



A guide to the management And treatment of Scabies: An MDT approach

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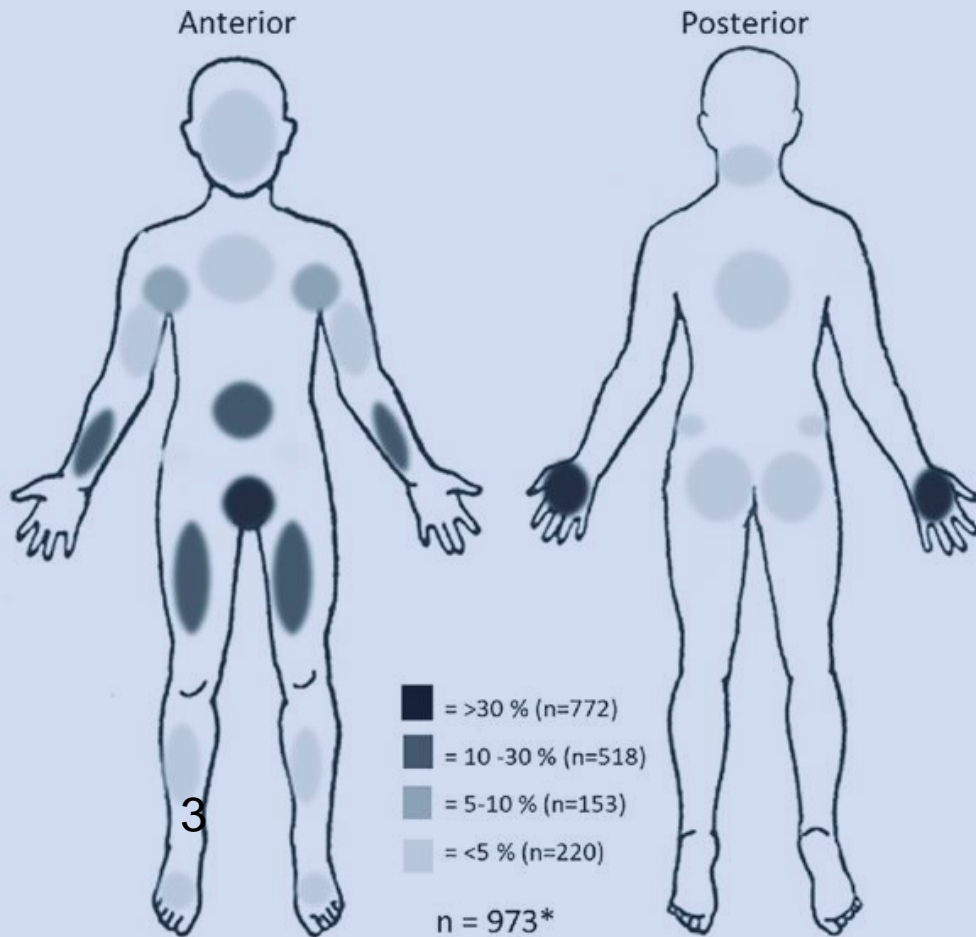
Review date: November 2024



Overview of Scabies

Scabies is a skin condition caused by an immune reaction to the mite *Sarcoptes scabiei* and their saliva, eggs, and faeces. The typical clinical presentation of infection is intense itching associated with burrows, nodules, and redness. However, asymptomatic infection has been shown in the elderly.

