

## SCABIES

### What is Scabies?

Scabies is an infestation of the skin with mites, which are microscopic organisms called *Sarcoptes scabiei*. These small insects burrow under the skin and cause intense itching, especially at night. The females lay eggs under the skin, and when these hatch, the bumps and itching spread around warm, moist skin areas.

### How do you get Scabies?

Scabies are spread from close or intimate contact with an infected person, their clothing or bedding. Dogs can get a type of scabies which causes Mange, and although humans may pick up some of these bugs, they cannot reproduce on people and therefore do not cause severe symptoms for people. Treating the animal will decrease exposure for humans.

### What are the symptoms of Scabies?

From the time of exposure, it is usually three to four weeks before any symptoms develop. Initial symptoms may easily be confused with other types of insect bites or rashes. The Scabies are active at night, and even though other rashes may itch more at night, this night time intensity is striking in Scabies. Itching and usually small bumps or lines of bumps are most often noted between the fingers, inside wrists, elbows and knees, under breasts and around nipples, waist bands, buttocks, upper thighs, scrotum and penis, and the sides and bottoms of feet. It would be extremely rare for all of these areas to be affected. The head and back are usually spared. Scratching at lesions may cause inflammation and skin infection.

### Receiving a Proper Diagnosis

Generally the diagnosis is made based on the patient history and appearance of the lesions, although this is not always straightforward. History of known exposure may be helpful in raising suspicion of this condition. Sometimes, a clinician may take a skin scraping to look for evidence under the microscope, but this is not often productive in confirming the diagnosis.

### Treatment Options

Various treatments are available but none will completely eradicate the itching immediately. Scrupulous cleaning of clothing and linens which might have been infested must be done to eliminate the insects. The most common treatment is the application of a cream made from permethrin (an insecticide) under brand names such as Elimate or Acticin. This medication is safer than other insecticidal creams or an oral medication that is sometimes prescribed. Treatment decisions must be made in consultation with a medical provider as these medications are only available by prescription. If more than one person is infected, the clinician may be able to prescribe for those close contacts as well.

When a medicated cream is prescribed, the patient should shower first and then apply the cream from the neck down. The cream should be left on for eight hours and re-applied to hands and under fingernails if they have been washed during that eight hours. The cream is then showered off after eight to fourteen hours and only clean towels, linens and clothes should be used.

### **Itching**

Itching may persist for one to two weeks after treatment due to a hypersensitivity reaction and does not mean the scabies are still alive and require more insecticidal cream. Itching can be controlled with anti-histamine pills. It is recommended to use Benadryl (diphenhydramine hydrochloride) at night time as it makes most people feel sleepy. For daytime use, non-sedating anti-histamines, such as Claritin (Loratidine) or Zyrtec, can control the itching without sleepiness. Over the counter hydrocortisone cream may also be helpful after the insecticidal treatment is complete to decrease inflammation.

### **Prevention of Spread to Others and Re-Infection**

Since Scabies is spread by close contact, those who have had close contact with an infected person might want to be treated at the same time to prevent ping-pong infections. However, the careful washing of clothes and linens must still be done by all those exposed. Since Scabies cannot live off the body for longer than 3-5 days, all clothes and linens which have been used recently should be washed with hot water and dried in a hot dryer or put away in a large plastic bag for at least 5 days before re-using.

Re-infection is less likely if all of the above steps are followed. Since the insecticidal cream can be irritating, it is not recommended to retreat unless symptoms are actually getting worse after an initial improvement. Re-visiting a medical provider might also yield a different diagnosis in someone who is not improving.