## A big word for a fungal infection cause by tiny spores

#### **Overview**

You might be surprised to know that very dirt we walk on harbors a fungus called *Histoplasma capsulatum* that can cause a chronic, noncontagious infection called histoplasmosis in animals and humans. Histoplasmosis is found globally and most commonly affects dogs and cats.

While this fungus can be found anywhere, it likes warm, moist environments best, and thrives especially well in soil that contains bird or bat waste. Histoplasma capsulatum is commonly found in the Mississippi River and Ohio River valleys in the U.S.

So how could your cat become infected with histoplasmosis? Most likely by inhaling fungal spores, which then set up camp in the lungs and multiply, causing a localized infection. Your cat can also become infected through oral transmission, where the organism then causes an infection in the intestines. The <u>fungal infection</u> may stay put in the lungs or the intestines, or it may spread to other parts of the body, causing a generalized or systemic infection, affecting the lymph nodes, spleen, liver, bone marrow, skin, or eyes.

Cats that have prolonged exposure to soil with high levels of the fungus are thought to be at greater risk of contracting the disease. Since the organism is found outdoors, in soil, most cats that become infected are those that spend time outside.

### **Symptoms**

The symptoms of histoplasmosis are unpredictable and often nonspecific. They can include:

- Mild fever
- Depression
- · Weight loss
- Loss of appetite
- Labored breathing
- Persistent diarrhea
- Tarry or bloody stools
- Straining when defecating
- Draining skin lesions
- Eve infection
- If the disease has spread and become

generalized, your veterinarian may find that your cat's liver, spleen, and/or lymph nodes are larger than normal and that your cat's joints have been affected.

#### **Diagnosis**

Your veterinarian will perform a thorough physical exam of your pet and take a complete history of his activity and places he visits.

Because the symptoms of histoplasmosis are often vague, your veterinarian may recommend the following screening tests to help support a tentative diagnosis of histoplasmosis:

- Chemistry tests to evaluate kidney, liver, and pancreatic function, as well as sugar levels
- A complete blood count (CBC) to rule out bloodrelated conditions
- Electrolyte tests to ensure your cat isn't dehydrated or suffering from an electrolyte imbalance
- Urine tests to screen for urinary tract infection and other disease, and to evaluate the ability of the kidneys to concentrate urine
- Specialty ELISA or PCR testing of the blood and urine
- Cytology and/or histopathology; these tests can help to diagnose histoplasmosis by identifying Histoplasma capsulatum microspcopically, with special stains

Additional tests may be added on an individual basis. Your veterinarian will recommend a course of action that is specific to your pet.

#### **Treatment**

The success of your cat's treatment depends on his physical state, the diagnostic tests results. Additionally, if the disease has spread from the lungs or intestines to other areas of the body, it could have a negative impact on your cat's prognosis.

Thanks to new advances in antifungal drugs, treatments with fewer serious side effects than drugs used in the past are now available. Medication may need to be administered for as long as 6 months in







# Histoplasmosis in cats

order to successfully treat this disease. Your veterinarian will work with you closely to monitor your cat's tolerance to the medication and response to treatment, and may also recommend routine blood tests and other diagnostic tests at specific intervals throughout treatment.

#### **Prevention**

Limiting your cat's exposure to high risk areas is the best way to prevent him from becoming infected with histoplasmosis.

If you have any questions or concerns, you should always visit or call your veterinarian – they are your best resource to ensure the health and well-being of your pets.



