



Bayer HealthCare
Animal Health

Lungworm – is your dog at risk?

Did you know that the lungworm parasite
A. vasorum can be found in slugs,
snails and even frogs that you find
in your garden?



advocate®

Is your dog inquisitive?

Has your dog ever eaten slugs, snails or frogs, either on purpose or by accident... and would you know?

Are foxes, slugs and snails present where you live or where you walk your dog?

If your answer is yes to any of the above questions then your dog could be at risk from a potentially life-threatening lungworm called *Angiostrongylus vasorum* which is spread by slugs, snails and occasionally frogs. Foxes can also become infected and they play a role in the spread of infection.



Lungworm – a widespread threat

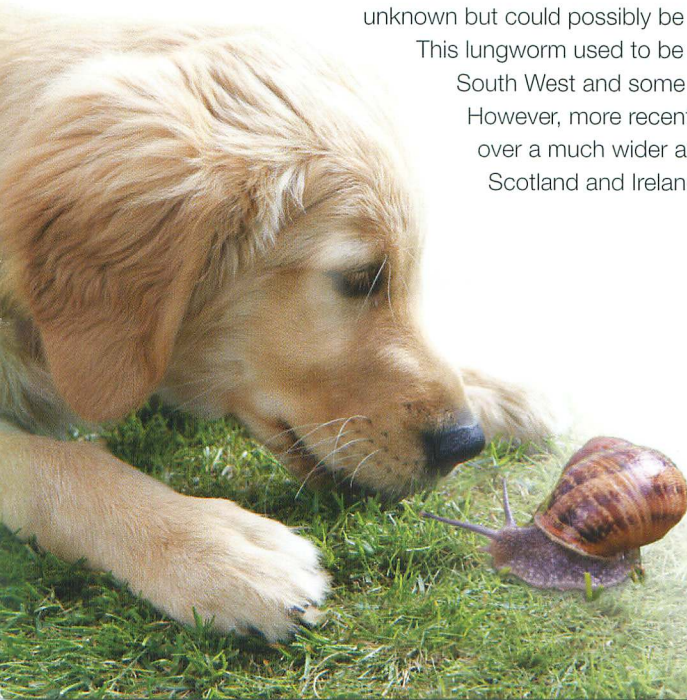
Lungworm is a life threatening disease and with cases being more widely reported it's a problem that appears to be on the increase.

The disease, known as angiostrongylosis, is caused by a type of lungworm that

is becoming more widespread in the UK – the reason for this is unknown but could possibly be as a result of global warming.

This lungworm used to be confined to South Wales, the South West and some areas of the South East.

However, more recently cases have been diagnosed over a much wider area throughout the UK, including Scotland and Ireland.



How does my dog become infected?

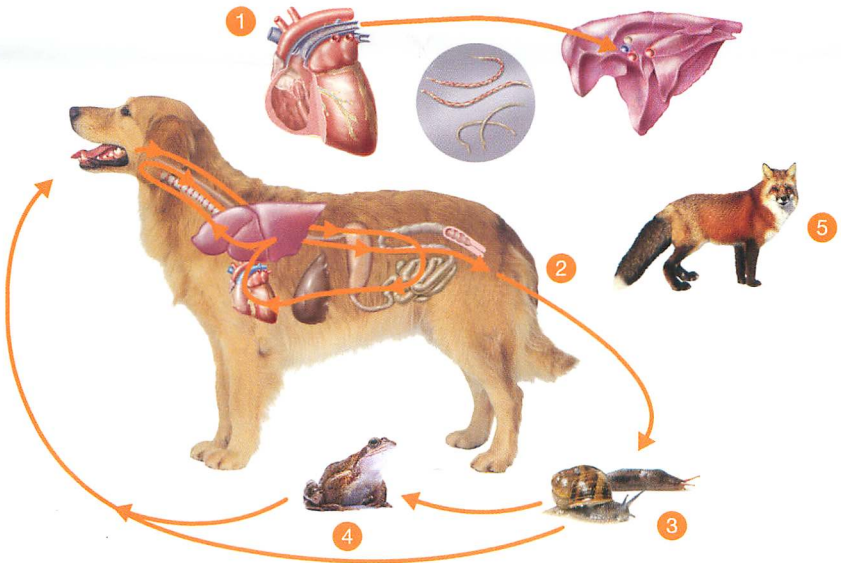
For dogs to become infected they have to eat infective larvae. These may be present in slugs, snails, and sometimes in frogs too. A dog has to eat infected slugs, snails or frogs to become infected with lungworm.

