What is scabies?
Scabies is a skin condition caused by a microscopic mite called *Sarcoptes scabiei*. The mites burrow under the skin and the females lay eggs. The itch results from the inflammatory response to mite excreta and other components.

It is a common problem in many remote Aboriginal communities within the Northern Territory where in some areas up to 50% of children and 25% of adults are affected.

What are the symptoms?
The first time someone is infected symptoms do not appear until 2-6 weeks after exposure. If someone has been infected previously, symptoms usually take 1-4 days to appear.

A red lumpy rash appears. Rarely little burrow markings about 10mm long can also be seen. In adults the rash is usually around the buttocks, wrist and ankles, and between the fingers and toes. It also commonly occurs in the folds of the skin around the armpits, elbows and genitals. In young children the rash may be from head to toe with early pustule formation on the hands and feet. The rash is very itchy, often much more so at night.

Are there any complications?
Scratching of the affected area often causes secondary infection with *Streptococcus* and *Staphylococcus* bacteria. Streptococcal infections can be associated with inflammation of the kidneys (glomerulonephritis) which increases the risk of kidney failure later in life. Streptococcal infection can also be associated with inflammation of the heart (acute rheumatic fever) which can lead to rheumatic heart disease and heart failure. Early treatment for streptococcal infections is therefore important.

How is it spread?
The scabies mite is spread from person to person by direct physical contact. Contact must be prolonged – a quick handshake or hug will not spread it. It can also be spread by clothes and linen that have been used by a person with scabies if they have been worn or used immediately beforehand. The scabies mite is able to survive outside the human body for approximately 3 days in climatic conditions of high humidity and warm temperatures. People with untreated crusted scabies can be ‘core transmitters’ of scabies in communities and health care facilities. Scabies will continue to be spread until all mites and eggs are destroyed.

A similar condition occurs in dogs, however the mite that causes dog scabies is different from that which causes human scabies.

Who is most at risk?
Scabies occurs worldwide, however people living in crowded conditions with poor hygiene and malnutrition are most at risk.

How is scabies treated?
For the individual
Creams available for the treatment of scabies include:
- 5% Permethrin (Lyclear), apply in the evening, leave on overnight, wash off in morning, repeat treatment day 7
- for babies less than 2 months old:Crotamiton (Eurax), apply daily for 3 days.

Apply the cream from head to toe, including the genitalia but avoiding the eyes and mouth.
Adequate application of the cream is very important.

Application of the treatment and contraindications vary depending on which one is used, so it is important to read the instructions carefully.

The person who is infected should first have a shower or bath to soften the skin. The treatment should then be applied to the skin as per the instructions and left on for the recommended period of time before washing it off. While the treatment is on the skin a complete set of new clothes should be worn. Tingling and itching may still be present for 1 to 2 weeks after treatment.

For others in the house
For the treatment to be successful all members of the household and other close contacts should be treated at the same time as the infected person. Contacts may be incubating scabies at the time of treatment and may not show any symptoms.

For the household
The sheets, towels and clothing used by the affected person in the 3 days prior to their being treated should be washed. A hot wash cycle (50-60°C) should be used or items should be dried in the sun to kill mites. Mattresses, pillows and blankets should be placed in the sun. The house also needs to be thoroughly cleaned. The floor and any soft furnishing such as lounges should be well vacuumed to remove dust and skin particles which may harbour mites. There should be no body contact for 3 days for items that cannot be washed or put in the sun.

How is scabies prevented?
Early diagnosis and prompt treatment helps to prevent the spread of scabies. Healthy Skin Programs are conducted in some communities, for further information about this contact your nearest health centre.

What is Crusted (Norwegian) scabies?
While most people are infested with about 10 to 15 mites, in crusted scabies, there is infestation with thousands of mites. Sometimes this happens because a person's immune system is not working well due to other illness. However, in many cases in the NT there are no clear underlying immune problems. Crusted scabies does not look like scabies. The rash appears as scaling, thickening and crusting of the skin. Often this appears on buttocks, elbows and arms. Mild cases of crusted scabies can be treated in the community with creams and oral ivermectin. Severe cases will require admission to hospital. For more information about management recurrent or crusted scabies see the One Disease website.


For more information contact the Centre for Disease Control in your region
Alice Springs 8951 7540
Darwin 8922 8044
Katherine 8973 9049
Nhulunbuy 8987 0357
Tennant Creek 8962 4259

or