

Valley Fever in Animals

1. Valley fever is caused by a fungus that lives in the desert soil in the southwestern United States
2. Dogs comprise the majority of valley fever cases in animals
3. Approximately 6-10% of dogs living in Pima, Pinal, and Maricopa counties in Arizona will become sick with Valley Fever each year.
4. Not all dogs who breath in the spores will become sick
 - a. About 70% of dogs who inhale Valley Fever spores are asymptomatic and possibly immune to the disease afterwards.
5. As part of its life cycle, the fungus grows in the soil and dries turning into strands of cells that are inhaled.
6. Once inhaled the spores grow and turn into endo spores. This process continues and spreads the infection in the host until the immune system surrounds and destroys it. The sickness Valley Fever occurs when the immune system does not kill the spores quick enough and they spread.
7. There is no way to prevent valley fever
 - a. You cannot prevent Valley Fever but you can limit the likelihood of exposure by avoiding activities that generate dust. Such as hiking, digging, sniffing.
8. A vaccine is under development
 - a. It is possible a vaccine will be available in the future to prevent Valley Fever or make it only a very mild illness.

Now that we know what Valley Fever is, how do we treat it?

Valley Fever diagnostics and treatment protocol

COCCI PROFILE (CBC, CHEMISTRY, T4, COCCI TITER)

Based on presentation and clinical signs, radiographs, and CT may be indicated. However, bloodwork tends to be important in making the diagnosis. The Valley Fever Titer is not always positive

TRIAL OF FLUCONAZOLE

A trial of fluconazole should be considered in symptomatic patients based off of blood work results. If patient shows improvement during the trial of fluconazole, treat the patient as a Valley Fever patient regardless of titer results.

TREATMENT PLAN:

After 30 days of treatment blood work will be ran to look for changes in liver values and white blood cells. These values will help us determine severity of the disease, future dosing, additional medications needed, and possible duration of treatment.

In 3-4 months, your doctor may perform recheck of the blood work and Cocci (Valley Fever) titer. Blood work will be repeated to monitor values every 4-6 months moving forward. Valley Fever treatment can range anywhere from 6 months or longer. Treatment is discontinued when there are no changes in the titer (1:4 or below) for 2 consecutive blood tests in conjunction with a normal CBC and globulins or one or two years with no symptoms. Your doctor will recommend a recheck Cocci (Valley Fever) titer 3 months after discontinuing Fluconazole, to make sure that it is not returning.