Typical areas of the body where the rash presents



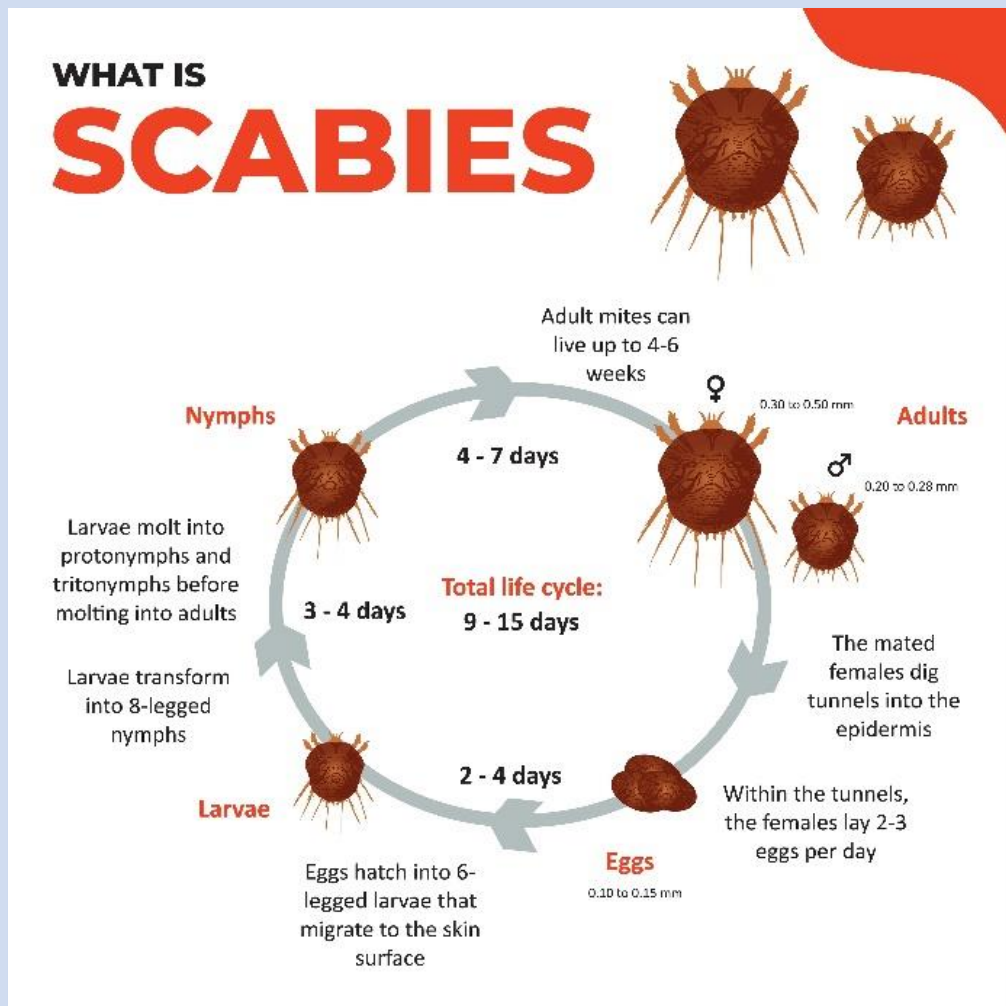
Symptoms may last for weeks or months, can be hard to recognise and are often mistakenly attributed to other skin conditions, leading to avoidable transmission.

Scabies is most often transmitted by prolonged or frequent skin-to-skin contact. Itching may be severe, particularly at night and scratching may lead to secondary bacterial infection.



Life cycle of scabies

- The newly mated female burrows through the skin, at the hands, wrists, elbows, feet, or groin
- Eggs are laid in the burrows at a rate of 2 - 3 per day for up to 2 months
- Eggs mature, and larvae emerge from the eggs 3 - 4 days after they have been laid
- After emerging from the egg, the larva passes through two moults before becoming an adult
- Adult mite's mate
- The entire life cycle can be completed in 10 - 14 days, and mites live for around 30 – 60 days



If a person has never had scabies before, symptoms may take 4-8 weeks to develop. It is important to remember that an infected person can spread scabies during this time, even if he/she does not have symptoms yet. In a person who has had scabies before, symptoms usually appear much sooner (1-4 days) after exposure.

Chain of infection

The chain of infection describes how infections/infestations are transmitted from one person or place to another. This could be via someone's hands, on an object, through the air or bodily fluid contact. Please see diagram below for the chain of infection for scabies and actions to take to break the chain to prevent further transmission.



