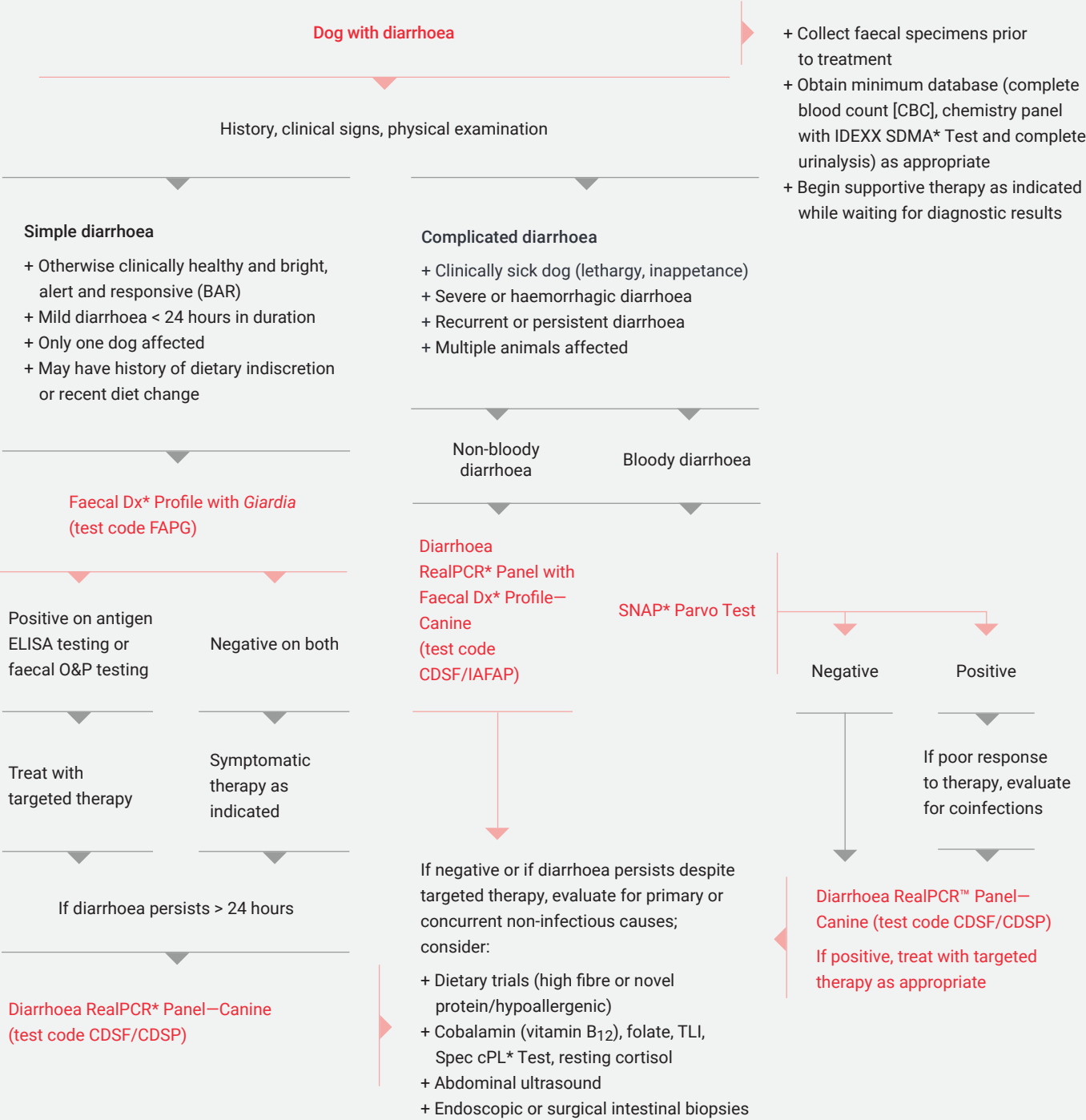


Faecal screening for sick dogs

Rule out infectious diseases by differentiating between simple and complicated diarrhoea and testing accordingly. Testing recommendations vary based on the duration and severity of diarrhoea and the health and dietary habits of the dog or dogs affected. In simple diarrhoea cases of short duration, a *Giardia* antigen by immunoassay or the SNAP* *Giardia* Test is recommended in addition to Faecal Dx* antigen testing and faecal flotation by centrifugation. A more comprehensive diarrhoea RealPCR* panel is recommended in complicated diarrhoea cases. Use the following algorithm to guide next steps when assessing sick dogs that present with diarrhoea.

Did you know?

RealPCR* testing expands the scope of detection beyond nematode parasites, coccidia and *Giardia*, allowing you to detect other important gastrointestinal pathogens, including viruses, bacteria, enterotoxins and difficult-to-detect protozoa (e.g., *Cryptosporidium*). Ideally RealPCR testing should be accompanied by faecal antigen testing.



How to minimise the threat of infection

In addition to regular veterinary examinations and diagnostic screening, encourage your clients to follow CAPC guidelines.⁵

Food and water

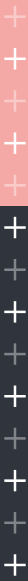
- + Pets should be fed commercial or cooked food.
- + Raw diets are not recommended.
- + Make sure pets have access to fresh water.

Outdoor activity

- + Limit access to wildlife and contaminated faeces.
- + Keep dogs on a leash or behind a fence.
- + Keep cats indoors.
- + Cover sandpits after use.

Hygiene

- + Do not handle animal faeces or urine with bare hands.
- + Wash hands immediately after incidental contact with faeces.
- + Promptly pick up and dispose of faeces from public areas.
- + Promptly remove faeces from the yard.





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