



EAR TO TAIL PARASITE PROTECTION

Inside you'll find information about common parasites in the UK that affect dogs. This guide will help you understand the key points for each parasite and learn how to prevent or treat them.

This information is provided by KRKA UK Ltd



INTESTINAL WORMS

WHAT ARE INTESTINAL WORMS?

There are several parasitic worms that can cause illness in your dog. One of the most important is *Toxocara canis*, a type of roundworm that can infect your dog's intestine.



RISK FACTORS FOR YOUR PET

PUPPIES

Puppies are very susceptible to *Toxocara canis* and can be infected before birth or through their mothers milk.

Starting a control plan from as early as two weeks of age is crucial.

ADULT DOGS

Adult dogs can become infected when:

- Ingesting another dog's poo
- Eating rodents or birds
- Scavenging on wildlife carcasses
- Though unusual, eating undercooked or raw meat



SIGNS YOUR PET MIGHT BE INFECTED

PUPPIES

Symptoms can be:

- Loose faeces
- Intestinal problems
- Dull coat
- Distended abdomen
- Respiratory signs with heavy infestation

ADULT DOGS

Clinical signs may not be present; however, the following symptoms might be indicators:

- Dull, dry coat
- Weight loss with increased appetite
- Scooting itchy bottom on floor
- Vomiting
- Diarrhoea



HOW CAN I PREVENT INFECTION IN MY DOG?

- **Deworm your dog regularly.** Veterinary guidelines recommend to deworm your dog a minimum of 4 times per year, and more frequently if the risk factors highlighted previously are relevant. Talk to your vet about the best approach for your dog.
- **Pick up dog poo at home and on walks** as this is the primary source of soil contamination and infection.
- **Do not feed raw or undercooked meat** unless frozen for at least 7 days at -18°C.



IS IT A PROBLEM FOR MY FAMILY?

Toxocara canis is a **zoonosis**, meaning the infection can be transmitted to humans. Transmission can occur when infected eggs are accidentally ingested. Though this is a rare occurrence, young children can be more at risk. Toddlers especially are more likely to crawl on grass in gardens and parks. They may pick up the *Toxocara canis* eggs on their hands and then put their fingers in their mouths.



EXTRA TIPS FOR PET OWNERS

- Wash hands before eating
- Cover children's sandpits when not in use

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TICKS



WHAT ARE TICKS?

Ticks are oval-shaped, blood-feeding parasites that can crawl and attach to the skin of animals and humans. Ticks climb or drop on to your pet when they brush past vegetation where ticks are present. The size of ticks can vary from 1mm to 1cm in length.

- Ticks are generally most active from spring to early autumn
- Dogs are more likely to get ticks than cats

Ticks can spread infections to your pet, such as Lyme disease, Tick-Born *Encephalitis*, the micro parasite *Babesia*, and the bacteria *Ehrlichia canis* / *Anaplasmosis*. Check with your vet if your area has an endemic problem with any of these diseases.



RISK FACTORS FOR YOUR PET

If your pet lives or walks in an environment with the following factors this will increase the chance of them being exposed to ticks:

- High grass, vegetation or undergrowth
- Woodland trails with fallen leaves, especially in autumn
- Pasture with livestock such as sheep and cattle
- Nature areas with wildlife especially deer and animal burrows

Ticks can also be found in urban areas so it is good to be vigilant and check for ticks on all pets that venture outside.

If you travel abroad with your pet be aware that there are many species of tick worldwide. Speak to your vet before you travel for further advice.

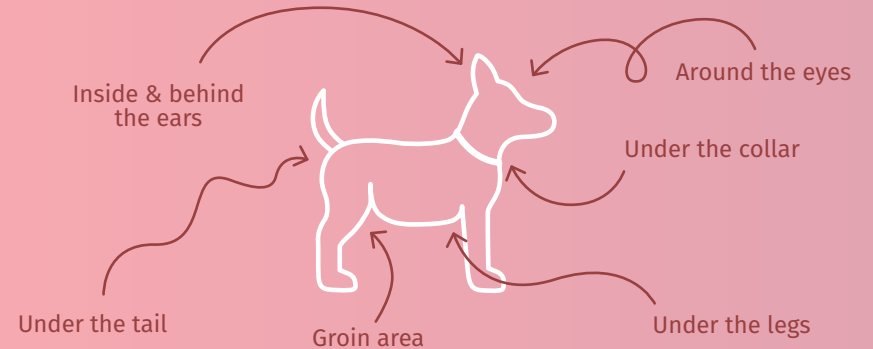


HOW CAN I PREVENT INFECTION IN MY DOG?

