Scabies Fact Sheet

DEFINITION
Scabies is caused by a tiny mite. It is often hard to detect, and causes a fiercely, itchy skin condition. Dermatologists estimate that more than 300 million cases of scabies occur worldwide every year. The condition can strike anyone of any race or age, regardless of personal hygiene.

ETIOLOGY
Scabies is caused by a microscopic mite that burrows in the skin. Within several weeks, an allergic reaction develops causing severe itching; often intense enough to keep sufferers awake all night. It may take up to a month before a person will notice the itching.

Human scabies is almost always caught from another person by close contact. Attracted to warmth and odor, the female mite burrows into the skin, lays eggs, and produces toxins that cause allergic reactions. Newly hatched mites travel to the skin surface, lying in shallow pockets where they will develop into adult mites. If the mite is scratched off the skin, it can live in bedding for up to 24 hours or more.

DIAGNOSIS
The earliest and most common symptom of scabies is itching, especially at night. Little red bumps like hives, tiny bites, or pimples appear. In more advanced cases, the skin may be crusty or scaly.

Scabies prefers warmer sites on the skin such as skin folds, where clothing is tight, between the fingers or under the nails, on the elbows or wrists, the buttocks or belt line, around the nipples, and on the penis. Mites also tend to hide in, or on, bracelets and watchbands, or the skin under rings. In children, the infestation may involve the entire body including the palms, soles, and scalp.

Bacterial infection may occur due to scratching. In many cases, children are treated because of infected skin lesions rather than for the scabies itself. Although treatment of bacterial infections may provide relief, recurrence is almost certain if the scabies infection itself is not treated.

Crusted (Norwegian) Scabies
Crusted scabies is a form of the disease in which the symptoms are far more severe. Large areas of the body, like the hands and feet, may be scaly and crusted. These crusts hide thousands of live mites and their eggs, making treatment difficult because medications applied directly to the skin may not be able to penetrate the thickened skin. This type of scabies is extremely infectious and occurs mostly among the elderly, in some AIDS patients, or in people whose immunity is decreased.
Who is most at risk?
Scabies is most common in those who have close physical contact with others, particularly children, mothers of young children, sexually active young adults, and elderly people in nursing homes.

TREATMENTS
Getting rid of the mites is critical in the treatment of scabies. Everyone in the family or group, whether itching or not, should be treated at the same time to stop the spread of scabies. This includes close friends, day care or school classmates, or nursing home residents. Bedding and clothing must be washed or dry cleaned.

PERMETHRIN: Five percent permethrin cream is applied to the skin from the neck down at bedtime and washed off the next morning. Dermatologists recommend that the cream be applied to cool, dry skin over the entire body (including the palms of the hands, under finger nails, soles of the feet, and the groin) and left on for 8 to 14 hours. A second treatment one week later may be recommended. Side effect of 5 percent permethrin cream includes mild temporary burning and stinging. Lesions heal within four weeks after the treatment. If a patient continues to have trouble, reinfection may be a problem requiring further evaluation by the dermatologist.

LIDANE: One percent lindane lotion is applied from the neck down at night and washed off in the morning. It may be reapplied one week later. Lindane should not be used on infants, small children, pregnant or nursing women, or people with seizures or other neurological diseases, and has been banned in the state of California.

OTHER: Ten percent sulfur ointment and crotamiton cream may be used for infants. Ivermectin is an oral medicine which may be prescribed for the difficult to treat crusted form. It is not to be used in infants or pregnant women.

Antihistamines may be prescribed to relieve itching, which can last for weeks, even after the mite is gone.

Successful eradication of this infestation requires the following:
• See a dermatologist as soon as possible to begin treatment. Remember, although you may be disturbed at the thought of bugs, scabies is no reflection on your personal cleanliness.
• Treat all exposed individuals whether obviously infested or not. Incubation time is 6-8 weeks so symptoms may not show up for a while. If you do not treat everyone, it is as if you were never treated.
Scabies Frequently Asked Questions
(SKAY-bees)

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

What are the signs and symptoms of scabies infestation?
- Pimple-like irritations, burrows or rash of the skin, especially the webbing between the fingers; the skin folds on the wrist, elbow, or knee; the penis, the breast, or shoulder blades.
- Intense itching, especially at night and over most of the body.
- Sores on the body caused by scratching. These sores can sometimes become infected with bacteria.

How did I get scabies?
By direct, prolonged, skin-to-skin contact with a person already infested with scabies. Contact must be prolonged (a quick handshake or hug will usually not spread infestation). Infestation is easily spread to sexual partners and household members. Infestation may also occur by sharing clothing, towels, and bedding.

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.

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

Did my pet spread scabies to me?
No. Pets become infested with a different kind of scabies mite. If your pet is infested with scabies, (also called mange) and they have close contact with you, the mite can get under your skin and cause itching and skin irritation. However, the mite dies in a couple of days and does not reproduce. The mites may cause you to itch for several days, but you do not need to be treated with special medication to kill the mites. Until your pet is successfully treated, mites can continue to burrow into your skin and cause you to have symptoms.
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, symptoms appear within several days. You do not become immune to an infestation.

How is scabies infestation diagnosed?
Diagnosis is most commonly made by looking at the burrows or rash. A skin scraping may be taken to look for mites, eggs, or mite fecal matter to confirm the diagnosis. If a skin scraping or biopsy is taken and returns negative, it is possible that you may still 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.

Can scabies be treated?
Yes. Several lotions are available to treat scabies. Always follow the directions provided by your physician or the directions on the package insert. Apply lotion to a clean body from the neck down to the toes and left overnight (8 hours). After 8 hours, take a bath or shower to wash off the lotion. Put on clean clothes. All clothes, bedding, and towels used by the infested person 2 days before treatment should be washed in hot water; dry in a hot dryer. A second treatment of the body with the same lotion may be necessary 7-10 days later. 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 your health care provider has instructed family members to be treated, everyone should receive treatment at the same time to prevent reinfection.

How soon after treatment will I feel better?
Itching may continue for 2-3 weeks, and does not mean that you are still infested. Your health care provider may prescribe additional medication to relieve itching if it is severe. No new burrows or rashes should appear 24-48 hours after effective treatment.