Management

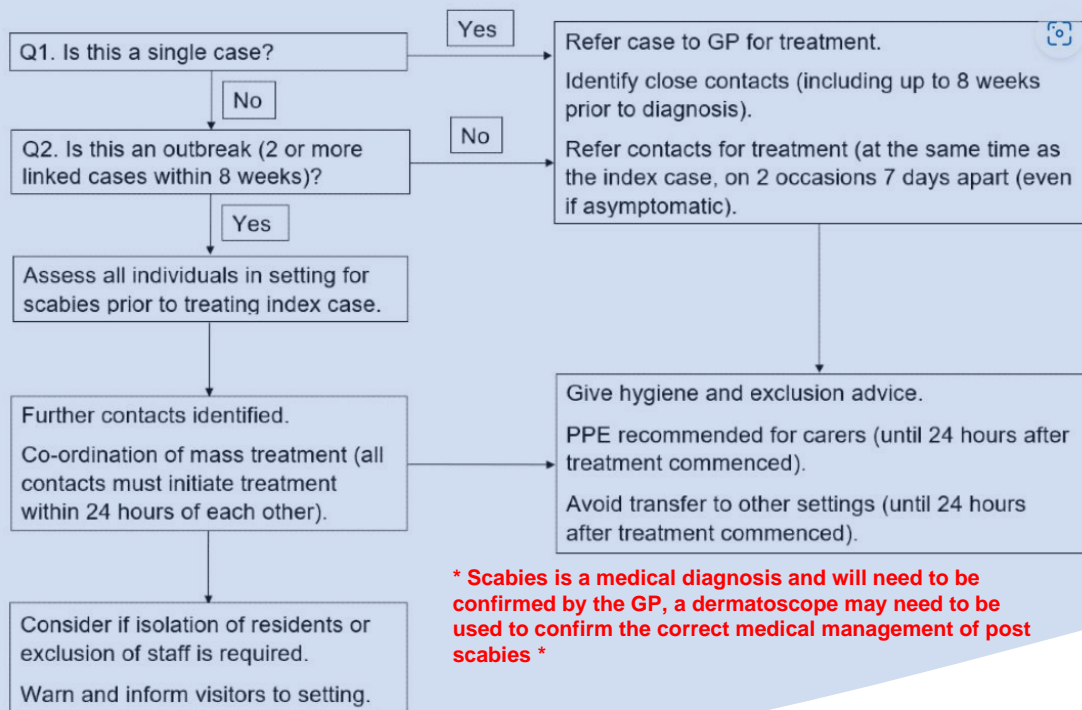
Management of a single case

- Refer case to GP for treatment.
- Identify close contacts (up to 8 weeks prior to diagnosis) including visitors.
- Refer contacts for treatment (take treatment within 24 hours of when residents/staff are treated).
- Co-ordinate treatment of case and contacts to break cycle of transmission.
- Provide hygiene and exclusion advice and avoid transfers to other settings during treatment.
- Advise on appropriate personal protective equipment (PPE) for staff and visitors

Management of an outbreak

- If 2 or more linked cases within an 8-week period, assess all individuals (staff and residents) within the setting for scabies infection.
- Identify close contacts (up to 8 weeks prior to diagnosis) including visitors.
- Co-ordinate treatments of all cases and contacts linked to the setting.
- Provide hygiene and exclusion advice and avoid transfers to other settings during treatment.
- Advise on appropriate PPE for staff and visitors.
- Consider isolation of residents or exclusion of staff until mass treatment completed
- Warn and inform visitors to the setting until mass treatment completed

Summary flowchart



Contact Tracing

Contact tracing should identify contacts within the 8 weeks before the case's diagnosis.

Contacts should be identified who meet the [definition of a close contact](#).

These may include:

- all service users unless there is a clear rationale for more limited tracing (see below bullet points)
- Service users on a single affected floor or unit if there is no mixing or movement of staff or service users and between floors or units
- all members of staff (including agency staff) exposed to the index case without wearing [appropriate PPE](#)
- visitors to the setting who have had prolonged (10 minutes) or frequent skin-to-skin contact with a case
- ancillary staff, for example, hairdressers, podiatrists, community health professionals and agency staff

Contact tracing risk assessment

High risk	Staff members who provide intimate care and who move between rooms, units, and floors. This will include both day & night staff. It will also include all symptomatic residents and staff members. This will also include hairdressers, podiatry and any other persons who have had intimate contact.
Medium risk	Staff and other personnel who have intermittent direct personal contact with residents. It will also include asymptomatic residents who have their care provided by staff members categorised as 'high risk'.
Low risk	Those at lowest risk are staff members who have no direct or intimate contact with affected residents e.g., gardeners, maintenance, catering & laundry staff. It also includes asymptomatic residents whose carers are not considered to be 'high risk' i.e., their direct personal care is provided by staff members who have not undertaken intimate care of symptomatic residents or who have not worked in the affected area(s) of the home.

All **high risk** and **medium risk** will require treatment even if they have no symptoms. It is likely that this will involve all staff, and any other persons who provide direct care.

It is recommended that all contacts **receive treatment at the same time** as the symptomatic cases.

It is the responsibility of the setting or management team to ensure that this is coordinated as much as possible.

IPC precautions

PPE

Standard infection control principles should be sufficient to prevent transmission. For most activities, gloves and plastic aprons are appropriate. Where prolonged skin to skin contact with a resident is expected (e.g., personal care) or contact with infested linen/clothing, staff and visitors should wear single use long sleeve gowns, or sleeve protectors to reduce risk of transmission.