You cannot prevent ticks completely however the following actions can help with the control of ticks:

- Check your pet for ticks when they have been in a high-risk area. The diagram below shows some of the key places to particularly look.
- Treatments for killing or repelling ticks are available. Consult your vet about which is most suitable for your pet.
- Talk to your vet team about how to remove ticks. It is essential to remove them properly and ensure the whole tick is removed. Never crush them between your fingers.

7 SPOTS TO CHECK FOR TICKS



IS IT A PROBLEM FOR MY FAMILY?

The same diseases that ticks can pass to your pet are a risk for human health too. These diseases can be passed by the same infected tick biting you, so it is important to avoid bringing these parasites into your home. There is no risk of a tick-borne disease passing directly from an infected pet to you.

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LUNGWORM

WHAT IS LUNGWORM?

Lungworm, *Angiostrongylus vasorum*, is a parasite that can affect a dog's heart, lungs and blood vessels. The most common way for dogs to get infected is from slugs, snails or eating the faeces of infected animals e.g. fox poo. If left untreated, lungworms can have severe health consequences for dogs.



RISK FACTORS FOR YOUR PET

Firstly, ask your vet if lungworm (*Angiostrongylus vasorum*) cases have been detected locally or where you may travel with your dog.

Then also consider your dog's outdoor habits, do they:

- Consume slugs or snails?
- Eat grass?
- Eat the faeces of other dogs or animals?
- Drink from outdoor water bowls?
- Have a history of previous lungworm infection?



SIGNS YOUR PET MIGHT BE INFECTED

This disease can go unnoticed, but in severe cases, can cause internal bleeding and painful symptoms. In some cases it can be fatal.

The clinical signs of lungworm are non-specific, but can include:

- Coughing and other breathing problems
- Prolonged or excessive bleeding from a cut
- Lethargy / reluctance to exercise
- Loss of appetite



HOW CAN I PREVENT INFECTION IN MY DOG?

- Avoid your dog from eating slugs, slugs or animal faeces.
- Protect your dog from slug and snail slime - avoid leaving toys and bowls in outside areas; if that is not possible, they must be cleaned regularly.
- Preventative monthly treatments for dogs are available. Speak to your vet about the risk of lungworm in your area and decide the best action plan for your situation.



IS IT A PROBLEM FOR MY FAMILY?

No, dog lungworms are not known to infect humans.



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TAPEWORMS

WHAT ARE TAPEWORMS?

Tapeworms look like long pieces of tape and can attach to your dog's intestines. Clinical signs are rare in dogs, sometimes you may only notice tapeworm segments and eggs in your dog's faeces.

3 MOST COMMON TAPEWORMS IN DOGS IN THE UK

<i>DIPYLIDIUM CANINUM</i>	<i>TAENIA SPP</i>	<i>ECHINOCOCCUS GRANULOSUS</i>
<p>The adult tapeworm can grow up to 50 cm long</p> <ul style="list-style-type: none">→ Hosts: Fleas and lice→ Infection: From ingesting infected fleas while grooming or eating flea infested wildlife	<p>The adult tapeworm can be very large in length</p> <ul style="list-style-type: none">→ Hosts: Sheep, rabbits and rodents may act as hosts→ Infection: Through scavenging, hunting or eating uncooked meat	<p>It is a small adult tapeworm (5–6 mm long)</p> <ul style="list-style-type: none">→ Hosts: The cyst from this tapeworm is called Hydatid Cyst, and ruminants and pigs may act as intermediate hosts→ Infection: The ingestion of the cysts by dogs by scavenging and hunting

Another important tapeworm is *Echinococcus Multilocularis*. This parasite is not present in the UK, but if you travel overseas with your pet, you must treat against it. Ask your vet for more details if you plan to take your dog abroad.



