

WORMS....WORMS....WORMS...

It is worth noting raw fed dogs are less likely to get infestations than kibble fed dogs as the guts of raw fed dogs are mostly healthier – and that's because food is digested quickly and moves through – whereas kibble that has a carbohydrate base sits in the gut much longer and makes a good environment for parasites to thrive.

However, it is important that you routinely wormcount/faecal screen your dog every 3 months to ensure that they are worm free.

There are three main groups of worms to consider in our dogs;

Intestinal worms, these include, roundworm, whipworm, hookworm, tapeworm. Then we have lungworm and heartworm, although heartworm does not exist in the U.K.

Symptoms Of Worms In Dogs

The symptoms that your dog experiences when he has worms can depend on the worm infecting him. But some common signs of worms in dogs include:

- Diarrhea or vomiting
- Abdominal pain
- Fever
- Scooting
- Loss of appetite
- Dull coat
- Lethargy
- Dehydration
- Mucus covered stools
- Bloody stool
- Coughing
- Bloating

ROUNDWORMS

Roundworms also known as *Toxocara canis* are the most commonly found worms in our dogs. Roundworms can grow to seven inches in length. Females can produce 200 thousand eggs in a day, and these can exist in the soil for years. Dogs become infected by ingesting worm eggs from contaminated soil. The eggs hatch in the intestine and the resulting larva are carried to the lungs by the bloodstream.

You can see roundworms in your dog's poop. They'll look a lot like spaghetti and can be 1 to 7 inches long. Your dog may look pot-bellied and he may feel lethargic. Sometimes roundworms can cause diarrhea, vomiting, stomach pain and weight loss.

Roundworms live in the small intestine of your dog and feed off undigested food. Your dog can pick up the microscopic eggs from the environment or by eating infected animals like birds or rodents.

Pregnant dogs can pass them on to their puppies and in puppies, roundworms can cause malnutrition and growth problems from vomiting and diarrhea.

Transmission

Roundworms can be transmitted in several different ways. They can be passed from mother to puppy whilst in the womb and through the mothered milk when nursing. Roundworms can also be spread by sniffing or eating infected faeces or eating infected animals like rodents, birds and earthworms, that are of course infected.

Symptoms

Roundworms are the most serious for puppies and young dogs as they can suffer from malnutrition, weight loss and have pot dog pot bellied appearance, as well as vomiting and diarrhoea. You may also notice worms in your dogs poop or vomit.

Diagnosis

Worm count or visually identifying.

WHIPWORMS

Whipworms also known as *Trichuris vulpis*, live in the caecum of a dog, this is a blind ended pocket located near the large intestine. They grow to around 30-50 mm in length and get their name from their whip like appearance with a thick anterior and a very long thin posterior. Whipworms attach themselves to the mucosal lining of the caecum and feed on blood and tissue fluids.

Transmission

Dogs become infected by consuming soil or faeces that is contaminated with whipworm eggs.

Symptoms

Whipworms cause serious irritation and inflammation of the lining of the caecum, causing watery, bloody diarrhoea, weight loss, anaemia and lethargy. If infestation is large it can be fatal.

Diagnosis

Worm count

HOO KWORMS

Hookworms also known as *ancylostoma caninum*, get their name from their hook like mouth piece, they are around 3mm in size and very difficult to see with the naked eye. They hook themselves to the wall of intestines and ingest blood from the tiny vessels.

Transmission

Hookworms can be transmitted in several different ways, in utero, through mother's milk, oral ingestion and the larva can burrow through the skin!

Symptoms

Hookworms can cause lots of symptoms including pale gums, bloody stools, poor growth, weakness and severe anaemia, that can lead to death. Hookworms can also cause dermatitis and itchy skin especially on the paws where the larva has buried into the skin.

