

Scabies

Scabies: General Information

Scabies: How is it Treated?

Scabies: Diagnosis and Treatment for Health Professionals

Scabies: Management of Scabies in Health and Social Care Settings

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Scabies: General Information

What is scabies?

Scabies is an infestation of the skin with a tiny mite smaller than a pin head. The mites burrow anywhere in the skin, mostly on the hands, and cannot be seen.

The usual kind of infection is called 'classical' scabies. With this type of scabies people get a very itchy skin rash, which is due to an allergy to the scabies mite.

'Crusted' scabies is the same infection but with many, many more mites. It is much less common than 'classical' scabies. Not all people with 'crusted' scabies itch. Scabies is more likely to spread from 'crusted' scabies.

Why is scabies important?

- It may pass on to other people.
- The itching is usually severe and night time sleep is disturbed.
- Scabies may not be recognised.
- Long-term scabies may lead to other infections.

How do you know you have got it?

- You have a very itchy rash.
- The itching is worse when you are warm in bed or after a hot bath or shower.
- You may know someone else who has an itchy rash.
- Check with your doctor.

How can you catch it?

- The mites pass easily from person to person when people are in skin-to-skin contact such as holding hands; groups of people living in family homes, residential and nursing homes.
- Nurses and carers may catch scabies from looking after people with scabies.
- The itching may occur anytime from 2 to 8 weeks after catching the mites, so mites can pass to someone else before the rash appears.

Can you catch it again?

Yes. If you previously had scabies, the rash may appear from 1-4 days after being re-infected.

How much skin contact do you need to catch scabies?

Scabies is unlikely to be caught by short contact such as shaking hands. Longer contact is needed but could be as little as 5 to 10 minutes.

How do you get rid of them?

You can get rid of scabies by treating with a lotion or cream. You can buy it from a chemist without a prescription, but it is better to see your doctor first to confirm scabies. Household family contacts and everyone who has had skin contact for more than 5-10 minutes with someone with scabies also need treatment. Everyone should be treated at the same time so the mites do not pass back to a treated person.

Patient Information Leaflet

Scabies: How is it treated?

How is it treated?

Scabies is treated with a lotion or cream. You can buy it from a chemist without a prescription, but it is better to see your doctor first.

The treatment most commonly used (permethrin) is recommended to be **applied twice, one week apart**.

Everyone should be treated at **the same time** so the mites do not pass back to a treated person.

Who needs treatment?

Everyone who has scabies needs two treatments, one week apart.

Everyone who has had skin contact with someone with scabies for more than 5-10 minutes, e.g. partner, boyfriend, girlfriend, children, household contacts need to be treated. Even those with no rash or itch, should have at least one treatment.

Putting on the lotion or cream

The treatment may be best applied at night. Take off all your clothes. Take off watches and rings. If it is not possible to remove a ring, move it to one side to treat the skin surface underneath.

Do not have a hot bath or shower before putting on the cream. However, do ensure that skin is clean, dry and cool.

Squeeze the cream/lotion into your palm.

Cream/lotion should be applied to the whole body below the jaw line, according to manufacturer's instructions.

In some cases, the treatment may need to extend to the scalp, neck, face and ears. This includes infants, children up to age two, the elderly, the immunocompromised, and those whose treatment has failed. Check with your doctor if this may apply to you or your family. If the treatment is to be applied to the head, avoid the eyes and in young children the mouth area, where the cream/lotion may be licked off.

Take special care to get it into the skin creases of the body – for instance, nipples and genitalia. Particular attention needs to be paid to the skin between the fingers and toes, under the nails and behind the ears. You will need someone else to apply lotion to your back.