RISK FACTORS FOR YOUR PET

Consider the following aspects of your pet's lifestyle to assess the risk of tapeworm, does your pet:

- Hunt and eat wildlife?
- Eat unprocessed raw food or have access to animal carcasses?
- Have unmonitored, off lead, access to pasture?
- Live in an *Echinococcus granulosus* endemic area?



HOW CAN I PREVENT MY DOG GETTING INFECTED WITH TAPEWORMS?

Avoid your pet

- Scavenging or consuming animal carcasses
- Eating raw or undercooked meat
- Hunting wild birds and rodents

Plus Picking up your dog's poo will help reduce the risk of livestock exposure to tapeworm eggs.

Treatment

- Deworm your dog with a product that protects against tapeworms.
- Flea and lice control as these parasites can be carriers of tapeworm (*Dipylidium caninum*).



IS IT A PROBLEM FOR MY FAMILY?

Some tapeworms can be infectious to humans. Be aware that the *Echinococcus granulosus* species of tapeworm, although rare in the UK, is a potential health risk. Ingestion of eggs by humans is rare, but if it happens, there is the risk of cysts forming in the liver, brain and heart with a significant risk to health.



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FLEA SCREEN
COMBO

For tapeworm management, provides flea prevention only

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FLEAS



WHAT ARE FLEAS?

Fleas are small insects that survive by feeding on animal or human blood. Fleas are among the most common external parasites for dogs, though in the UK the most common type of flea to cause infestation on any type of household pet are in fact cat fleas.



RISK FACTORS FOR YOUR PET

While UK flea infestations are thought to peak in summer and autumn, studies have shown that flea infestation can occur throughout the year. European Scientific Counsel Companion Animal Parasites (ESCCAP) recommends year-round treatment for pets at risk from flea infestation, **based on the following risk factors:**

1. The household has several dogs, cats (including house cats) or other pet animals present in the household.
2. Your pet has free access to places with existing flea infestations or where early flea lifecycle stages may be present e.g. grass and other vegetation, woodland trails, wildlife dens, or in a house infested with pupae and larvae.
3. Your pet is known to be at risk of, or suffers from, Flea Allergy Dermatitis (FAD).
4. When re-infestation with fleas is more likely, such as warm conditions (including central heating) and multiple animal households.

HOW DO I SPOT A FLEA?

Fleas on dogs and puppies are tiny and quick-moving, so spotting them can be difficult.



One of the most obvious signs of a flea infestation is flea dirt (faeces) on your pet's fur.

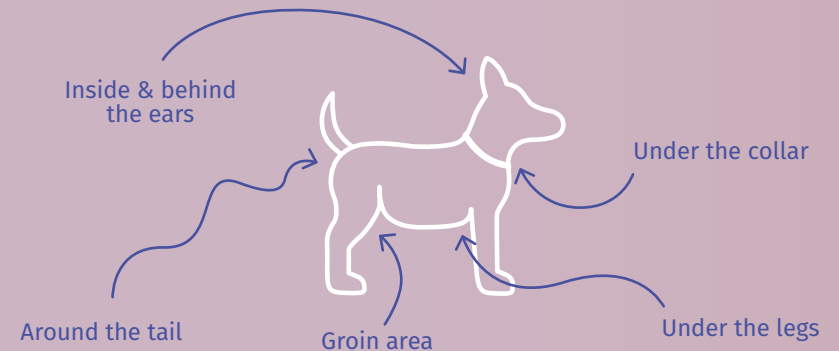


SIGNS OF A FLEA INFESTATION ON YOUR PET

- The presence of flea dirt / visible fleas
- Your pet excessively scratching
- Skin allergy – red bumps
- Hair loss
- In severe cases, anaemia

Fleas can also carry a species of tapeworm so if your pet has been infested with fleas it is worth checking with your vet if they need any further treatments.

PLACES WHERE FLEAS LIKE TO HANG OUT



IS IT A PROBLEM FOR MY FAMILY?

Fleas can cause discomfort, itchiness, and skin irritation for humans just as they do for pets. However fleas can also be a carrier for diseases that are a risk to human health. In the UK this includes *Bartonella* bacteria that spreads to humans from a cat scratch that is contaminated with flea faeces. Infected cats that lick a person's open wound or bite can also spread the bacteria. Some evidence suggests that these bacteria may spread directly to people by the bite of infected cat fleas, but this has not been proven. It is not yet known whether dogs can transmit *Bartonella* infection to humans.