Exclusion or isolation

- Affected individuals should avoid close physical contact with other people until completion of the first 24-hour treatment dose.
- Staff and carers should wear appropriate PPE when handling and providing personal care until the first 24-hour treatment dose has been completed.
- Transfer of cases to other settings should be avoided until the first 24-hour treatment dose has been completed.

Family, visitors and visiting professionals

Family members and other regular visitors (for example, healthcare staff, hairdressers and podiatrists) to the setting who may or may not have close physical contact with cases should be advised about the scabies outbreak, be given advice on the symptoms of scabies and advised where appropriate to seek treatment from their GP if they meet the definition of a case or contact.

All visits to the setting and individuals should be risk assessed appropriately. The benefits of visits to residents are likely to outweigh the risks to visitors, which can be managed by recommending avoiding skin-to-skin contact and wearing appropriate PPE

Scabies Treatment

Treatments that are licensed in the UK for treating scabies are permethrin, malathion, and benzyl benzoate, which are creams or lotions. Permethrin cream is the usual first choice of treatment for people with scabies. Malathion lotion can be used if people cannot use permethrin (for example if they are allergic to it). Permethrin cream and malathion lotion are applied all over the body for a long time before being washed off. This is done twice, 1 week apart.

Ivermectin

Ivermectin is a drug that kills parasites, and it can be used to treat scabies that are difficult to treat. It has been used to treat crusted scabies and has also been used to treat infected people that cannot use creams or lotions.

It is taken by mouth (orally), usually just as one single dose. Oral Ivermectin can be used if the rationale has been discussed with the hospital dermatology and pharmacy team. For support/advise in prescribing Ivermectin please contact the hospital dermatology team.

For difficulties obtaining Ivermectin in the community, please link in with the hospital pharmacy team.



Permethrin

All cases and contacts should be treated at the same time to break the cycle of transmission. If staff are off duty at the time of treatment, they should complete the first 24-hour treatment dose before returning to work.

It is important that all staff and residents are treated as some may not show symptoms in the initial stages of the infection.

Individual case management should happen **simultaneously** for all cases and contacts in the outbreak.

Where occupational exposure of staff has led to their need for treatment, it is recommended that the employer should consider funding any treatment rather than staff paying for their own prescriptions. This encourages treatment uptake and promotes a prompt return to normal working.

If any staff/residents refuse to have the treatment, please contact the Integrated Care Board (ICB) and the Infection Prevention and Control (IPC) team for further advice and risk assessment.

Family, visitors and visiting professionals

Family members and other regular visitors (for example, healthcare staff, hairdressers and podiatrists) to the setting who may or may not have close physical contact with cases should be advised about the scabies outbreak, be given advice on the symptoms of scabies and advised where appropriate to seek treatment from their GP if they meet the definition of a case or contact.

All visits to the setting and individuals should be risk assessed appropriately. The benefits of visits to residents are likely to outweigh the risks to visitors, which can be managed by recommending avoiding skin-to-skin contact and wearing appropriate PPE.