Diagnosis

Worm count

From a Member:

We have had two CHC members who have discovered that their dogs have had Hookworm in their skin – the symptoms were very severe itching to the point where dogs made themselves bleed. Both dogs were raw fed and live in very good homes. All the bathing etc. took place and checking for fleas – houses fully fumigated (with Cedarcide) but to no avail – no sight of fleas but still dogs itching madly and harming themselves. The first member that discovered this consulted Animal Communicator Maureen Rolls and Maureen said there was something living in the dogs skin and suggested bathing dog and then covering them in pure garlic oil – leaving for ten minutes and then washing off – repeat as necessary.

A worm Count Test in both cases confirmed it was Hookworm. Liquid Allitech given twice daily (about 5ml per dose) orally then a retest – confirmed Hookworm had gone and the garlic on the skin sorted the itching. It is the larvae that burrows into the skin and if you research it – the paws are often where infestation starts – but it was the body affected with both dogs described here.

Vets were consulted both times – the first member knew there was Hookworm in the skin (thanks to Maureen and her subsequent research) – Vet had no idea this was possible! The second member took her dog to vet because itching was so severe that dog was mutilating herself. Vet prescribed Apoquel - read about the very dark side of Apoquel here [Apoquel: Dog Drug With a Dark Side \(vitalanimal.com\)](http://vitalanimal.com) – this never would have sorted the Hookworm infestation!! Fortunately second member contacted me and did not give the Apoquel – what she described rang a bell – *Hookworm I thought* – and so I suggested doing the Worm Count Test to confirm it was Hookworm and the pure garlic oil on the skin. The itchy dog lived with two others of same breed – these two not itching. Worm Counts were done for all three and all had Hookworm burden. All were effectively treated with Allitech Liquid.

While we are talking Allitech liquid – another member's dog after doing Worm Count test showed moderate burdens of Capillaria and Round Worm – she used Allitech Liquid for 2 weeks – 5ml twice daily and the second tests came back clear – all infestations gone!

Moral of the above – if you have itchy dog – do Worm Count Test to eliminate possibility its Hookworm.

TAPEWORMS

There are a lots of different species of tape worms, a common tapeworm is taenia echinococcus but the most commonly found species in U.K. dogs is dipylidium caninum, also known as the flea tapeworm. Tapeworms belong to the cestode family of parasitic worms, they are flat in shape. Tapeworms hook/suck onto the intestinal wall of the dog and absorb nutrients directly through their skin. Tapeworms are made up of segments, these are called proglottids that detach from the worm and are essentially a bag full of eggs, ready to infect the environment and their next host.

Transmission

Tapeworms are carried by live stock and your dog would need to ingest a cyst to be infected, the larva in that cyst would then grow into an adult tapeworm, if it is a flea tapeworm they must first ingest a flea that has been infected with tapeworm larva, that will develop into an adult tapeworm.

Symptoms

Tapeworms can cause a whole host of symptoms from dull coat, weight loss and vomiting. Dogs will often scoot and bite at their back end, and in some cases you will see a proglottide segment crawling around the anus.

Diagnosis

Worm count or seen proglottides in faeces.

LUNGWORM

There are two main lungworms which attack your dog.