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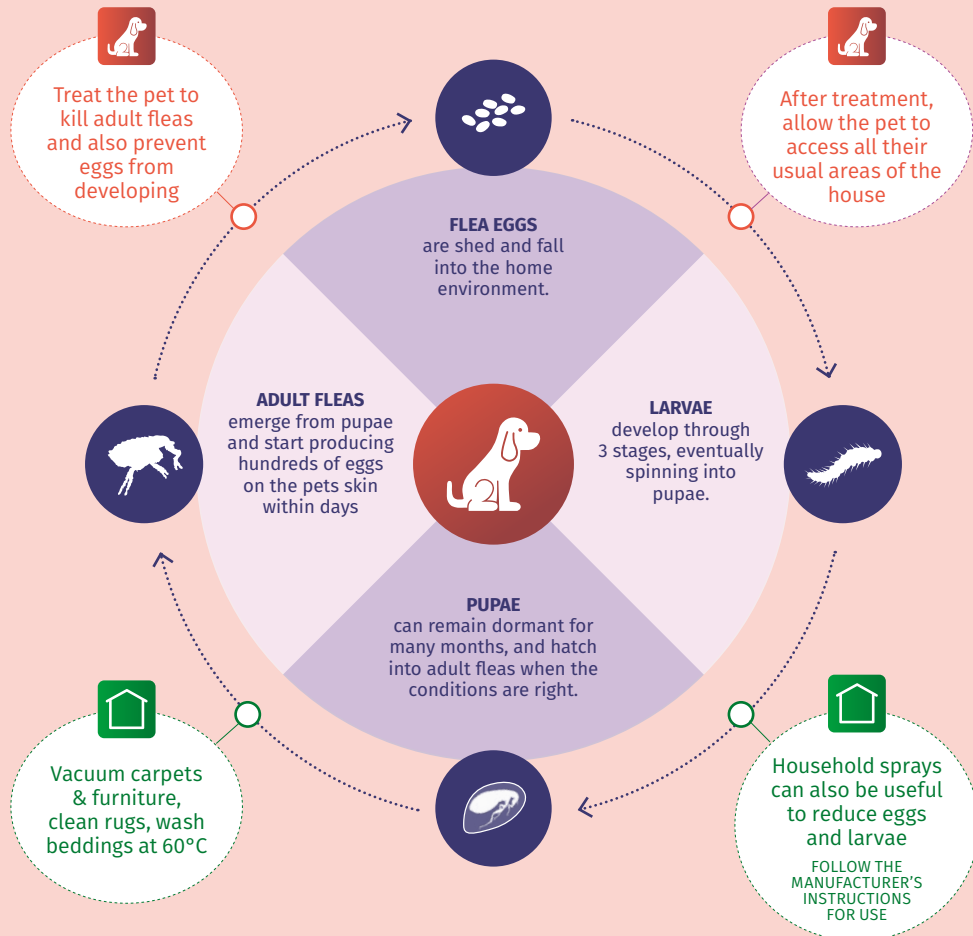


CAN I PREVENT FLEAS?

Preventing the flea lifecycle from getting established is the best approach. You can kill adult fleas on your pet dog with a flea treatment product. Your vet will advise the recommended treatment frequency based on the risk factors around your dog's lifestyle and how to administer the product correctly.

The diagram below shows the flea lifecycle and how it evolves from the pet to the home and the different treatment approaches. See further information on treating a flea infestation in this guide.

TIPS TO BREAKING THE FLEA'S LIFE CYCLE



GETTING RID OF A FLEA INFESTATION

95% of a flea problem exists in the home environment as eggs, larvae and pupae, therefore it will take some time to eradicate an infestation.

HERE'S A CHECKLIST OF THE KEY MEASURES FOR YOU TO TAKE:



Make sure you treat all pets in the household with a licensed veterinary product that kills fleas on the pet. Fleas are highly adaptable and capable of infesting a variety of animals. Also consider any stray or neighbour owned cats that visit the house and avoid in future.



If you are going to use a flea shampoo and wash your pet – do that first before treating your dog with the licensed flea treatment, do not keep washing your dog or cat after treatment as that will lower the effectiveness.