Preparation of treatment

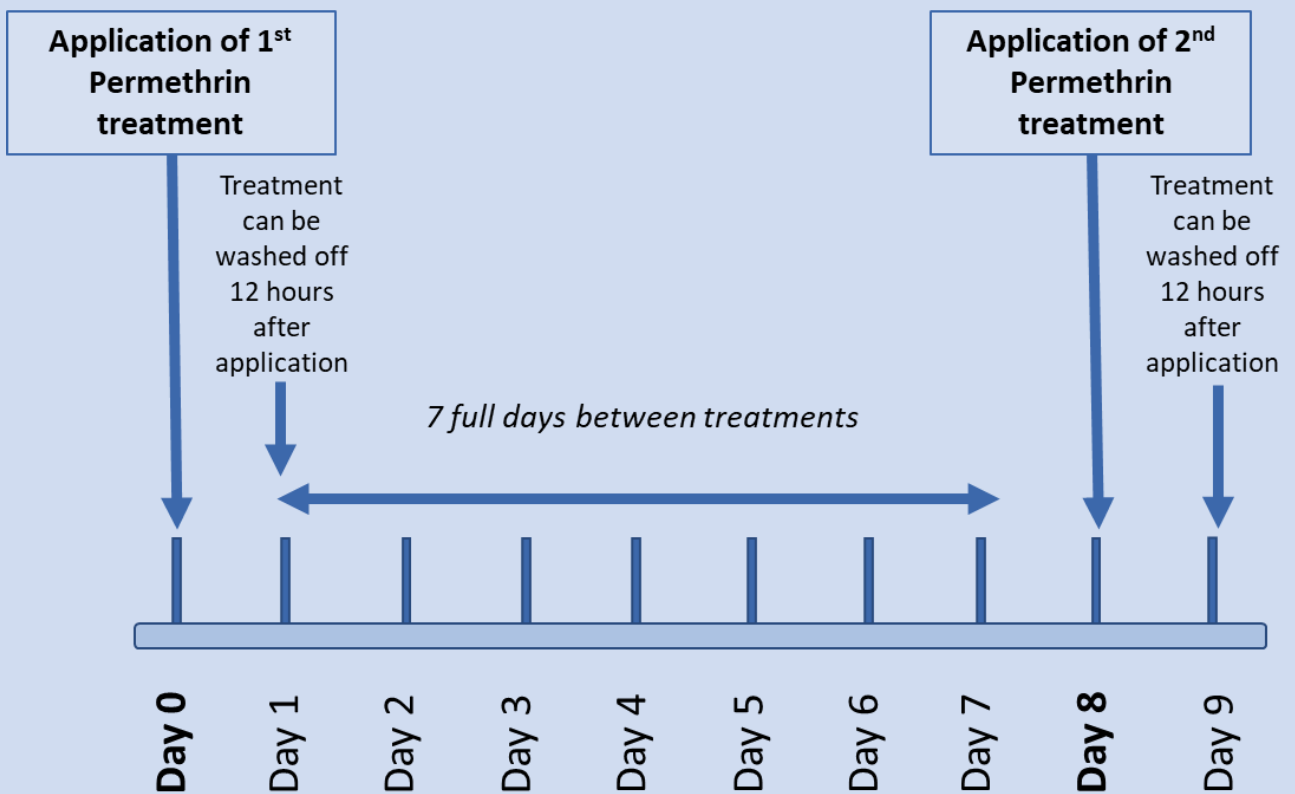
Treatment co-ordination

All service users/staff/contacts need to be treated on the same day (within 24 hours) for both treatments – if this is not co-ordinated properly, the chain of infection will not be broken.

Please ensure enough staff are rota' d on to cover treatment application.

Treatment of scabies with Permethrin, consists of the application of two treatments, one week apart, for symptomatic service users/staff and for all contacts.

Treatment one takes place on **day 0**, and treatment two on **day 8** to allow for 7 full days between treatments.



Preparation of treatment

Treatment co-ordination

Before you start, make sure you have:

- enough product for everyone before starting to apply it. Some people may require 4 x 30g tubes of cream for adequate treatment (2 x 30g tubes for treatment 1 and a further 2 x 30g tubes for treatment 2) - insufficient lotion is a contributory factor to treatment failure
- enough cream applicators/brushes for treatment application
- asked the GP to consider prescribing an antipruritic (anti-itch) cream or an emollient cream to relieve itching

Where to apply

The cream should be applied all over the whole body, **including the neck, face, ears, and scalp**. Particular attention should be paid to the areas between fingers and toes, under nails, wrists, armpits, external genitalia, breasts, and skin folds the area close to the eyes should be avoided.

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



How to apply – step by step

1. Do not bathe or shower before putting on the cream (the cream needs to be applied to cool, dry skin)
2. Application of the cream or lotion is best done in the evening because the cream needs to stay on the body for 8-12 hours
3. For staff applying cream to service users, clean hands and wear disposable apron and gloves
4. Remove all clothing and jewellery (if rings cannot be removed, move to the side and place treatment to the area where the ring would usually sit – place the ring back in its normal position once the skin is dry)
5. Apply the cream to the **whole** body, including the head (face, neck, scalp, and ears), regardless of manufacturer's instructions, taking care to avoid the eyes, nose, and mouth
6. Squeeze the cream into the palm of the hand and ideally use a soft brush (e.g., clean paint brush) for application. A different brush must be used for each service user and remember to discard the brush at the end of the application of treatment
7. Apply the cream to the skin, ensuring creases and folds of skin are covered - under breasts, the nipples, behind the ears, scrotum and between the buttocks
8. Make sure that the cream is applied to the skin between the fingers and toes, and under the nails.
9. Mites can harbour under nails and nails should be kept short. The lotion should be brushed under the ends of the nails.
10. Do not get dressed until the cream has dried. This usually takes between 10 – 15 minutes
11. Get dressed, but leave the feet uncovered. Apply the cream to the soles of the feet and wait until dry before placing socks/slippers on – it may be best to apply the cream to the feet once the service user is on the bed
12. Do not bathe/shower within the treatment time (8-12 hours). **If hands are washed within 8 hours of application, please re-apply cream to the hands**
13. For staff supporting service users with the treatment, once the cream has been applied, wash hands after removing each item of PPE; remove gloves, wash hands. remove apron, wash hands



Aftercare

Staff should ensure all residents receive adequate nail care.