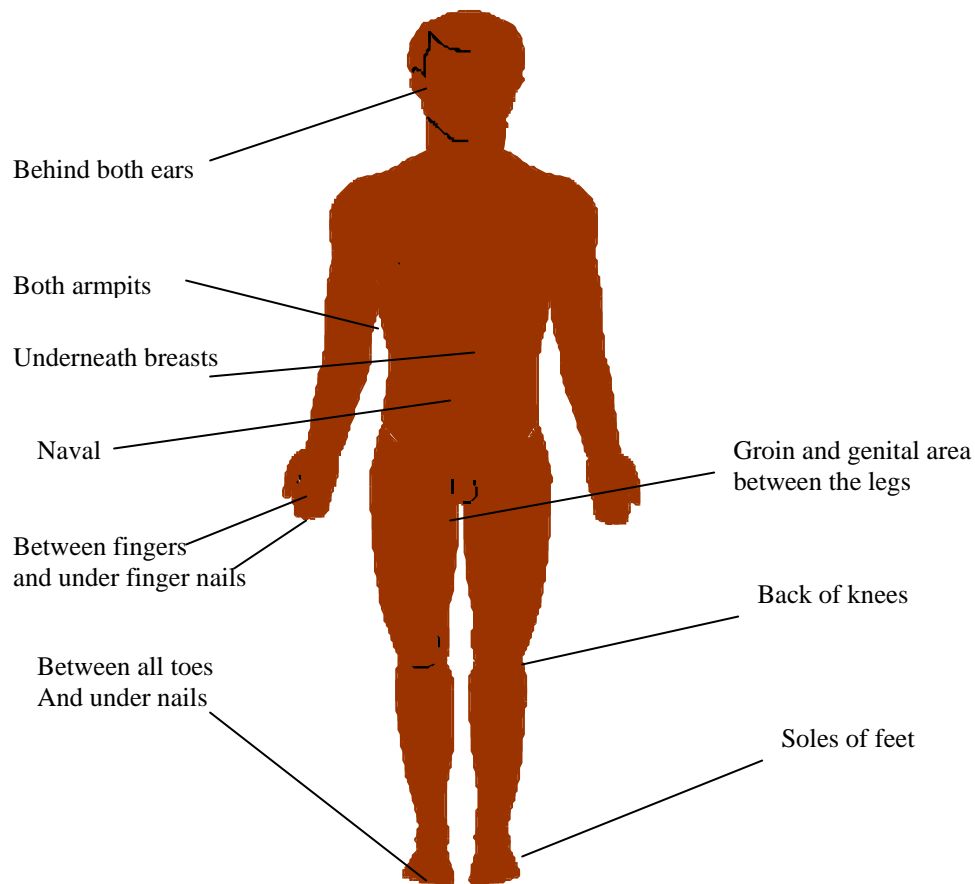
Brush some cream/lotion under the nails with a soft nail brush as mites can easily escape treatment in the thickened skin there. Nails should be trimmed and kept short for duration of treatment.

Let the cream/lotion dry before getting dressed or it may rub off (this takes 10-15 minutes).

Do the soles of your feet last after the body treatment has dried. This is best done with your feet resting on top of or dangling over the side of the bed.

Put more cream/lotion on any parts you wash during the treatment period e.g. hands or skin after changing nappies or incontinence wear that that is while the lotion/cream is on the body. If you need to wash your hands often, use plastic gloves for dirty work during the treatment period.

Pay special attention to these areas when you put on the lotion or cream



How long should I leave the treatment on?

This depends on the product used and may be 8 hours or 24 hours. You will need to check the information provided with the lotion or cream you are advised to use.

After the treatment

After the lotion/cream has been on for the appropriate time it should be washed off initially with plain cool water and no soap. Once everything is washed off, a shower or bath with soap may be taken. Change clothes and wash as usual. Once treatment is complete, you can return to work or school. You will not give scabies to anyone.

Treatment should be applied twice, a week apart, in cases of scabies.

Itching may last for 2 to 3 weeks after full treatment. Use an anti-itch cream or tablets from your doctor or pharmacist, if needed. Do not be tempted to apply further anti scabies cream as this may aggravate the irritation.

The skin will need time for the rash to settle down. If fresh spots appear go to your doctor. You may need more treatment or have a different problem.

What about mites in clothing and bedding?

Classical Scabies: Mites die quickly if they fall off the body and do not spread on clothes, towels or bedding. Normal washing of clothes and bedding is recommended.

Crusted Scabies: There are so many mites, which may fall off as 'crusts' (like flakes of skin), that all clothing and bedding should be washed in a hot wash, and floors and chairs vacuumed.

