What You Need to Know About Scabies

Barb Ogg, Extension Educator

What is scabies? Scabies is an infestation of the skin by the microscopic mite *Sarcoptes scabiei*. Infestation is common, found worldwide, and affects people of all races and social classes. Scabies is very contagious. It spreads rapidly under crowded conditions, especially where there is frequent skin-to-skin contact between people, such as in hospitals, institutions, child-care facilities, and nursing homes.

How does a person get scabies? Scabies are transmitted by direct, prolonged, skin-to-skin contact with a person already infested with scabies. Contact generally must be prolonged (a quick handshake or hug will usually not spread infestation). Household members and sexual partners are likely to become infested. Transmission may also occur by sharing clothing, towels, and bedding, but it is less likely. Caregivers and other persons who work in facilities where residents are infested are also at risk of becoming infested.

How does an infestation begin? An infestation begins when an egg-bearing female scabies mite tunnels under the skin and lays eggs in the burrow. After an incubation time of 3–10 days, eggs hatch into immature mites which develop under the skin.

What are the signs and symptoms of scabies infestation? You will not be able to see the scabies mites. Infested persons will have pimple-like irritations, burrows or a skin rash. Burrows made by the mites are usually found on the hands, wrists and elbows where skin tends to be thin, especially the webbing between the fingers and folds of wrists and elbows. Other common locations are the penis, the breast and shoulder blades. Rash may or may not correspond to where the areas where the mites are burrowing. There is intense itching, especially at night. People with scabies develop sores on the body caused by scratching, which can become infected. Reactions in the elderly may not become inflamed, and these cases may be missed by health care providers.

How soon after infestation will symptoms begin? For a person who has never been infested with scabies, symptoms may take 4–6 weeks to begin. For a person who has had scabies before, symptoms appear within several days. Because of the lag time between initial infestation and symptoms, a person may be contagious for at least a month before being diagnosed. This means that family and close contacts may be infested, even though they do not show symptoms. Someone who sleeps in the same room with a person with scabies has a high possibility of becoming infested. Many physicians recommend all family and close contacts be treated at the same time to prevent reinfection.

Who is at risk for severe infestation? People with weakened immune systems and the elderly are at risk for a more severe form of scabies, called Norwegian or crusted scabies. Scabies is spread more easily by persons who have Norwegian, or crusted scabies than by persons with other types of scabies.

How long will mites live? Once away from the human body, mites usually do not survive more than 48–72 hours. When living on a person, an adult female mite can live up to a month.

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**How is a scabies infestation diagnosed?** Scabies must be diagnosed by a medical doctor (often a dermatologist), who looks at the burrows or rash. A skin scraping is often done to look for mites, eggs, or mite fecal matter to confirm the scabies diagnosis. Even if a skin scraping or biopsy is taken and returns negative, it is still possible that a person may be infested. Typically, there are fewer than 10 mites on the entire body of an infested person. This makes it easy for an infestation to be missed. However, persons with Norwegian, or crusted scabies can be infested with thousands of mites and should be considered highly infectious.

**When should you seek medical advice?** See your doctor if you have signs and symptoms that may indicate scabies or if you believe you’ve had contact with someone who has scabies. Many skin conditions, such as dermatitis or eczema, are associated with itching and small bumps on the skin. Your doctor can diagnose your skin problems and make sure you receive proper treatment. Bathing, over-the-counter preparations, and home remedies won’t eliminate scabies.

**Can I get scabies from my pet?** No. Pets can become infested with a specific variety of the scabies mite, which causes tremendous itching. In animals, this is known as mange (see box below). If a pet is infested with this type of mite, and has close contact with its owner/handler, the mites may bite the owner and cause itching for several days. But, these mites cannot reproduce on humans, so the infestation dies out without the need for medical intervention.

**What precautions should be taken to prevent other people in the household/facility from becoming infested?** Close contact with the infested person should be avoided. If this isn’t possible, close caregivers, contacts and spouses may need to be treated. All clothes, bedding, and towels used by the infested person during the three days before treatment, should be washed in hot water and dried in a hot dryer. Caregivers who must touch infested individuals should wear gloves and long sleeves to prevent mites from getting on their hands and forearms.

**What about treating the home/institution/room?** Insecticidal treatments are not recommended for scabies mites. Instead, take the following actions:
- Launder recently worn clothes, towels, and bedding in hot water and dry in a hot dryer. Continue until the treatment regiment is over. If laundering is impossible, use one of the following:
  - Dry items, like pillows, in a hot dryer for 30 minutes.
  - Dryclean bedding, like wool blankets.
  - Freeze items overnight.
  - Quarantine items in a plastic bag for two weeks.
- Vacuum floors, carpets, rugs, chairs, and other pieces of furniture.
- Disinfect floor and bathroom surfaces by mopping.
- Clean the shower/bath tub after each use.

**Can scabies be treated?** Yes. Several creams or lotions that are available by prescription are FDA-approved to treat scabies. Patients must always follow the directions provided by the physician or the directions on the package label or insert.

**Apply the medication to a clean body from the neck down to the toes. After leaving the medication on the body for the recommended time, take a bath or shower to wash off the cream or lotion. Put on clean clothes and have previously worn clothing and towels washed. A second treatment of the body with the same cream or lotion may be necessary. Pregnant women and children are often treated with milder scabies medications.

**Who should be treated for scabies?** Anyone who is diagnosed with scabies, as well as his or her sexual partners and persons who have close, prolonged contact to the infested person should also be treated. If other family members must be treated, everyone should receive treatment at the same time to prevent reinfection.

**How soon after treatment will the patient feel better?** Itching may continue for 2–3 weeks, and does not mean the infestation is still active. If itching is severe, the health care provider may prescribe additional medication to relieve itching.

**Sources:** Center for Disease Control (CDC), Physicians Guide to Arthropods of Medical Importance, 3rd Ed (Goddard, 2000)

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**Signs of Mange in Pets**

Crusty ear tips and hair loss, particularly on the ears, elbows, legs, and face in the early stages. Later on, hair loss spreads throughout the body. Pets, especially dogs, bite fiercely at themselves to ease the itching. But it is important to take the pet to its veterinarian for diagnosis and treatment of mange. Until the pet is successfully treated, mange mites can continue to bite and cause symptoms for pet owners.