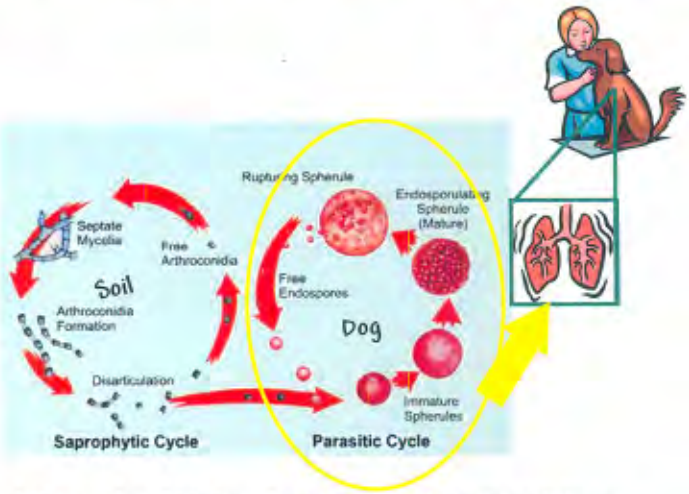
# Coccidioidomycosis (Valley Fever) in Dogs

- Valley Fever is a common illness in dogs in southern Arizona's deserts
- It is caused by a fungus inhaled from the soil
- It usually infects the lungs first and may disseminate to other areas from there




**Life cycle** of Valley Fever fungus in soil and dogs

## Common Symptoms

- Coughing or difficulty breathing
- Fever
- Lack of appetite
- Lack of energy (lethargy)
- Lameness with involvement of bones, usually in legs

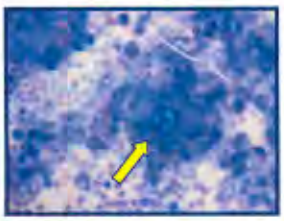
- The fungus grows as a mold in the soil, especially when it rains. It is invisible to the naked eye
- When the soil dries out, the fungus starts to form spores (*arthroconidia*), which are dispersed in the air. Activities that raise dust raise risk of infection
- Inhaled spores change their form and develop into spherules. Each rupturing spherule produces hundreds of endospores which mature into more spherules, causing the infection to expand rapidly.
- Infection can spread via blood or lymphatics to sites outside the lungs. Most dogs and people have immune systems that stop this cycle and control the infection quickly

## Diagnosis of Valley Fever

- Veterinary examination
- Blood tests – blood counts, serum chemistries, VF serology
- X-rays – chest, painful bones or joints
- Cytology and/or culture – laboratory tests to identify the fungus in your dog's lesions

Valley Fever bone lesion below the knee in a dog

Spherule in tissue sample from a dog



## Prognosis

- Valley Fever can be a severe or mild disease in dogs
- Most sick dogs need treatment with medication
- Most dogs recover with treatment


**Valley Fever Center for Excellence**

**University of Arizona, Tucson, AZ**