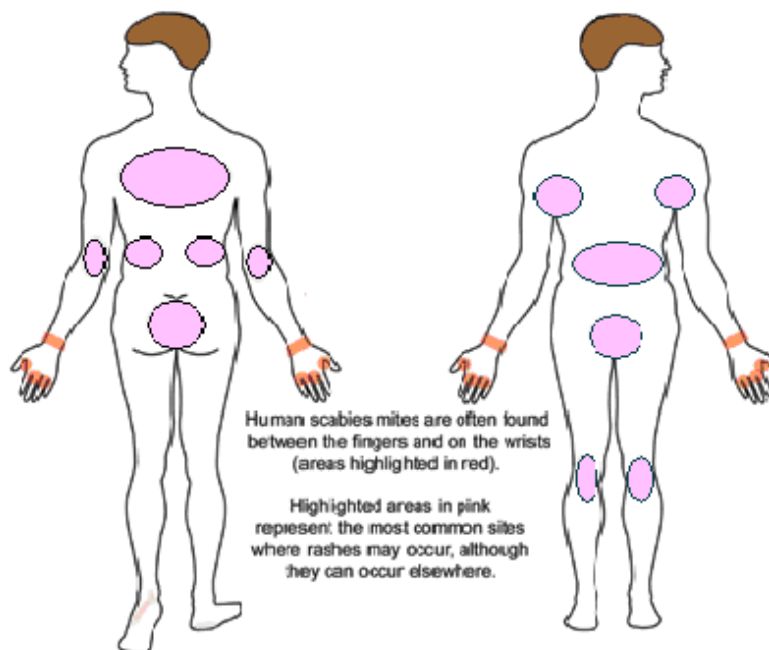
Scabies: Diagnosis and Treatment for Health Professionals

Although the major symptoms are dermal, it should be remembered that they are produced by systemic involvement, and presentation depends on the immune status of the patient.

Classical Scabies

In the so-called classical form of the disease the itch, rash and papules are often the only symptoms. These eruptions may be easily obscured by the patient's frequent need to scratch, resulting in excoriation, eczematous and ultimately lichenification of affected areas if left untreated for long enough. Mites are normally found on the hands, particularly the insides and webs of fingers, wrists, elbows, feet, male genitalia, buttocks and axillae, in descending order of frequency.

In contrast, the allergic rash occurs around the midriff, insides of the thighs, axillae, buttocks, lower arms and legs. The rash may not appear in all these areas at once, but it is always bilaterally symmetrical, affecting both sides of the body.



Diagnoses

The identification of a burrow with the mite at one end is diagnostic. This usually requires the assistance of a hand lens magnified eight or 10 times and a good light. In practice, the burrows are hard to find. The distribution of the rash and a history of intense itching, particularly at night, are usually indicative of classical scabies, making this type the easiest to diagnose.

Crusted (or Norwegian) Scabies

Less commonly, especially if there is any degree of immune debility, the infection may change presentation. In some patients, the keratinised layers of the skin become thickened and hyperkeratotic. This may appear ichthyosiform or merely crusty in patches, but under the surface of the thickening the mites survive in greater than normal numbers. Any crusts that dislodge will be full of mites that may be contagious to other people. Most outbreaks of scabies in psychiatric hospitals, nursing homes and

other long-stay facilities can be traced to one or more undiagnosed cases of crusted scabies.

Patients most likely to develop the crusted form of the disease include the elderly, alcoholics, those with Down's syndrome, those undergoing transplant or other immunosuppressive therapy, and those with AIDS.

Treatment

Permethrin is commonly recommended for treatment of scabies. Malathion may also be used.

Treatment is also recommended for all household family contacts and all who have had skin contact with someone with scabies for more than 5 to 10 minutes, e.g. partner, boyfriend, girlfriend, children.

For classical scabies two treatments are recommended, one week apart

Asymptomatic contacts, as outlined above, should receive at least 1 application of treatment.

Patients with crusted scabies may require 2 or 3 applications of treatment on consecutive days to ensure that enough penetrates the skin crusts to kill all the mites.

For details of cautions, side effects and recommended application time for each product please refer to the specific product information.

Even with fastidious treatment, the cure rate is not 100%. Most apparent failures are due to either inadequate application of the cream/lotion or failure to identify a contact.

Patient and contacts should be treated at the same time.

Sufficient cream/lotion must be given to treat each patient and contact. Larger adults may require two packs.

Written instructions should be provided on how to apply the treatment. See "Patient Information Leaflet Scabies: How is it treated".