Long nails can act as a reservoir of scabies mites and therefore nail care after a scabies diagnosis is essential. If resident's nails are not trimmed regularly this could also cause unnecessary harm to the resident's skin integrity as a consequence of itching.

Residents and staff may experience severe itching after scabies treatment this is called post-scabies syndrome.

Post-scabies syndrome is due to an allergic reaction to the debris from the dead mites. Unfortunately, it can last for several months.

The GP will be able to assist with this and may prescribe emollients to help relieve the itching.



Post scabies treatment symptoms

People with scabies may have symptoms that persist for up to 6 weeks after treatment and it is important that these symptoms are also treated:

The skin can still be itchy after treatment, up to 6 weeks, and an emollient or anti-itch cream will need prescribing.

Scabies can cause secondary skin conditions, such as eczema, which can make it look as though the scabies infection is still present. This also needs treating adequately, with a potent topical steroid (Betnovate ointment) and a regular and generous emollient (e.g., Hydromol or Cetraben ointment).

The scabies treatments can cause an irritant contact dermatitis which again will require treatment.

Please ask the GP to review post scabies treatment skin complaints.

Treatment failure

Evidence shows that unsuccessful eradication is usually due to failure to adhere to the correct outbreak procedures and treatment instructions.

Treatment failure is likely if:

- The itch persists for longer than 2-4 weeks after the first application of treatment (particularly if it persists at the same intensity or is increasing in intensity)
- Treatment was uncoordinated or not applied correctly, e.g., scalp and face not treated, not reapplied after washing hands, etc., during the treatment time
- New burrows appear (these are not always easily seen) after the second application of the treatment

Management of treatment failure:

- Consider alternative diagnosis – ask GP to review
- Contact Lancashire County Council's IPC team and the IPC team at the ICB



Environmental cleaning

The aim of cleaning in the event of a case or outbreak of scabies is to remove skin scales and dust in the environment. The role of fomites in transmission of scabies is unclear; however, mites are very unlikely to survive without a host long enough to infest a new person.

For classical scabies cases and outbreaks, the normal cleaning regimen (cleaning with warm water and a PH neutral detergent) will be sufficient to remove skin scales from the environment. For crusted scabies, more regular vacuuming and a deep clean after treatment cycles (for example, damp dusting soft furnishings, cleaning touch points, vacuuming mattresses (see mattress care section)) should be considered due to the increased shedding of skin associated with this form of scabies.

Laundry and linen

***Laundry disinfection must take place at the same time as the treatment**

Clothing which has been worn by affected individuals in the period prior to completion of the first 24-hour treatment dose should be managed using appropriate PPE. It is recommended to collect these items in a dissolvable alginate bag (soluble laundry bag), which is placed without opening into a compatible washing machine.

The contaminated items should not be mixed with those belonging to unaffected residents.

Any items which cannot be laundered in a hot wash or dried in a hot dryer, should be placed in a sealed plastic bag for at least 4 days prior to laundering: this should be sufficient to kill any mites present. It should not be necessary to launder any items that have not been touched by the resident in the past week.

All bed linen/towels must be changed at the same time as applying the treatment. and processed as infected linen. Items should be placed in dissolvable alginate bags (where available and if compatible with available washing machines) and processed in the on-site laundry using an enhanced process. Make sure you have **adequate staffing levels, who are trained in laundry, to cover these extra duties:**

- An infected linen wash consists of a thermal disinfection at 71°C for 3 minutes or 65°C for 10 minutes.
- For clothes that cannot withstand an infected linen wash or for domestic washing machines that do not have thermal disinfection, the temperature should be at least 50°C (122°F)
- Linen should not be removed from water-soluble bags or sorted by hand
- Washing machines should not be overloaded
- After laundering items should be dried immediately in a tumble drier



Mattress care

A key thing to consider during an active scabies outbreak is to check mattress audits have been conducted. Each mattress and mattress cover should be reviewed on a regular basis, which should be based upon a local risk assessment, e.g., monthly, and whenever a room is vacated.

Mattresses should be enclosed in a waterproof cover, preferably with an integral zip fastener, to facilitate inspections of the surfaces and to improve its longevity, integrity and to reduce infection risk.

