**Scabies**

Scabies is a common skin infestation of tiny mites called *Sarcoptes scabiei*. They reproduce on the surface of the skin and then burrow into it, lay eggs and feed on blood. This causes small itchy bumps and blisters.

Sometimes, raised wavy lines appear where the mites have burrowed, especially on the inner part of the wrist or between the fingers or toes.

It’s a highly contagious condition that can easily be passed from one person to another through direct skin contact or through infested clothing or bedding. It spreads most easily in crowded conditions and those with a lot of close contact — among families, in childcare centres, college dorms, or nursing homes.

Mites can live for about 2 to 3 days in clothing, bedding, or dust.

It may take up to 4 to 6 weeks after infection for symptoms to appear in someone who has never had scabies. In people who have had scabies before, symptoms may start in just a few days.

**Signs and Symptoms**

The most Scabies is caused by mites that burrow under the upper layer of human skin, feeding on blood and laying eggs. Scabies is extremely itchy and causes grey lines on your skin along with red bumps.

Common symptom of scabies is severe itching, which can be worse at night or after a hot bath.

A scabies infection begins as small itchy bumps, blisters, or pus-filled bumps that break when scratched. Itchy skin may become thick, scaly, scabbed, and crisscrossed with scratch marks. The itching is due to a hypersensitivity reaction to the mite and/or its faeces and eggs.

The areas of the body most commonly affected by scabies are the hands and feet (especially the webs of skin between the fingers and toes), the inner part of the wrists, and the folds under the arms. It may also affect other areas of the body, particularly the elbows and around the breasts, genitals, navel, and buttocks.

Infants and young children can have the rash on the scalp, palms, and soles of feet.

Scratching the itchy areas of skin can allow bacteria to get into the injured skin. Impetigo, a bacterial skin infection, may affect skin that is already infected with scabies.

After the initial exposure to scabies, it can take up to six weeks for symptoms to appear. The symptoms usually develop more quickly in people who have had scabies before.

The hallmark symptoms of scabies include a rash and intense itching that gets worse at night. Continuous scratching of the infected area can create sores that become infected. If this occurs, additional treatment with antibiotics for the skin infection may be recommended.

**Common sites for scabies in older children and adults include the:**

•wrist

•elbow

•armpit

•nipple

•penis

•waist

•buttocks

•area between the fingers

Scabies in babies and toddlers, and sometimes the very elderly or immunocompromised, can include the:

•head

•face

•neck

•hands

•soles of the feet

The rash itself can consist of tiny bites, hives, bumps under the skin, or pimple-like bumps. The burrow tracks of the mite can sometimes be seen on the skin. They may appear as tiny raised or discoloured lines.

**Treatment**

Scabies infections need to be treated by a doctor.

If scabies is suspected, the doctor may scrape a small part of the affected skin and examine the scrapings under a microscope for signs of scabies mites.

Doctors treat scabies by prescribing a medicated cream or lotion to kill the mites. The cream needs to be applied to skin all over the body, not just the area with the rash, and usually must stay on the skin for 8 to 12 hours before it can be washed off.

In infants and young children, remember to also put the cream on the head, face, and scalp — even on the ears. If you forget these areas, you may not get rid of all the mites. Also trim your child's fingernails and scrape off any dirt that is on the fingertips, and put medicine on the fingertips as well. After applying the cream, do not wash your own hands — scabies mites love the area between the fingers! You may want to apply the medication before your child goes to bed, then wash it off in the morning.

Most often, the treatment needs to be repeated in 1-2 weeks, especially if you see live mites on the skin 2 weeks after treatment.

Sometimes the doctor may choose an oral medication instead of topical lotion to treat scabies in older children.

The doctor might prescribe antibiotics if your child also develops a bacterial skin infection (such as impetigo) and an antihistamine to help relieve the itching.

Once a child begins treatment for scabies, it usually takes about 1 to 2 days for the itching to stop. In some cases, though, itching can last for a few weeks. If your child has itching that is severe, the doctor may prescribe a steroid cream for the skin, like hydrocortisone. Steroid cream should only be used if recommended by your doctor because it can make certain infections worse.

If the treatment is effective, there should be no new rashes or burrows after 24 to 48 hours.

Most kids can return to school the day after the treatment is complete.

Since scabies is highly contagious and can cause re-infestations, other members of your household also should be treated, even if they have no symptoms. Because scabies can be sexually transmitted, sexually active teens with scabies should be examined for other sexually transmitted diseases (STDs) too. Any sexual partners also should be treated for scabies.

**Prevention**

Direct physical contact — like holding hands — is the most common way to transmit scabies. But because the mites can live for several days in clothing, bedding, or dust, scabies can spread when people share infected bed, linens, or towels.

If someone in your family is being treated for scabies, all other members of the household should be treated, too. Wash clothing, sheets, and towels in hot water and dry on a hot setting. Put stuffed animals and any other items you cannot wash in a sealed plastic bag for at least 3 days. Vacuum each room in the house, then throw away the vacuum cleaner bag.

Although scabies can be bothersome, the infestation can usually be treated effectively. Treatment often consists of medications that kill scabies mites and their eggs. Since scabies is so contagious, doctors will usually recommend treatment for an entire group of people who are in frequent contact with a person who has scabies.

Scabies mites are transmitted by skin-to-skin contact with an infected person or by extended contact with the clothing, bedding, or towels of an infected person.

**How is scabies diagnosed?**

 Your doctor will likely be able to diagnose scabies simply by performing a physical exam and inspecting the affected area of skin. In some cases, your doctor may want to confirm the diagnosis by removing a mite from the skin with a needle. If a mite can’t easily be found, your doctor will scrape off a small section of skin to obtain a tissue sample. This sample will then be examined under a microscope to confirm the presence of scabies mites or their eggs.

**How is scabies treated?**

 Treatment for scabies usually involves getting rid of the infestation with prescription ointments, creams, and lotions that can be applied directly to the skin. Oral medications are also available.

Your doctor will probably instruct you to apply the medicine at night when the mites are most active. You may need to treat all of your skin from the neck down. The medicine can be washed off the following morning. Make sure you follow your doctor’s instructions very carefully. You may need to repeat the topical treatment in 7 days.

Your doctor may also prescribe additional medications to help relieve some of the bothersome symptoms associated with scabies. These medications include:

•antihistamines, such as Benadryl(diphenhydramine) or pramoxine lotion to help control the itching

•antibiotics to kill any infections that develop as a result of constantly scratching your skin

•steroid creams to relieve swelling and itching

During the first week of treatment, it may seem as if the symptoms are getting worse. However, after the first week, you will notice less itching, and you should be completely healed by the fourth week of treatment. Skin that has not healed within a month may still be infested with scabies mites. It is important to remember that “post-scabies itch” can last up to one month.

**How can I get rid of scabies?**

 The best way to prevent getting scabies is to avoid direct skin-to-skin contact with a person known to have scabies. It is also best to avoid unwashed clothing or bedding that has been used by a person infested with scabies.

Scabies mites can live for 48 to 72 hours after falling off your body, so you need to take certain precautions to prevent reinfestation. Make sure to wash all of the following in hot water that reaches 122°F (50°C):

•clothing

•bedding

•towels

•pillows

These items should then be dried in the dryer on very high heat for at least 10 to 30 minutes.

Anything that can’t be washed should be thoroughly vacuumed. When you have finished vacuuming, throw out the vacuum bag and thoroughly clean the vacuum with bleach and hot water. Bleach and hot water can also be used to clean other surfaces that may contain scabies mites.