Some dogs might not eat slugs and snails on purpose, but they may do so by accident – e.g. when a slug or snail is sitting on a bone or a favourite toy!

In fact research has shown that infective lungworm larvae can also be released from the slug or snail (in the slimy trail they leave behind)*. So larvae could potentially be found wherever slugs or snails have left their trails such as puddles and outdoor drinking water bowls or even on your dog's treats or toys. You should also keep in mind that various types of slugs and snails, big and small, can carry larvae – not only the species shown in this leaflet!



Life cycle of *Angiostrongylus vasorum*



1. Adult worms are found in the heart and pulmonary arteries. The worms lay eggs which hatch into larvae and pass into the airways of the lung.
2. The larvae are then coughed up and swallowed, passing out in the dog's poo.
3. Slugs and snails then swallow the larvae and pose a threat to young and inquisitive dogs, though dogs of all ages can be affected.
4. Frogs can also be a part of the lungworm life cycle.
5. Foxes are natural hosts for lungworm and are also responsible for the spread of the disease.

What are the symptoms?

When this lungworm gets inside a dog it can result in a number of quite different symptoms, some of which are easily confused with other illnesses. Your dog could present with one or more of the following symptoms if infected with lungworm:

1. Breathing problems or coughing, tiring more easily
2. Poor blood clotting leading to excessive bleeding from minor wounds, nose bleeds, bleeding into the eye, and anaemia (paleness around the eyes and gums)
3. Behavioural changes, seizures (fits), spinal pain, weight loss, loss of appetite, vomiting and diarrhoea.

Younger dogs up to 2 years are more susceptible to a lungworm infection – most likely due to their inquisitive nature. However, any breed at any age can be at risk.

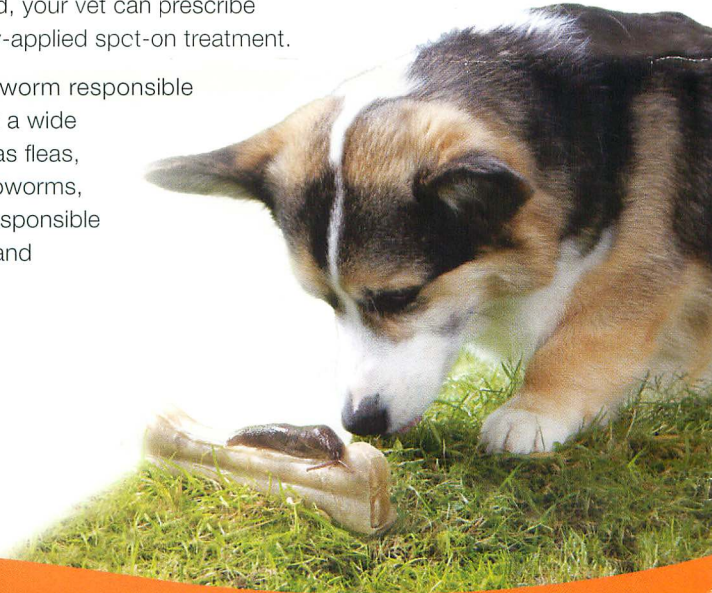
If you notice any of the symptoms described above or if it seems your dog may be at risk, it is important that you talk to your vet. Early diagnosis and treatment will give your dog the best chance of a complete recovery.

Treating angiostrongylosis

If angiostrongylosis is suspected, your vet can prescribe your dog an innovative, monthly-applied spot-on treatment.

This will effectively kill the lungworm responsible for the disease, as well as treat a wide range of other parasites, such as fleas, roundworms, hookworms, whipworms, heartworm (*D.immitis*), mites (responsible for some ear diseases, mange and demodicosis) and biting lice.

Just ask your vet for advice!



This information has been provided by Bayer, manufacturers of



*Barçante, T.A. et al.; *Angiostrongylus vasorum* (Baillet, 1866) Kamensky, 1905: emergence of third-stage larvae from infected *Biomphalaria glabrata* snails. Parasitol Res (2003) 91: 471-475.