If mattresses are not protected by a plastic covering, or if the service user has Norwegian (crusted) scabies, vacuum both sides of the mattress and add waterproof cover for 72 hours to reduce fomite transmission.



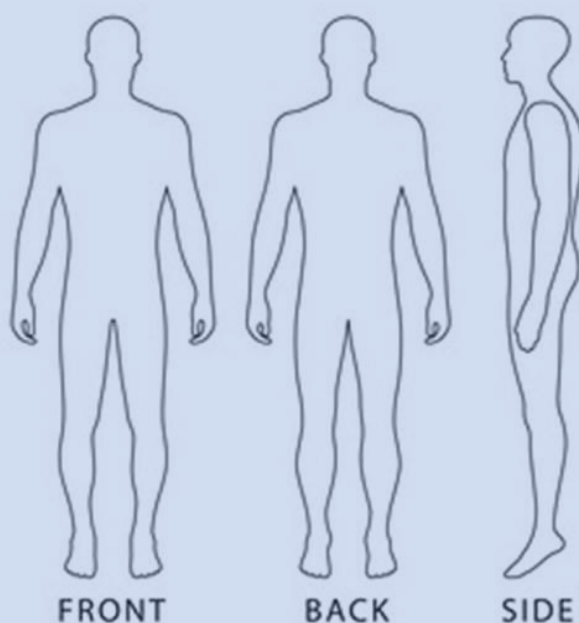
Admissions/transfers

New admissions/transfers to settings experiencing a scabies outbreak may be possible with appropriate risk assessments, please contact the Lancashire County Council IPC team for support and advice.

Communication of the setting's outbreak status should be communicated to other social care and health care settings, when service users are being transferred.

It is good practice to check the skin of any new service users on arrival to the setting. Checking the skin in the first weeks of arrival, will enable scabies infestations to be diagnosed promptly:

- Re-assess the skin (full body check) after **3 weeks** (make a note of any new skin concerns, using a different colour)
- Re-assess the skin (full body check) after **6 weeks** (make a note of any new skin concerns, using a different colour)
- If any new rashes are identified, please ask the GP/ANP/care home specialist practitioner to review



Please see Appendix 1 for an admission body map and Appendix 2 for an inter-transfer form template.



Post Infection Review

Post Infection Reviews (PIR) is a process to help to identify any critical points and contributory factors leading to any infection or outbreak. This enables lessons to be learnt and make recommendations for improvement.

The purpose of this tool is to assist care settings to conduct a PIR of outbreaks or unusual infections from GERMS (gastrointestinal, ectoparasites, respiratory, multi-drug resistance organisms, skin) within care settings:

- **Gastrointestinal** – Hepatitis A (Hep A), Norovirus, Clostridioides difficile (C. diff), Escherichia coli (E. coli).
- **Ectoparasites** – Scabies, Head lice.
- **Respiratory** – Influenza (please see separate PIR form for Coronavirus), Strep throat (Group A streptococcal (GAS)).
- **Multi-drug Resistance Organism's (MDRO)** – Meticillin Resistant Staphylococcus Aureus (MRSA), carbapenemase-producing organism (CPO).
- **Skin** – Cellulitis (GAS), Impetigo (GAS), scabies

It is a resource for Providers and **NOT** a monitoring tool.

Please fill in the ectoparasite section for scabies on the PIR form which can be completed here: [GERMS Post Infection Review - Introduction - Online Forms \(achieveservice.com\)](https://www.achieveservice.com)

Contact Information

Infection, Prevention and Control team:
infectionprevention@lancashire.co.uk

UK Health Security Agency (UKHSA):
clhpt@ukhsa.gov.uk

Integrated Care Board (ICB):
iscicb-el.infectioncontrol@nhs.net

References

[UKHSA guidance on the management of scabies cases and outbreaks in long-term care facilities and other closed settings - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/ukhsa-guidance-on-the-management-of-scabies-cases-and-outbreaks-in-long-term-care-facilities-and-other-closed-settings)

[NHS SBAR Communication Tool Scabies \(infectionpreventioncontrol.co.uk\)](https://infectionpreventioncontrol.co.uk/nhs-sbar-communication-tool-scabies)

[Scenario: Management of scabies | Management | Scabies | CKS | NICE](#)

[Health Technical Memorandum 01-04: Decontamination of linen for health and social care –Management and provision \(england.nhs.uk\)](#)

[NHS England » National Standards of Healthcare Cleanliness 2021](#)

[Instructional Video on the application of Permethrin](#)



Scabies Prevention!