1. "French Heartworm" or Fox Lungworm - *Angiostrongylus vasorum*

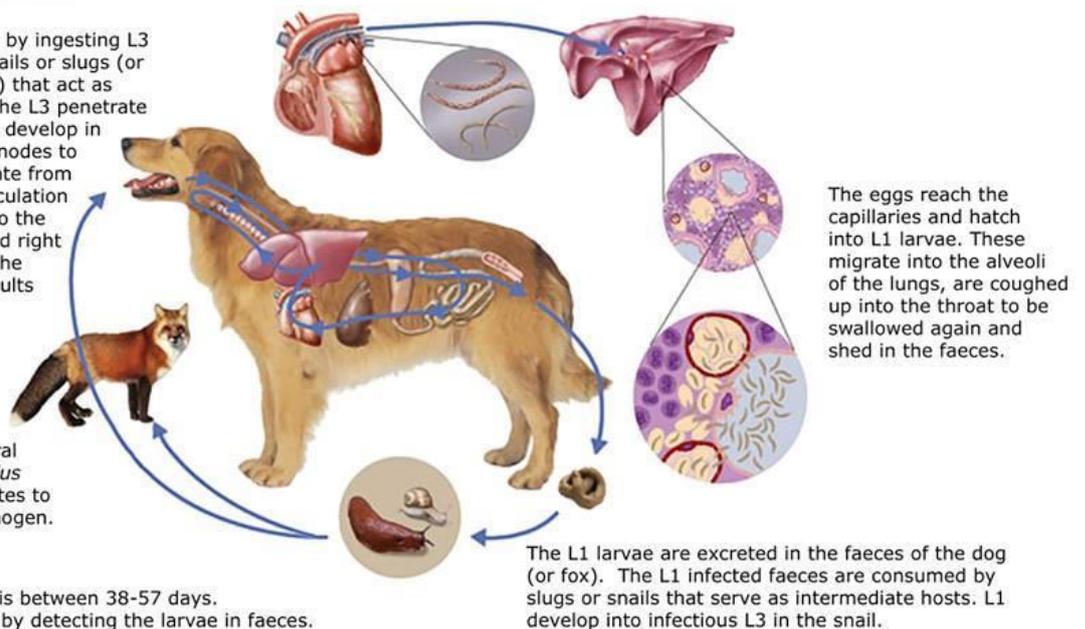
Lungworm Development cycle *Angiostrongylus vasorum*

Dogs become infected by ingesting L3 larvae contained in snails or slugs (or their fresh slime trails) that act as intermediate hosts. The L3 penetrate the intestinal wall and develop in the abdominal lymph nodes to L4 and L5. They migrate from here via the portal circulation system and the liver to the pulmonary arteries and right heart ventricle. Here the worms mature into adults and lay eggs that are released into the bloodstream.

The fox is also a natural host for *Angiostrongylus vasorum* and contributes to the spread of the pathogen.

The prepatent period is between 38-57 days.
Diagnosis is achieved by detecting the larvae in faeces.

Mature adult *Angiostrongylus vasorum* in the pulmonary artery (the top female, male worms below)



2. The other is known as the dog lungworm – *Oslerus osleri*.

Oslerus Osleri is a parasitic worm and has a much simpler lifecycle. An infected dog passes out first-stage larvae into the environment. Your dog picks these up and they make their way to the lung where they develop into adults in nodules in the trachea and bronchi. Here females lay eggs which hatch in the lung. These larvae are carried back up the trachea and are swallowed and then passed out to start the cycle again – the dog may also vomit up the larvae. The lifecycle takes about 10 weeks.

Symptoms of both infestations are coughing, loss of breath and stamina, profuse bleeding after a cut (*A. vasorum*), loss of weight and general depression.

However! The sinister thing about both these parasites is that your dog may show no symptoms at all but the damage is being done within your dogs' organs. The wetter the weather the more likely it is that there will be slugs, snails and frogs about! If you walk your dog in the country, parks or even in the town he or she may pick up parasites from sniffing other dogs' infected poo.

Transmission

Lungworm is transmitted to our dog by either eating a slug or snail that is infected with lungworm larvae, the larvae can also be transmitted to our dogs through the slug/snails slime that is on dogs toys, water bowls or infected puddles. It should be noted that not all snails and slugs are infected with lungworm.

Lung worms enter the system via the gut first, so using a natural intestinal prevention will help reduce the risk of them establishing in the gut and moving to the lungs. Do not allow your dog to drink from outside water bowls and puddles, this will reduce the risk. Bring in and wash dog toys that have been in the garden.

Symptoms

Lungworms can cause serious damage if left untreated. There is lots of symptoms from vomiting, weight and appetite loss, pale gums, bruising and poor blood clotting. Coughing or coughing up blood, as well as other breathing problems such as emphysema and pneumonia. Lungworm also cause heart problems and in extreme cases heart failure, as well as seizures.

