

Information sheet about pathogens in humans

What is scabies?

Scabies, referred to medically as *Sarcoptes scabiei*, is a contagious human skin infection caused by the itch mite. The mites are only 0.2 to 0.5 mm in size and therefore barely visible to the naked eye. The female mites burrow into the top layer of skin, where they lay their eggs over their lifetime of about four to eight weeks. The mite infestation only causes skin reactions after some time. Itch mites can spread especially where people live close together, which is why clustering of the infection occasionally occurs, especially in community or care facilities.

How is scabies transmitted?

From person to person

Itch mites spread between humans, especially during prolonged skin contact (generally five to ten minutes), for example while playing together, cuddling, helping with personal hygiene, sharing a bed or during sexual intercourse. Shaking hands or a brief hug usually does not lead to transmission. In the case of crusted scabies (*scabies crustosa*), a highly contagious form of scabies, the number of mites on the skin is very high, which is why even short-term skin contact may lead to an infection.

Through clothing and objects

Without a host, the itch mites can survive for around two days in clothing or bed linen. But transmission through shared bed linen, blankets, upholstery or clothing is rare. However, it is possible in the case of crusted scabies because of the large number of itch mites.

What symptoms do the sufferers show?

The first symptoms of scabies often include skin burning and itching, which are made worse by the warmth of your bed. Itching may even affect areas of the skin that are not directly affected by itch mites. The spaces between fingers and toes, wrists, ankles, armpits, elbows, nipples and genitals are primarily affected. In infants and young children, the scalp, face and soles of feet may also be affected.

Typical symptoms include fine, irregular lines in the skin. These are the burrow tracks of the mites that are visible in the skin. After a while, the skin reacts by developing blisters the size of a pinhead, reddened raised nodules or pustules. In addition, areas of the skin injured by scratching because of the itching may develop purulent inflammation. In the case of a prolonged infestation, a large-scale allergic rash may develop in response to the mites' excretions.

In people who have an intensive body care regime, the skin changes and mite infestation can remain unnoticed for a long time due to the use of cosmetics. If left untreated, scabies often becomes chronic.

People with a weak immune system are at particular risk of developing the highly contagious form, crusted scabies. In these cases, a great number of mites are present in the skin, accompanied by pronounced encrustation.

What is the incubation period and how long are you contagious?

Upon first infection, the symptoms become apparent after only two to five weeks, while they occur as soon as after one to four days on reinfection. Scabies is therefore contagious long before sufferers exhibit any symptoms and remains so while itch mites are present on the skin.

Who is particularly at risk?

Scabies occurs worldwide and may affect people of any age. People who are infected by other sufferers are usually members of the family or those who share a household, as well as carers and nursing staff if people in need of care are affected.

What should I do if I fall ill?

- ▶ If you experience the symptoms described above or suspect that you have scabies, you should consult a doctor immediately.
- ▶ Scabies can be treated effectively by medication referred to as scabicides. They are usually applied to the skin in the form of creams or ointments. In some cases, an oral medication can be taken in the form of tablets.
- ▶ To protect others from getting infected, sufferers should temporarily avoid prolonged direct skin contact.

SCABIES

- ▶ Sufferers are usually no longer contagious after completing an external treatment or 24 hours after taking tablets. Crusted scabies may often require repeat treatment until the affected persons are no longer contagious. Itching may persist for one to two weeks after the treatment.
- ▶ The clothing, underwear, towels and bed linen from those affected by scabies should be washed at a minimum of 50 °C. Objects with prolonged physical contact, such as shoes or cuddly toys, which cannot be washed or cleaned, should be stored in a dry place in sealed plastic bags for three days at a minimum temperature of 21 °C. Upholstered furniture can be cleaned with a vacuum cleaner or should not be used for at least two days.
- ▶ Crusted scabies requires further action. Ask your doctor of health authority for advice.
- ▶ The regulations set out in the German Protection against Infection Act apply in the case of scabies. Children and adults with or suspected of having scabies are temporarily prohibited from attending or working at community facilities such as schools or nurseries. Affected persons must inform the community facility of the diagnosed or suspected infection.
- ▶ The community facility will inform the responsible health authority of the diagnosed or suspected infection. The health authority or the attending doctor will determine when the affected person may resume attending or working at the community facility.

How can I protect myself?

- ▶ Safety precautions are usually almost impossible to take as itch mites can be transmitted without being noticed before any symptoms appear.
- ▶ Avoid prolonged direct skin contact with people who have scabies.
- ▶ If physical contact with sufferers cannot be avoided, for example when caring for children or people in need of care, you should wear long-sleeved clothing and disposable gloves. Then wash your hands and arms thoroughly. Thoroughly clean your fingernails in particular.
- ▶ People in close contact with those who have scabies, i.e. people who have had extensive, long-term skin contact with a sufferer, should also be treated, even if they do not show any symptoms of the infection.

Where can I get more information?

Your local health authority can provide you with further advice and information. It has information on the latest situation and a wealth of experience in dealing with the infection.

More (specialist) information is available online from the Robert Koch Institute (www.rki.de/skabies).

Further information on infection control can be found on the website of the Federal Centre for Health Education (www.infektionsschutz.de).



STEMPEL

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