# Sarcoptic Mange (Scabies)

### **ABOUT THE DIAGNOSIS**

Dogs (Canine Scabies): Sarcoptic mange in dogs, also called scabies, is a skin disease caused by a mite (microscopic parasite) known as Sarcoptes scabiei, var. canis. This mite infests the skin of dogs, but it is potentially contagious to humans (see Signs to Watch For), ferrets, and cats as well, causing extreme itchiness. Sarcoptes mites are too small to be seen with the naked eye. They live on the surface or inside the superficial layers of the skin of an infected dog. In most conditions, mites generally do not live more than a few days off the dog's body. Therefore, scabies is usually spread by direct contact with infested dogs and less commonly from contact with an infested environment. It can take up to 3 weeks from the time a dog is exposed to when it starts to show signs of itching, so it is not always easy to pinpoint where or when the dog got the mites. Dogs seem to have an allergic reaction to the mites because only a few mites can make a dog itchy all over its body, and the itchiness can continue for days or a week or two even after treatment.

Cats (Feline Scabies): Feline scabies is caused by a mite known as Notoedres cati; it is in the same family as the mite that causes canine scabies. This mite generally only infests cats, and therefore, feline scabies is rarely contagious to people or dogs. Feline scabies infections are common mainly in cats that live outdoors or with many other cats in certain urban areas in the United States, especially in warm regions such as Florida and Louisiana.

Diagnosis of sarcoptic mange in dogs and cats is made by performing one or more superficial skin scrapings. This simple test involves the veterinarian's use of a blade to scrape a sample of the top layers of the skin to collect adult or immature mites, mite eggs, or mite fecal matter onto a slide, which is then examined under a microscope. The test is superficial and painless, and results are generally available the same day. Mites are usually seen on skin scrapings from cats with feline scabies, but skin scrapings will usually only show mites in about half of the dogs with canine scabies. Therefore, if skin scrapings are negative in an animal that has the classic signs and is profoundly itchy, veterinarians will often make a tentative diagnosis of scabies and treat for it. Sometimes mites can show up in a fecal exam (examined under the microscope) from the animal that has been chewing on its skin and swallowing them. A blood test for canine scabies is available in Europe but may or may not be available in North America.

## LIVING WITH THE DIAGNOSIS

Dogs: Canine scabies generally affects areas of the dog's skin where the hair is very thin, such as the ear tips (pinnae), elbows, hocks (ankles), and underside (belly and chest), but can spread to affect the whole body. Many changes can be seen in the skin of infected dogs, but none of these changes is specific to scabies—many other skin diseases can cause similar lesions. First, there may be small bumps (papules) that are red in color. These bumps may then crust over and appear yellowish, and the area may become scaly. As the dog scratches and/or chews the areas and causes trauma to the skin over a period of time, there may be hair loss (alopecia), thickening of the skin (lichenification), and darkening (pigmentation) of the skin. Abrasions and sores can also develop with continued trauma to the skin from continued scratching and/or chewing. These may become infected with bacteria. Sometimes the animal's lymph nodes may also become enlarged (lymphadenopathy)

due to immune system response and to secondary skin infections. However, some well-groomed dogs with scabies do not show these common signs; this is called *scabies incognito* or *occult scabies*. They may only show signs of extreme itchiness and some redness and abrasions.

Cats: Extreme itchiness is the main sign of scabies in cats. The ears, head, and neck are the most common areas that are affected; therefore, feline scabies is sometimes called head mange. It can also affect the hocks and tail and then spread to the rest of the cat's skin. Infected cats will have skin changes that include papules, yellow/gray crusts, scabs, scales, hair loss (alopecia), and thickening of the skin (lichenification).

## **TREATMENT**

There are several treatment options that will completely cure the scabies infection. Your veterinarian will recommend a specific treatment plan to kill the mites. Over the last several years, treatment for scabies has become increasingly safer, as the anti-scabies effectiveness of certain prescription drugs for dogs and cats has been better recognized. In addition to treatment(s) to kill the mites, other treatments may be needed. For example, it may be necessary to use corticosteroids (cortisone-like drugs) for a few days (at most) in order to decrease the inflammation and give the animal some relief from itchiness. Antibiotics may be needed if there is a bacterial infection. A medicated bath can help remove the crusts and scales (scabs).

#### D<sub>0</sub>s

- Have other animals with which the dog or cat has (or has had) contact examined to determine whether they need to be treated.
- Wash or throw away all bedding; wash or replace collars and harnesses.
- Clean the environment. Products that kill parasites, such as flea sprays and foggers, are generally effective against scabies; these should be used according to directions and with caution around pets and people.
- Use proper hygiene (wash hands, etc.) after handling your pet.
- Follow the medication plan exactly as recommended by your veterinarian; otherwise the condition may persist and require a longer course of treatment.
- Realize that the initial reaction to the treatment (dying mites in the skin) may trigger a worsening degree of itchiness, but this is to be expected for the first few days after the medication has been given.
- Consider having a second opinion from a veterinary dermatologist if the problem is persisting or if the cause or treatment remains unclear. Your veterinarian can refer you to one of these specialists (directory: www.acvd.org).

#### DON'Ts

 Don't allow your pet to come into contact with other animals and people before or during treatment because your pet may still be contagious.

## WHEN TO CALL YOUR VETERINARIAN

- If the pet continues to be very itchy.
- If the condition seems to be getting worse, not better, several days after the treatment.

- If your pet has a reaction to the medication(s) (vomiting, hives, abnormal behavior, increased itchiness, etc.).
- If you are unable to return for your recheck appointment as scheduled.

## SIGNS TO WATCH FOR

Note itchiness or the development of a rash in family members.
Scabies is contagious to people. The skin may break out with a rash (papules) that may look like mosquito bites, generally on the arms, neck, and belly. These can show up anywhere from 1 to 3 weeks after being exposed to scabies. Concerned persons should contact their physicians.

# **ROUTINE FOLLOW-UP**

 Return for recheck appointments as determined by the initial exam, test results, and response to treatment. The need for rechecks, and their timing, should be discussed at every appointment. Other information that may be useful: "How-To" Client Education Sheets:

- How to Deal with Severe, Self-Inflicted Skin Erosions
- How to Prevent Licking or Chewing at the Skin
- How to Bathe a Dog or Cat Using Medicated Shampoo

Practice Stamp or Name & Address	

Also available in Spanish.