Diagnosis

Worm count

Natural Prevention for Worms

When it comes to worms ... one thing is for sure! Prevention is better than cure! Anthelmintics are a class of drugs used to treat parasitic worm infections. Unfortunately due to an unnecessary overuse of these drugs, we are now seeing a rise in anthelmintic resistance.

These drugs are routinely used when there are not worms present. It makes more sense to use natural prevention and routinely screen for worms via a worm count

(recommended every 3 months) to see if worms are present and if caught in a timely manner, then they can then be dealt with.

Naturally preventing intestinal worms is much easier than you would think and is also much safer than using drugs unnecessarily. There are lots of ways to prevent intestinal worms and as it's natural, you don't have to just use one method you can use a few together and vary them.

What to use;

- **Allitech capsules** – (available from [Dulwich Health](#)) - 190mg daily – this helps clear ALL parasites or Allitech Liquid

From a Member: Allitech liquid lasted 4 months and 3 weeks 1 teaspoon a day for 2 medium sized dogs and no positive worm counts 😊

- **VermX** – (available from [Verm-X](#)) herbal biscuits (fed every day, quantity depends on your dog's weight) or liquid (added to your dogs food for 3 consecutive days each month)
- **Raw, ground pumpkin seeds** (available from all good health food shops) added to food is a great preventative, pumpkin seeds are from the GOURD family they contain an amino acid call cucurbitin this paralyzes and eliminates worms from the intestines. Grind seeds and give ¼ tsp per 10 lbs of weight once or twice a day until the parasites are gone. Pumpkin seeds are safe for pregnant dogs.

From a Member re worming Puppies

I've just 'naturally reared' my first litter of Dobermanns. Mum is completely raw and chemical free. I sent off for Wormcount before breeding and during pregnancy. When the pups were a few weeks old I had a scare as I read the dam can release stored worm eggs and pass these to the pups through her milk. I almost resorted to chemicals wormers. I held on, gave a few days of crushed pumpkin seeds to the pups as a 'just in case', and did a Worm Count at 6 weeks for all pups and mum. All was clear so I'm so happy I held my nerve. I'm advising my new owners to do counts every 3 months for at least a year.

- **Grapefruit seed Extract** – (available from [Higher Nature](#)) - added to drinking water or onto food
- **Fresh garlic** - Feed half a teaspoon per 10kg of dog, always use fresh garlic, chop and leave to sit for 15mins to release the allicin. Allicin is a compound in garlic that offers many health benefits.

Do not feed garlic to puppies under 6 months, pregnant or whelping bitches and Japanese breeds, or dog's sensitive to sulphur containing compounds. Always check safety with other medications.

If you research natural wormers – there are loads and loads of other suggestions, like using; Meats or treats with fur still attached, grated fruits and vegetables, pineapple, pomegranate, coconut, apple cider vinegar. However, these methods are far from fool proof and should not be relied upon solely. Unfortunately, Members who routinely use these “other suggestions” are the ones whose dogs have had positive counts for worms when worm testing 😞

CLEARING INFESTATIONS if you have a positive worm count !!!

[Allitech Liquid](#) 5ml twice daily for 2 weeks and then retest with a worm count

Works every time as many members who have used it will vouch for!

Grapefruit seed Extract - For parasites such as giardia or minor intestinal worm infestations, use 10-15 drops of GSE per 10 pounds of body weight, up to 3-5 times a day – amazing stuff! GSE has also successfully been used to treat Fox Lungworm as well.

.... and finally – WHAT is a WORM COUNT!

As many of you have used the FECLAB worm kits that we have sold via our Sofa Shopping events, I contacted FECLAB for some info.....

Worm Counting.....

Faecal Egg counts Explained

Faecal Egg Count (FEC) is a method of determining how many internal parasite Eggs are present in a particular dung sample. It may also be possible to determine the different types of worms or other parasites present. The information on both the number and type of parasites can be used to determine whether or not an anti-parasitic treatment is required.

