

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

SCABIES**WHAT IS IT?**

Scabies is an infestation of the skin caused by the human itch mite, *Sarcoptes scabiei*. The microscopic scabies mite burrows into the upper layer of the skin to live and to lay eggs. The characteristic rash and intense itching is due to an allergic reaction to the proteins and feces of the mite. Scabies mites usually survive no more than 2-3 days away from human skin.

HOW IS IT TRANSMITTED?

- ❖ Scabies is spread by direct, prolonged skin-to-skin contact with an infested individual. Sexual partners and household members are likely to become infested. Casual skin contact is unlikely to result in transmission.
- ❖ Sharing towels, bedding, clothing, and other objects is another means of transmission, though much less common.
- ❖ Pets can become infested with a different species of scabies mite and develop mange. If a human has close contact with an infected animal, he or she can develop a mild rash and itching. However, the mites that infect animals will not reproduce on humans and will die within a few days. Therefore, no specific treatment is required for humans, but the infected pet should be treated for mange.

WHAT ARE THE SYMPTOMS?

- ❖ Severe itching, usually worse at night, is the most common symptom. The itching usually develops within 3-6 weeks of infestation but can occur within days if the person has been exposed to scabies in the past. Even though symptoms may not appear for up to 6 weeks, the infested person is still able to spread scabies during that time.
- ❖ A rash consisting of multiple small red bumps is common. The rash is usually found between the fingers and toes, wrist, groin area (including the penis), belt line, nipple area, armpits, and buttocks. It usually spares the head, neck, palms, and soles of adults.
- ❖ Small gray/red/brown burrows or ridges, due to tunneling of the female mite under the skin, may be visible in some cases. This finding is uncommon but strongly supports a diagnosis of scabies.

HOW IS IT DIAGNOSED?

Scabies is usually diagnosed based on your symptoms and physical exam findings. Laboratory testing is usually not necessary.

WHAT IS THE TREATMENT?

- ❖ **PRESCRIPTION MEDICATIONS:** First-line agents include permethrin cream and oral ivermectin, both of which are generally well-tolerated.

Permethrin (Elimite) 5% cream is highly effective against scabies, with cure rates exceeding 90%. Permethrin kills mites and eggs for several days following treatment.

- Massage the cream thoroughly into clean, dry skin from the chin down to the soles of the feet.
 - Be sure to include the skin between the fingers and toes, under the nails, and in the naval and buttock folds.
 - Do not apply permethrin to the vagina, the tip of the penis, the eyes, the nose, the mouth, or to any areas of open skin.
- The cream is usually applied at bedtime and left on overnight (for 8-14 hours or as directed on the product label). It is washed off in the shower/bath the next morning. Clean clothing should be worn after treatment.
- A second application of permethrin 1-2 weeks later may be necessary.

❖ **PRESCRIPTION MEDICATIONS (continued)**

Ivermectin (Stromectol) is an alternative first-line treatment for scabies. It appears to be as effective as topical permethrin in clinical studies and is particularly useful for widespread outbreaks. It is also preferred due to ease of use and cost.

- Ivermectin is taken by mouth as a single dose, with a repeat dose given 1-2 weeks later.
- Oral ivermectin is not a first-line treatment in pregnant or lactating women and in young children. Permethrin cream is the treatment of choice in these populations.

Other Agents

- Topical ivermectin is a newer treatment option that appears to be effective against scabies. In one study, it was as effective as topical permethrin.
- Other topical treatments are available but considered second-line due to low availability, higher cost, and/or higher risk of drug toxicity.

❖ **SKIN CARE & ITCHING**

- Antihistamines and/or steroid creams can help with the itching.
 - Consider taking a non-sedating antihistamine (such as Zyrtec, Claritin, or Allegra) during the day and a sedating antihistamine (such as Benadryl 25-50mg) at bedtime.
 - Prescription steroid creams can be used twice daily if needed for itching. Only a thin layer is needed. Overuse can lead to thinning and whitening of the skin.
- Avoid excess soap and hot water, as they can dry out the skin and intensify the itching.

❖ **GENERAL ENVIRONMENTAL MEASURES**

Immediately following medical treatment, it is important to treat your belongings and living space (in particular, objects and areas with which you have had prolonged contact in the last 3 days):

- Wash in HOT water and dry in a HOT dryer all contaminated clothing, head gear, bedding, towels, etc., used by the infested individual and close contacts during the 3 days prior to treatment. Ironing washed items is also effective.
- Items that cannot be washed should be dry-cleaned or sealed in a plastic bag for at least 72 hours to kill the mites.
- Vacuum rugs and upholstered furniture thoroughly. Discard the vacuum bag immediately.
- The use of pesticides is not recommended and may be harmful.

❖ **RETURN TO SCHOOL/WORK**

Infested individuals can usually return to school or work the day after completing the first treatment.

DO CLOSE CONTACTS NEED TREATMENT?

Yes, it is generally recommended that close contacts of an infested individual receive simultaneous treatment to prevent reinfection. A close contact is someone with whom you have had prolonged physical contact (usually a sexual partner, roommate, etc.).

HOW DO I KNOW IF I AM BETTER?

- ❖ Treatment is likely successful if active lesions resolve and night-time itching is gone by 1 week after treatment. However, it is not unusual for itching to persist for 2-4 weeks after successful treatment.
- ❖ Retreatment may be necessary if itching persists beyond 4 weeks or if new rashes/burrows continue to appear 48 hours after treatment.

RECOMMENDED WEBSITES: www.cdc.gov, www.mayoclinic.org