The itch of scabies persists for some weeks after the infestation has been eliminated and antipruritic treatment may be required. Application of crotamiton can be used to control itching after treatment but caution is necessary if the skin is excoriated. Oral administration of a sedating antihistamine at night may also be useful.

Management of Scabies in Health and Social Care Settings

This information applies to long term care facilities, residential homes and day care centres.

Many outbreaks of scabies in long-stay facilities can be traced to one or more undiagnosed cases of crusted scabies therefore awareness of symptoms and early detection are key factors to limiting the impact of scabies infection in health and social care settings.

The extent of treatment depends on a risk assessment, which includes consideration of the following:

- Number of cases, confirmed and suspected.
- Type of facility – all single rooms, or multiple occupancy rooms
- Dependency level of residents
- Living arrangements within the facility, including contact between residents
- Staff mobility within the facility – do staff work across all areas of the facility or are they designated to a unit or ward?

Who to treat?

It is important to identify the original source of infection so that all contacts are identified and treated, otherwise scabies can continue to spread.

Contacts can be defined as all those who have had intimate skin contact for a prolonged period i.e. greater than 5-10mins with a person diagnosed with scabies.

In a residential setting this will include those who provide direct care to residents and may include other residents and family members.

Single Case of Scabies

Where an individual resident has a clinical diagnosis of scabies infection they should be treated as soon as possible. They will require 2 full body treatment 7 days apart.

Check for further cases, if two or more cases are diagnosed, the appropriate Infection Control Nurse or Senior Medical Officer should be informed and they will provide advice and guidance otherwise

- All staff who provide direct care which involves skin to skin contact with the affected resident for 5-10min should be treated once.
- All residents who have had skin to skin contact with the affected resident for 5-10min should be treated once.
- Family members of the affected resident may also require treatment specifically those who provide direct care to the resident.
- All treatment should be carried out simultaneously (within a 24 hour period). Coordination of treatment is vital to limit the spread of scabies to others.

Cluster or Outbreaks situations:

The control of an outbreak depends on early detection, investigation, and appropriate control measures. Time must be given to identifying cases and contacts prior to initiating treatment. The purpose of identifying cases and contacts is to limit the spread of scabies to others and prevent unnecessary use of scabicide treatment. The appropriate Infection Prevention Control Nurse or Senior Medical Officer should be contacted for advice and guidance.

Definition of an outbreak

- Two or more residents and/or staff **diagnosed with scabies** by a clinician
- Two or more residents and/or staff with an unexplained rash, **diagnosed by a clinician as probable scabies**

Who to treat?

All staff and residents identified as contacts will require at least one treatment, even in the absence of symptoms. In many long term care facilities this will involve all residents and staff that provide resident care being treated simultaneously in a coordinated way. In an outbreak this will include those at high and medium risk of acquiring scabies as outlined in Box 1.

See Appendix 1 for an overview for suggested approach to treatment.
See appendices 2- 5 for treatment record sheets.

Box 1

The following can be used to assess the level of risk of scabies infection to other residents and staff and decide who needs to be treated, however this is not definitive and local knowledge of the facility should be considered.

High Risk are

- all symptomatic residents and staff
- staff members who undertake intimate care of symptomatic residents including both day and night staff

Medium Risk are

- asymptomatic residents who have their care provided by staff members categorised as high risk
- staff and other personnel who have intermittent direct personal contact with residents (greater than 5-10 minutes direct skin to skin contact)

Low Risk are

- asymptomatic residents whose carers are not considered high risk i.e. their direct personal care is provided by staff members who have not undertaken care of symptomatic residents or who have not worked in the affected area of the facility
- staff who have no direct or intimate contact with affected resident's e.g. catering staff, laundry staff, maintenance, administration.

Family members of symptomatic residents may also require treatment specifically those who provide direct care to residents.

When a management regime is agreed this should be explained to all staff and residents involved. It may also be appropriate for the facility to inform relatives.

The treatment day will need to be planned in advance and extra staff deployed to facilitate

- Proper application of the cream/lotion as previously outlined
- Shower/bath to remove cream/lotion after the recommended contact time
- Changing of all residents clothes and bed linen after washing

Treatment will need to be coordinated and appendices 2-5 will assist in monitoring and recording.

All residents/clients and staff should be treated at the same time (within the same 24hr period) with the same insecticide.

