

Dog Tips

Cat Tips

Watch Out for This Obscure Seasonal Freeloader

Does your pet love frolicking in these types of places? Then keep watch for this often overlooked infection that can cause generally mild but occasionally severe symptoms. Nope, not heartworm. It's more obscure, but certainly worth knowing about in case of exposure.

Reviewed by <u>Dr. Becker</u>

STORY AT-A-GLANCE

- Lungworms are parasites that infect the lungs and tracheas of pets. Dogs and cats that roam freely outdoors in certain geographic locations are at greatest risk of exposure
- Symptoms of infection depend on a variety of factors and can range from mild coughing to significant lung disease
- Lungworm disease can mimic other respiratory diseases, so it's important to receive an accurate diagnosis
- Conventional treatment of lungworm disease includes anti-parasitic drugs. Integrative veterinarians also use beneficial alternative therapies to treat lungworm patients

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Lungworms are parasites that have the ability to infect the respiratory tracts — the lungs and windpipes (tracheas) of dogs and cats.

There are several different parasites that fall into the category of lungworms. Some types infect dogs, some infect cats, and some can infect both dogs and cats.

Pets who roam freely outdoors in certain geographic locations in North America and elsewhere are at highest risk of acquiring lungworm disease. As an example, the cat lungworm (Aelurostrongylus) is found throughout the southeastern U.S. According to Dr. Kathryn Primm, writing for dvm360:

"Lungworms' geographic range may be expanding — which may be related to global warming and associated animal movement, vector adaptations, and changes in wildlife habitat and numbers — or heightened clinical awareness and confirmation of these infections in domestic cats may be occurring.

Since the problem may be growing, it is important for all practitioners who are treating cats be aware of this often missed pathogen."¹

How a Lungworm Infection Occurs

Infection typically happens when a dog or cat is exposed to a host animal that carries the parasite, so pets who hunt and eat prey outdoors are at risk, as well as those who drink from ponds or free standing water that may contain the larval stage of the worm.

Once ingested, the worm larvae travel out of the intestines via the bloodstream and then to the lungs, where they grow into adult worms and lay eggs.

In the case of the tracheal worm (Oslerus osleri), infection in dogs can be transmitted directly from the mother to her litter while she's licking her pups, or if they come in contact with her infected feces.

Many lungworm parasites are found near lakes where crayfish, snails, and slugs are hosts.

Raccoons eat crayfish and snails, so a dog who comes in contact with a raccoon or raccoon poop can be exposed. Cats are more likely to acquire a parasite when hunting birds or small mammals that have eaten infected snails.

Significant lungworm infections are most often seen in heavily infested pets under two years of age.

While there are many species of lungworm that can infect an animal's lungs, the most common parasite seen in dogs is the tracheal worm, Oslerus osleri. In cats, two of the most prevalent worms are Capillaria aerophilaand Aelurostrongylus abstrusus.

Symptoms of a Lungworm Infection

Symptoms of a lungworm infection depend on the specific type of parasite your pet has been exposed to, how long he or she has been infected, the severity of the infection, and your pet's immune system response to the presence of the parasites.

Pets with mild infections often have no symptoms, or they may experience some mild coughing, lethargy, exercise intolerance, or weight loss.

In severe infestations where there are large numbers of larvae in the airways, complications can include shortness of breath, bronchitis, emphysema, fluid build-up in the lungs, and even pneumonia.

Interestingly, dogs that have recovered from lungworm disease are thought to have some level of immunity against future exposure. This is quite rare in that it doesn't happen with other parasitic infections.

Diagnosing a Lungworm Infection

Your veterinarian will take a complete medical history on your pet, and perform a physical exam that will include listening to the lungs with a stethoscope. A complete blood count (CBC) and chest X-rays will be needed, along with a fecal exam to check for the presence of worm ova or larvae.

Respiratory secretions will also be checked for ova or larvae, using a procedure called a transtracheal wash. In addition, a test will be performed to rule out heartworm disease.

Since lungworm infections can masquerade as other common feline diseases, including pulmonary toxoplasmosis, respiratory mycosis, and feline asthma, it's important to get an accurate diagnosis. Primm offers the following guidance to veterinarians:

"In any cat presented for evaluation of signs suggestive of respiratory disease, lungworms should be considered.

To better find lungworm infections, veterinarians should consider a Baermann fecal migration technique for stool sample examination, be watchful for trichurid eggs in any feline fecal sample, and be careful to discern between whipworm and capillarid infections."²

Treatment Options

The traditional treatment for lungworm is an anti-parasitic drug. Integrative veterinarians also use beneficial adjunctive remedies, including ozone therapy, essential oil inhalation therapy (the protocol designed by a veterinarian trained in using essential oils this way), oral cat's claw, and turmeric.

Rechecking your pet's stool samples is an important step in insuring the lungworm infection has been completely resolved. For additional information on lungworms and lungworm disease, visit the Companion Animal Parasite Council webpage.

Sources and References

^{1, 2} dvm360, March 21, 2016