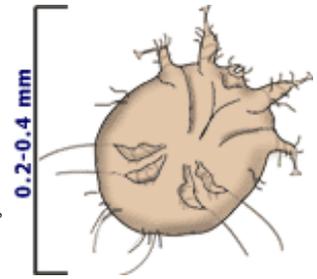


Scabies (Sarcoptic Mange)

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Sarcoptic mange, commonly known as scabies, is caused by the parasite *Sarcoptes scabiei*. These microscopic mites can invade the skin of ferrets and create a variety of skin problems, including hair loss and severe itching. While they will infect ferrets, other animals, and even humans, these mites prefer to live their short lives on dogs. Fortunately, there is a good treatment for sarcoptic mange in ferrets.



Who gets scabies?

Sarcoptes scabiei usually infects dogs, but will also infect ferrets, cats, humans, and fox. Cats, fox, and humans all have their own particular species of mite within the *Sarcoptes* family. Each species of mite prefers one specific kind of host (e.g., dog, cat), but may also infect others. All of these species of mites have a similar life cycle and respond to the same treatment.

What is the life cycle of *Sarcoptes scabiei*?

The mites usually spend their entire life on an animal. The female mite burrows into the skin and lays eggs several times as she continues burrowing. These tunnels can actually reach the length of several centimeters. After she deposits the eggs, the female mite dies. In 3-8 days, the eggs hatch into larvae which have 6 legs. The larvae mature into nymphs which have 8 legs. The nymph then molts into an adult while it is still in the burrow. The adults mate, and the process continues. The entire life cycle requires 2-3 weeks.

The mites prefer to live on an animal, but will live for several days off of the host in the environment. In cool moist environments, they can live for up to 22 days. At normal room temperature in a home, they will live from 2 to 6 days. Because of the mite's ability to survive off of the host, ferrets can become infected without ever coming into direct contact with an infected animal.

What are the signs?

There are two different forms of the disease in ferrets. In the generalized form, there is a patchy or generalized loss of hair and intense itching. Small red pustules often develop along with a yellow crust on the skin. Because of the severe itching and resultant scratching, the ferret's skin soon becomes traumatized and a variety of sores and infections can develop as a result.

The second form of the disease mainly affects the feet, and is sometimes termed "foot rot." The paws become red, swollen, and painful. Again, there may be crusts and often intense itching. In severe infestations, the nails may become deformed or fall out. If left untreated, there may be enough damage to cause the loss of the foot. This form of the disease may look similar to the signs of contact dermatitis, in which the ferret is allergic to something he walks on, e.g., plastic.

The intense itching caused by the sarcoptic mite is actually thought to be caused by a severe allergic reaction to the mite. If the animals are treated and then reinfected at a later time, severe itching starts almost immediately, which indicates the itching may be due to an allergic reaction. However, the standard treatments for allergies generally will not decrease the symptoms of scabies, and will do nothing to cure the disease.

How is sarcoptic mange diagnosed?

Trying to obtain a diagnosis for scabies can be very frustrating. The standard method is to perform a skin scraping and then identify the organism under the microscope. Unfortunately, few ferrets will show *Sarcoptes* mites on any given scraping. Therefore, if a ferret has a positive skin scraping, the diagnosis is confirmed but a negative scraping does not rule out sarcoptic mange. Therefore, most diagnoses are made based on history and response to treatment for scabies.

How is scabies treated?

Although not labeled for use in ferrets, [ivermectin](#) (Ivomec®) is widely used by veterinarians to treat sarcoptic mange in ferrets. Sarcoptic mange may also be treated using 2% lime sulfur dips (Lymdyp™) for 6 weeks or until the mites are eradicated. These dips may discolor the hair, and they have a strong odor.

Ferrets with the foot form of the disease should have the affected nails trimmed. The feet can be soaked in warm water, and the crusts gently removed.

Antibiotics should be administered if there is a secondary bacterial infection.

In addition to treating the affected ferret, all other ferrets in the household should be treated. Clean the environment, including cages, bedding, and other materials having contact with the ferret.

How is sarcoptic mange prevented?

Since the mite can be transmitted from an infected dog, ferret, or bedding, etc., infected animals should be kept apart from other animals in the household, and the environment cleaned.

Can I get *Sarcoptes* from my pet?

Yes, although when humans get *Sarcoptes scabiei* from animals, the disease is generally self-limiting, causing only temporary itching. There is a human race of *Sarcoptes*, which is transmitted from person to person. This human race of sarcoptic mite causes a rash on the wrists, elbows, or between the fingers. In infants, the rash may appear on the head, neck, or body.