# Valley Fever (Coccidioidomycosis)

## What is Valley Fever?

Valley Fever is caused by a fungus that lives in the desert soil. Dogs acquire Valley Fever by inhaling these fungal spores in the dust raised by the disturbances such as, but not limited to digging, wind, construction. The dog may inhale only a few spores or many hundreds. Once inhaled, the spores grow and mature and produce new cells, spreading the infection. The sickness Valley Fever occurs when the immune system does not kill the cells quickly and they continue to spread in the lungs and sometimes throughout the animal's body. Only about 30% of dogs that inhale spores become sick.

#### **Symptoms**

The most common symptoms for pulmonary (of the lung) infection are: coughing, fever, weight loss, lack of appetite and lack of energy. A dog may have one or multiples of these symptoms. When the infection spreads outside of the longs it cause disseminated (spread) disease. The most common symptom of disseminated disease is lameness, but after the infection has disseminated it can affect any organ. Other symptoms that may occur, but not limited to: seizures, swollen lymph nodes, eye inflammation, pain or weakness, soft abscess like swelling under skin, non-healing ulcerated skin lesions.

# **Diagnostics**

In order to do a complete work up and depending on the symptoms x-rays and bloodwork are warranted. Sometimes biopsies will need to be done in order to determine skin lesions. There is a specific lab test for Valley Fever and though highly reliable can show false negatives. Please consult your veterinarian for the best choices of diagnostics regarding your pet.

#### **Treatment:**

Valley Fever is treated with an anti-fungal. The most commonly used is Fluconazole, but occasionally Itraconazole or Ketaconazole have been used. There are other drugs on the market that can be used and are best discussed with your veterinarian to determine if they are acceptable. Possible side effects of medications are: GI upset, liver or kidney elevations (these organs help to process the medication), lethargy or loss of appetite. There are numerous side effects that are less likely and like people each patient will respond differently.

Length of treatment will vary depending on symptoms and response to medications, but are typically lengthy. Minimum treatment is 6 months to a 1 year. However with disseminated disease, sometimes lifelong treatment is warranted. Occasional liver support is recommended to help prevent damage of the liver with long term medications.

## **Medication Cost and Resources:**

Fluconazole can be a costly medication. Many local veterinarians will call in a prescription to a compound pharmacy which is significantly less expensive. Prices do fluctuate some. Frequently used pharmacies include Roadrunner, Diamondback and Pet Health Pharmacy, all in Phoenix. Dosage does depend on weight, a typical reported cost with the compound pharmacies is \$30 per month for smaller dogs up to \$60 per month for very large dogs.

#### **FAQS**

<u>Is Valley Fever contagious to me or my other animals</u>? No. Valley Fever is inhaled. It can be possible for only one dog to get Valley Fever in a multi dog house. It all depends on the dog's immune support.

<u>Will my dog recover from Valley Fever</u>? Depending on your dog's health and response to treatment, Valley Fever can go into remission. Occasionally treatment is needed lifelong depending on response to treatment or symptoms of disease. Occasionally very sick dogs and immune compromised patients have a hard to time responding to treatment and euthanasia is warranted for quality of life.

<u>Can Valley Fever relapse?</u> Yes Valley Fever has known to relapse in dogs, especially with disseminated disease. If relapse occurs, occasionally patients will not respond to the same anti-fungal or occasional lifelong treatment is warranted.

<u>Is Valley Fever preventable</u>? At this time there is no sure fire way to prevent Valley Fever except to completely avoid any areas where it is found. However there are studies being done to make a vaccine to either prevent Valley Fever or lessen the effects of the disease.

If you are looking for further information please check out the following website: https://www.vfce.arizona.edu