Paw Prints the Magazine

Stuff To Do & Places To Go
- Calendar of Events
- Event Photo Galleries
- Off Leash Parks
- National Parks & Forests
- State Parks
- Pet Friendly Lodging
- Hotel Reviews

Departments
- Features
- Stuff We’ve Tried
- What’s Up Doc
- Behavior / Training
- Nutrition
- Travel Tails
- Ask PJ
- Stuff We’ve Read
- Kid Stuff
- Laws for Paws
- Expedition Paw Prints
- Towser Talk
- What We Think
Coccidioidomycosis: It’s As Bad As It Sounds

If you're new here, you may want to subscribe to my RSS feed. Thanks for visiting!

By Janice Arenofsky

You’re taking a road trip with your companion animal family. As you drive from Tucson to Phoenix, you decide to stop for a bathroom break. Zeke, your German Shepherd-mix is excited—he wants to race around in circles by the vending machines, but the leash prevents that. So he does the next best thing: he digs with his front paws,
releasing some of that pent-up energy.

Zeke’s nose is covered with dust, but that’s no big deal, you think.

And that would be the end of the story were it not for coccidiodomycosis, or valley fever. Endemic to the Southwest, especially in Arizona and southern California, valley fever is transmitted via airborne spores. You cannot see them, but when you breathe normally in an area such as the “Valley Fever Corridor”—the 100 miles or so paralleling Interstate 10 between Tucson and Phoenix, you—and your pets—run the risk of contracting the fungal disease.

Dogs are more vulnerable to the cocci spores than people—maybe it’s because they are lower to the ground than humans. Two-to-three weeks after Zeke returns home from vacation to his normal activities, he starts to cough. Then he goes off his food. You take his temperature and find he has a slight fever. That calls for a visit to the veterinarian, who chances to ask you if you’ve taken Zeke out of state lately. You mention Arizona, and luckily, the veterinarian has recently read a journal article about valley fever. The veterinarian suggests running a valley fever test, and you agree to it. But that’s when your luck runs out.

The test comes back negative. It’s nothing to cheer about, though, since many people and pets at the start of the disease do not produce enough antibodies to react positively to the test. Your vet does not know this yet, but Zeke is showing a false negative, and his condition worsens despite the antibiotics the veterinarian prescribes for what he believes is a bacterial infection.

This is what coccidiodomycosis looks like under a microscope.

Misdiagnosis is a common outcome when dogs contract valley fever, especially those who visit endemic regions but live outside of the Southwest. Veterinarians in other parts of the country usually know little or nothing about the disease. In the above case, Zeke probably became infected after his digging disturbed the soil at the highway rest area. He inhaled spores into his lungs, which then traveled to the bloodstream and various organs in the body.
If Zeke is to receive proper treatment for valley fever, he will require an antifungal medication such as fluconazole. Although this drug has serious side effects that can compromise the kidneys or liver, it is the only practical remedy to fighting valley fever. Zeke will probably need to stay on the drug for a minimum of six months, and even so, he may relapse. Current drugs do not kill valley fever; they only curb its spread.

The real problem is there is as yet no total cure or vaccine for valley fever. Since the annual statistics show that valley fever affects less than 200,000 people in the United States (60 percent of them in Arizona), the federal government designates the disease (also classified as a bioterrorist weapon like anthrax) as an orphan disease. Although valley fever is eligible for federal grants, orphan diseases like coccidioidomycosis do not generally attract private investors in new drug research and development. Big drug companies realize they would not see a huge return on their investment due to the relatively small target population.

That is what is happening now to Nikkomycin Z, an experimental, possibly curative, antifungal drug that the University of Arizona is testing for safety and effectiveness. So far the results have been extremely encouraging, but, according to John Galgiani, M.D., director of the Valley Fever Center for Excellence at the University of Arizona, Tucson, even if the drug is a miracle cure, it will take $60 million and five years before the FDA can approve it and the VFCE can secure enough financial backers to produce and market the drug.

The nonprofit Arizona Victims of Valley Fever (AVVF)—a grassroots organization of activists, fundraisers and survivors advocating for pets and people—says that although the State of Arizona has officially recognized the disease as its “own,” legislators have not appropriated any funds towards its prevention or a cure.

In light of the optimistic results of the FDA Phase II Dog study testing Nikomycin Z, the state’s inertia is puzzling at best. Lisa Shubitz, DVM, who heads the Tucson-based clinical trial, has so far enrolled seven dogs with confirmed diagnoses of valley fever. They received Nikomycin Z twice daily, according to body weight. Results of the study so far indicate no negative side effects, a good improvement in condition and possible resolution of the disease in several dogs.

Ironically the results come at a time when seasonal dust storms are plaguing Phoenix. Reacting to national headlines regarding an immense July 5 haboob that stirred up an oceanful of dust, Pat White, founder and director of AVVF (www.arizonavictimsofvalleyfever.org), says she is worried: “The spores will linger for days to weeks in the air,…coating everything and still just as dangerous to humans and animals.”

White, who struggles with a chronic form of the disease, empathizes with pet owners whose dogs often die from complications of valley fever and/or the current antifungals. Nikomycin Z gives White and others hope. “It is going to take everyone and every business in the state of Arizona…to eliminate this disease,” says White.

For more information on valley fever, go to www.vfce.arizona.edu.

Tags: arizona, coccidioidomycosis, phoenix, tucson, Valley Fever
Spay and neuter programs are a crucial part of ending pet overpopulation.

SNKC needs your HELP.
DONATE NOW!
Adopt a Pet

Find a pet to adopt!

- Dogs
- Cats
- Other

Zip / Postal: [ ] or by city (ex: Miami, FL)

Distance: [ ] Less than 50 miles (80 km)

- Breed
- Any

- Sex
- Any

- Color
- Any

- Hair
- Any

- Age
- Any

Here Kitty Kitty!

- Popular
- Comments
- Tags

To booth or not to booth? That is the question.

PawPrintsTheMagazine.com partners with the World’s 2nd largest pet adoption site


Tucker’s Insurance Policy

williams: Don’t believe anything WAYNE PACELLE says either!!...

eileen: I do not believe a word that comes out of vicks mo...

Leslie Munroe: Well that's the most ridiculous thing I have ever...
LAE: Asking me to give up my cat would be equal to ask...
Blogroll

Around The Water Bowl
Newsletter

© 2009 Paw Prints the Magazine.
All Rights Reserved.