

Scabies and other mites causing skin disease

Description

Scabies is an infestation of the skin by small insects called mites. It is found worldwide but is endemic in remote northern and central Australian Indigenous communities.⁴¹ Scabies affects people of all ages, sexes, races and standards of personal hygiene. Having scabies does not mean that people are unclean.

The tiny mites burrow under the skin, and itchy red bumps or blisters appear on skin folds around the fingers, toes, wrists, elbows, armpits, waistline, thighs, genitals, abdomen and lower buttocks. Thread-like 'tunnels' (about 1 cm long) may be present in the skin, but these often are very difficult to see due to scratches. Children younger than 2 years are likely to be infected on the head, neck, palms and soles of the feet, but they can have mites all over their body.⁴¹ Scabies is a human infection. Mites that infest animals (e.g. those that cause mange in dogs or horses) may look similar, but they do not burrow into human skin, lay eggs on humans or cause itching in humans.

Scabies is diagnosed by examining the characteristic burrows or rash. The diagnosis is confirmed by scraping the skin and identifying the mites or eggs under a microscope.

People with an infestation of scabies usually have itchy skin and scratching may lead to secondary bacterial skin infection, in particular infection with Group A streptococci. The bacteria can enter the body (through the damaged skin) and cause Acute Rheumatic Fever (ARF) which can damage the heart resulting in Rheumatic Heart Disease (RHD). Australian Aboriginal and Torres Strait Islander communities have the highest rate of ARF and RHD in the world.⁴²

How does it spread?

Scabies usually spreads by skin-to-skin contact with an infested person. Contact must be prolonged—a quick handshake or hug will usually not spread the disease. Mites can sometimes spread on underclothing or bedclothes that have been freshly contaminated by an infested person, but the mites can only live away from the human body for 2–3 days.

Incubation period

Itching begins 2–6 weeks after infestation in people who have not had scabies before, and within 1–4 days in people who have had scabies before.

Infectious period

People with scabies can pass on the mites until the day after they have started effective treatment. The mites can live for 2–3 days on the clothes, bed linen and other personal items of people who have scabies.

Exclusion period

People with scabies should be excluded until the day after they have started treatment.

41 Aronson, SS & Shope, TR (eds) 2005, *Managing infectious diseases in child care and schools: a quick reference guide*, American Academy of Pediatrics, Illinois.

42 Fischer, K & Kemp, DJ. 2009, Scabies and bacterial skin infections at a molecular level, Microbiology Australia.

Responsibilities of educators and other staff

- Advise the parent to keep the child at home until the day after they have started treatment.
- Make sure staff and children practise effective hand hygiene.
- Ensure that appropriate cleaning practices are being followed in the education and care service.

Responsibilities of parents

- Keep the child at home until the day after they have started treatment.
- Treat all close contacts of the child (i.e. people who have skin-to-skin contact with the child) and other people in the household at the same time.
- Encourage effective hand hygiene at home.

Controlling the spread of infection

All close (skin-to-skin) contacts and other people in the same household should be treated at the same time, even if they have no itching or other symptoms. By the time scabies is diagnosed in one person, many other people may have been infested. If everyone is not treated at the same time, treatment is unlikely to be successful.

Contaminated underwear, bed linen and other clothing worn by infested people in the 48 hours before treatment starts should be washed in hot water and detergent. All items such as toys, cushions and pillows that cannot be washed or dry-cleaned should be placed out in the sun for 2 or 3 hours.

Treatment

Skin disease caused by mites can easily be confused with other skin diseases. Treatment should not begin until a doctor has confirmed the diagnosis after examining a skin scraping for mites. This is particularly important for infants, pregnant women or people who have other forms of skin disease.

Several treatments are available from chemists, and your doctor will tell you which one is best for the child and your family. All family members and other close contacts should be treated at the same time, even if they are not itching. Treatment can fail if not all contacts are treated at the same time.

Follow the manufacturer's instructions carefully before, during and after the treatments. Treatment should be repeated after 5–7 days.