Written instructions on how to apply the treatment needs to be provided. (see patient leaflet within this document and refer to product instructions)

The facility needs to be monitored for 6 to 8 weeks for signs of renewed problems

In an extensive or prolonged outbreak it may be necessary to check for undiagnosed scabies in family members of staff and patients.

If symptoms persist after treatment consult with the Infection Control Nurse or Senior Medical Officer before considering a second cycle of treatment. It may be necessary to consult a dermatologist in difficult cases, e.g. where the diagnosis is uncertain or the problem persists.

Infection Prevention and Control

Isolation of residents with scabies is not always necessary as once treated scabies is no longer infectious.

Contact precautions and single room placement are recommended in the following cases

- Crusted Scabies
- Classical Scabies when diagnosed or suspected on admission to a residential setting

Classical Scabies

The resident is no longer considered infectious when the first treatment has been applied therefore Standard Precautions are all that is required. However in the healthcare setting it is recommended that gloves are worn for lengthy procedures (greater than 5mins) involving contact with the skin until the resident has completed the 1st and 2nd treatment.

For classical scabies, no special precautions are required for bedding or clothing other than regular laundry of used linen. Good standards of environmental cleaning are all that is required.

Crusted Scabies

Contact Precautions and single room placement should be in place until the 1st and 2nd treatment has been completed. Long sleeved gowns and gloves will be required when providing care which involves skin contact.

Cases of crusted scabies may produce flakes of skin containing viable mites. For these cases it is advisable to wash all clothing and bedding in a hot wash and to vacuum floors and chairs.

Please refer to the following sections of the Guideline on Infection Prevention and Control for Community Services for further information specifically

Section 2 Standard Precautions

Section 5 Transmission Based Precautions

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Appendix 1

Overview of Approach to the Treatment of Scabies in Long term care and residential facilities

Single case of scabies Confirmed or probable scabies in a resident	Outbreak or cluster Two or more, confirmed or probable cases of scabies
Case - Treat case twice, 7 days apart Reassess for signs at 14 days and 21 days	Case - Treat case twice 7 days apart Reassess for signs at 14 days and 21 days
Residents 1. Check for further cases if found treat situation as outbreak or cluster. 2. Treat once all residents who have skin to skin contact for greater the 5-10 minutes with the case 3. Observe for signs of scabies amongst residents at 7 days.	Residents 1. Check for cases, treat all cases twice, 7 days apart and observe for signs at 14 and 21 days 2. Treat once all contacts at high and medium risk and observe for signs of scabies at 7 days.
Staff 1. Check for further cases if found treat situation as outbreak or cluster. 2. Treat once all staff who provide direct care involving skin to skin contact for 5-10minutes with the affected resident 3. Advise to observe for signs scabies at 7 days.	Staff 1. Check for cases, treat all cases twice 7 days apart and observe at 14 & 21 days 2. Treat once all contacts at high and medium risk and advise to observe for signs of scabies at 7 days
Key Treatment Measures <ol style="list-style-type: none"> 1. Treat cases twice, at one week apart 2. Treat contacts once 3. Coordinate to treat all cases and contacts in the same 24hr period. 4. Use the same treatment product for all 5. Ensure written instruction for treatment are provided 6. Advice that the itch of scabies rash will persist for 2-3 weeks following treatment and advise Eurax or similar is used 	

Appendix 2 Name of Facility _____

Residents with diagnosed scabies rash					Observed for signs on Day 14	Observed for signs on Day 21
Name	DOB	Unit /Room	Date of Treatment 1	Date of Treatment 2	Document Yes/No, comment on action taken if yes	

Appendix 3 Name of Facility _____

Residents without a rash				Signs of scabies at Day 7 Yes /No If signs, seek diagnosis, if confirmed treat as resident with scabies
Name	DOB	Unit	Date of Treatment 1	

Appendix 4 Name of Facility _____

Staff with diagnosed scabies rash					Signs on Day 14	Signs on Day 21
Name	DOB	Unit /Room	Date of Treatment 1	Date of Treatment 2	Document Yes/No, comment on action taken if yes	

Appendix 5 Name of Facility _____

Staff without a rash				Signs of scabies at Day 7? Yes /No If signs, seek diagnosis, if confirmed treat as resident with scabies
Name	DOB	Unit	Date of Treatment 1	