If an animal has internal parasites the eggs produced by the adult parasites are often passed out in the dung. If eggs are found in a fresh dung sample it shows that worms are present in the animal.

The number of eggs found can provide a useful indication of the level of parasite infection, so a high egg count would suggest a high level of adult parasites in the animal.

What Feclab do with your sample

A measured amount of the dung sample is added to a measured amount of a solution (a flotation fluid) that allows the parasite eggs to float to the surface. The mix needs to be carefully measured so the results can be translated into a final ‘eggs per gram’

(or egg). The dung and the solution are mixed well and then strained through a sieve or cheesecloth to get rid of as much debris as possible. The filtered solution is then stirred again and a small sample drawn off with a syringe or pipette for examination right away (eggs will start to float to the top as soon as the mix is left undisturbed). The sample is placed into a counting slide which normally has two chambers, each with a grid etched onto the top surface. One chamber is filled, the solution is stirred again and then the second chamber is filled.

The sample is then allowed to stand for a short while allowing the eggs to float to the surface where it is easier to see them under a microscope.

Eggs that can be seen under the etched grid are then counted and identified, as necessary.

The quantities of dung and flotation fluid that are mixed together determine the multiplication factor that is applied to the egg count result to give a final 'eggs per gram'.

How often should you do a fecal worm and Lungworm count?

Every 3 months as a standard, if the owner is not happy with a behavioural change, then test as soon as they notice something is wrong.

A word of advice from FECLAB - I would advise anyone who has a puppy with Diarrhoea to test for Giardia it can be a killer in puppies, I would say always have a test kit handy if you are having a litter of pups, it gives a result in 5 minutes.

What is Giardia?

Giardiasis is an intestinal infection in humans and animals, caused by a microscopic protozoan parasite.

Statistics say 50% of puppies and younger dogs will suffer from Giardiasis in their lifetime!

Giardia is not a "worm, bacteria or virus."

How do dogs get Giardiasis?

A dog becomes infected with Giardia when they swallow the cyst stage of the parasite. This could be through water, grass, or any area that other infected animals have been. In dogs and cats and even horses that have a weaker immune system i.e. young dogs, kittens and foals, Giardia can be fatal if not detected and treated in a timely manner.

Once infected, Giardia starts its transformation and some transform into the cystic form. Following this stage the cyst attaches to the intestinal wall of the animal to feed. If sufficient numbers are present then clinical signs of damage to the intestinal wall will develop. Eventually, the dog passes the infectious cysts in its Faeces.

Usually, the time it takes from ingestion of cysts to passage in faeces is 5 to 12 days in dogs and 5 to 16 days in cats. Giardia is very difficult to detect in a standard faecal Egg Count as it is inconsistent when shedding.

This is why the Giardia Antigen Rapid Test is used. Giardiasis can be transmitted by eating or sniffing the cysts from contaminated ground, or by drinking contaminated water.

Common Signs That Giardia is present:

- Giardia infection in dogs may lead to weight loss
- Chronic intermittent diarrhoea
- Fatty stool.
- The stool may range from soft to watery,
- Infected dogs tend to have excess mucus in the faeces. • Vomiting may occur in some cases.

It is important to note that not every dog or cat will show all the clinical signs from Feclab : Kits come with all the instructions and tools needed, to carry out an accurate test for Giardia at home.

If the test shows a positive result then you should contact your vet, who may recommend a course of treatment, usually panacur.

This however will be dependant on: your vet, the clinical signs of your pet and your pet's current or previous health concerns.

If detected a good chlorine bleach dilution/ disinfectant, should be used and all bedding, toys and bowls washed. Faeces should be picked up and the area washed down to lower the chances of reinfection.

If an animal is diagnosed with Giardia it can very dangerous for people suffering from Aids, cancer or undergoing chemotherapy.