Also avoid your pet coming into close contact with wildlife and their habitats e.g. foxes / fox dens. If this is the infestation source, then it will lead to a repeat cycle of fleas being carried back into the home. This point also applies to dog daycare.



You should let your pet access its normal places at home if the pet flea prevention product being used also treats flea eggs or larvae in the house, this way the product will work more effectively.



You need to treat the household environment because 95% of the flea infestation will be in the home not on your pet.

Different Krka products target flea egg development and/or larvae in the household environment. We would also recommend the use of a household flea spray to also kill flea eggs in the home. With severe infestations get your house fumigated by a professional company.



Thoroughly vacuum and clean carpets, soft furnishings and bedding, including your pet's bed.

The eggs, larvae, pupae and adult fleas will be in cracks and crevices; door mats, the edge of rugs, under radiators, back and sides of the sofa etc. Dispose of the vacuum cleaner bag immediately after each clean.



All bedding where the animal lies needs to be washed at 60°C or greater, to kill fleas, eggs and larvae.



Flea infestations can continue in autumn and winter periods. Central heating can activate dormant flea pupae in the home.



Be patient, it may take weeks or even months to completely get rid of fleas depending on the degree of infestation.

HELPFUL TIPS

WHAT TREATMENT APPROACH SUITS ME AND MY PET?

Asking yourself questions about lifestyle, and your preferred product will help to maximise the effectiveness of any recommended treatment.

Two important factors are:

Do you prefer tablet or spot-on treatment?

Selecting a form of medication you feel confident using with your pet improves the success of using or giving your pet medication and reduces the risk of product wastage and/or under-dosing.

Do you shampoo your pet or does the pet frequently swim?

This factor affects the duration of action and efficacy of some products that are not systemically absorbed. It also makes practical sense not to bath your pet soon after spot-on application (i.e. for up to the first 4 days depending on the product) as this will result in a wasted treatment and compound the risk of product being rinsed off into local environmental systems. It's good to remember, always read the product information leaflet first, to ensure correct use of any medical product.



Discuss which is the most suitable treatment approach with your vet

OTHER HYGIENE TIPS

Any use of parasite control products should be part of an overall approach.

The guide below provides other useful tips to help reduce parasite risk factors for you and your pet.

ACTION	BENEFIT
Picking up of dog faeces	will reduce potential contamination of the environment from both parasite eggs and oral parasiticides.
Covering of sandpits and home grown fruit and vegetables	will reduce faecal contamination from cats, dogs and foxes.
Washing fresh fruit and vegetables	will remove parasitic egg contamination.
Daily monitoring for ticks	removal of ticks within 24 hours of attachment reduces the risk of tick-borne disease transmission.
Good hand hygiene	will help to reduce parasites transmitted by the faecal-oral route. Some infections such as <i>Giardia spp.</i> and <i>T.gondii</i> spread this way have no effective preventative treatment.
Bring in pet waterbowls and toys at night	will prevent contamination by slugs, snails or intestinal worms.
Regular vacuuming of household especially areas that pets utilise	will help reduce wider flea life-cycle infestation in the home.

USING A SPOT-ON PRODUCT

Take your time and choose a moment when your pet is relaxed to apply the spot-on. Evening is a good time as your pet is ready for sleep and it allows time for product to dry on skin and fur overnight. Once applied encourage your pet to sleep in their pet bed and it is recommended to avoid stroking your pet in the area where the treatment has been applied until it is fully dried. If your dog loves water, to ensure the efficacy of your product is retained and to protect aquatic organisms, do not let your dog swim in streams and rivers for up to 4 days depending on the product.

HOW TO APPLY A SPOT-ON

The Krka range offers an award winning pipette design to make using your spot-on product easier to use.



Hold the pipette upright, twist & pull the cap off.



Reverse the cap, reattach the opposite end to the pipette, and twist to break the seal before removing it.



Expose the skin by parting the coat at the base of the neck in front of the shoulder blades.



Apply the pipette tip to the skin and fully empty its contents in one spot by squeezing it multiple times.

SUCCESSFUL TABLET GIVING

Getting your pet to take a tablet can be a tricky business and all Krka worming products come with additional flavouring to help this process.

However if you are struggling, speak to your vet team on some practical tips for your specific pet and the medication they need to take.



Always read the product information leaflet before use