

## SCABIES

### What is scabies?

Scabies is an infestation of the skin caused by the mite, *Sarcoptes scabiei* var. *hominis*. The microscopic mites burrow into the upper layer of the skin where it lives and lays eggs, producing itching and a pimple-like skin rash.

### What is crusted (Norwegian) scabies?

Norwegian scabies is a severe form of scabies that can occur in persons with weakened immune systems, the elderly, individuals with disabilities, and those who are debilitated. Persons with this form of scabies have thick crusts of skin that contain large numbers of mites and eggs. Persons with crusted scabies are very contagious to others and can spread the infestation easily by direct skin-to-skin contact and by contaminated items such as their clothing, bedding, and furniture. Persons with crusted scabies may not show the usual signs and symptoms of scabies such as the characteristic rash or itching. Persons with crusted scabies should receive quick and aggressive medical treatment for their infestation to prevent outbreaks of scabies.

### Who gets scabies?

Anyone can get scabies. Scabies affects all persons regardless of economic status, skin color, age, or standard of personal hygiene. Scabies can spread rapidly under crowded conditions where close body and skin contact is frequent. Nursing homes, extended care facilities, and prisons are often sites of scabies outbreaks. Childcare facilities also are a common site of scabies infestations.

### What are the symptoms?

The most common symptoms of scabies are intense itching and scratching, especially at night, and a pimple-like rash. Symptoms are most common on the wrist, elbow, armpit, webbing between the fingers, nipple, penis, waist, beltline, and buttocks. The rash also can include tiny blisters and scales. Scratching the rash can cause skin sores which sometimes become infected by bacteria.

When the female scabies mite tunnels just beneath the surface of the skin, the burrows appear as tiny raised and crooked grayish-white or skin-colored lines on the skin surface. These burrows may be difficult to find due to the small number of mites typically found on a human (about 10 to 15 mites per person). The burrows are found most often in the webbing between the fingers, in the skin folds on the wrist, elbow, or knee, and on the penis, breast, or shoulder blades.

The head, face, neck, palms, and soles often are involved in infants and very young children, but usually not adults and older children. Persons with crusted scabies may not show the usual signs and symptoms of scabies such as the characteristic rash or itching.

### **How soon do symptoms appear?**

If a person has never had scabies before, symptoms may take four to eight weeks to develop. It is important to remember that an infested person can spread scabies during this time, even if they do not have symptoms yet. If an individual has had scabies before, symptoms usually appear much sooner after exposure – between one to four days.

### **How is scabies spread?**

Scabies is usually spread by direct, prolonged, skin-to-skin contact with an infested person. A quick handshake or hug usually will not spread scabies. Scabies is spread easily to sexual partners and household members. Scabies in adults frequently is sexually acquired. Scabies sometimes is spread indirectly by sharing articles such as clothing, towels, or bedding used by an infested person; however, such indirect spread can occur much more easily when the infested person has crusted scabies.

### **How is scabies infestation diagnosed?**

Diagnosis of a scabies infestation usually is made based on the customary appearance and distribution of the rash and the presence of burrows. Whenever possible, the diagnosis of scabies should be confirmed by identifying the mite, mite eggs, or mite fecal matter. This can be done by a health care provider by carefully removing a mite from the end of its burrow using the tip of a needle, or by obtaining a skin scraping to examine under a microscope for mites, eggs, or mite fecal matter. It is important to remember that a person can still be infested even if mites, eggs, or fecal matter cannot be found.

### **How long can a person spread scabies?**

A person can spread scabies until mites and eggs are destroyed by treatment. Infested persons who are without symptoms can transfer the mite prior to their knowledge of having scabies. This is why scabies outbreaks occur within institutions like long term care facilities and childcare centers.

### **What is the treatment for scabies?**

A health care provider can prescribe a medicated lotion or cream, called a “scabicide,” to treat scabies by killing the mites and eggs. No over-the-counter products have been tested and approved for humans. Always follow the instructions provided by the doctor or pharmacist, as well as the package insert.

When treating adults and older children, the scabicide cream or lotion is applied to all areas of the body from the neck down to the feet and toes. When treating infants and young children, the cream or lotion is also applied to the head and neck. The medication should be left on the body for the recommended time before it is washed off. Clean clothes should be worn after treatment.

Treatment is also recommended for household members, sexual contacts, or other individuals who have had prolonged skin-to-skin contact with the infested person. All persons should be treated at the same time to prevent re-infestation. A second treatment is sometimes necessary if itching continues more than two to four weeks after treatment or if new burrows or rash appear.

### **Is there a way to prevent scabies infestation?**

Scabies mites do not survive more than two to three days away from human skin. Items such as bedding, clothing, and towels used by a person with scabies can be decontaminated by machine-washing in hot water and drying using the hot cycle or by dry cleaning. Decontaminate any items that cannot be washed or dry cleaned by removing them from any bodily contact for at least 72 hours. Because persons with crusted scabies are considered very infectious, careful vacuuming of furniture and carpets in rooms used by these persons is recommended. Fumigation of living areas is unnecessary.

### **Should an individual with a scabies infestation be excluded from work or school?**

A person diagnosed with scabies can generally return to work once treatment has begun, but if they have a job with prolonged contact with other humans, exclusion may be considered until 24 hours after completing treatment. In childcare settings, infected persons should be excluded from the facility until 24 hours after treatment has been completed. Persons with crusted scabies should be considered highly contagious and appropriate isolation procedures should be used to protect other persons from becoming infested.

### **Can I give my pet scabies or vice versa?**

No; animals do not spread human scabies. Pets can become infested with a different kind of scabies mite that does not survive or reproduce on humans but causes mange in animals. If an animal with mange has close contact with a person, the animal mite can get under the person's skin and cause temporary itching and skin irritation until it dies on its own in a few days. Although the person does not need to be treated, the animal should be treated because its mites can continue to burrow into the person's skin and cause symptoms until the animal has been treated successfully.

## Resources

Centers for Disease Control and Prevention:

- Scabies Home Page, <https://www.cdc.gov/parasites/scabies/index.html>
- Scabies FAQ, [https://www.cdc.gov/parasites/scabies/gen\\_info/faqs.html](https://www.cdc.gov/parasites/scabies/gen_info/faqs.html)
- Scabies Workplace FAQ, [https://www.cdc.gov/parasites/scabies/gen\\_info/faq\\_workplace.html](https://www.cdc.gov/parasites/scabies/gen_info/faq_workplace.html)

Division of Public Health's Child Care Manual, "Managing Infectious Disease in Childcare Settings," <https://www.dhss.delaware.gov/dhss/dph/epi/files/ChildCareManual2021.pdf>