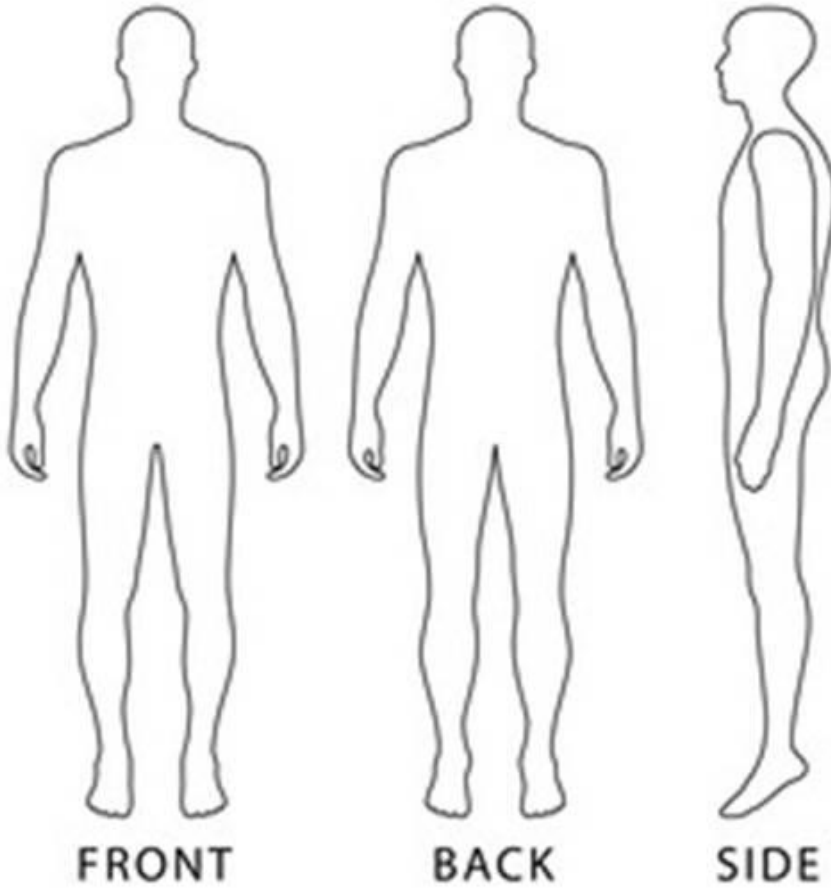
On arrival to the setting, please assess the skin of new service user's using a body map.

Document any rashes, skin tears, bruises, pressures sores

- Re-assess the skin (full body check) after **3 weeks** (make a note of any new skin concerns, using a different colour)
- Re-assess the skin (full body check) after **6 weeks** (make a note of any new skin concerns, using a different colour)

*If any new rashes are identified, please ask the GP to review

Checking the skin in the first weeks of arrival, will enable scabies infestations to be diagnosed promptly



Comments (document any skin tears, bruises, pressure sores, rashes. Make a note of colour/size. Any new skin concerns should be documented in a different colour)

Print Name: _____

Signature: _____

Date: _____ Time: _____

Inter- health and social care infection control transfer form

Patient Name: Address: NHS number: Date of birth: Patients' current location	GP Name and contact details:
Receiving facility e.g., Hospital, ward, hospice: If transferred by ambulance, has the service been notified: YES/N/A	
Is the patient an infection risk: <input type="checkbox"/> Confirmed risk Organisms: <input type="checkbox"/> Suspected risk Organisms: <input type="checkbox"/> No known risk Patient exposed to others with infection e.g., norovirus, influenza, scabies: YES/NO If yes, please state:	
Is the patient aware of their diagnosis/ risk to infection? YES/NO Does the patient require isolation? YES/NO If the patient requires isolation, phone call to the receiving facility in advance: <input type="checkbox"/> Actioned <input type="checkbox"/> N/A	
Any additional information: 	
Name of staff member completing the form: Print Name: Contact Number: Date:	

S	Situation:
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B	Background:
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A	Assessment:
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R	Recommendation:
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MDT notes

Date	Time	Notes	Action	Job title	Signature

Scabies Infection, Prevention and Control Checklist

Infection prevention and control measures	Action	Person responsible	Date completed	Comments
Early detection and early diagnosis – all cases	Diagnosis to be made/confirmed by GP or dermatologist – ideally face to face appointment			
	Establish a relationship with hospital dermatologist and pharmacist for prescribing guidance and stock availability			
	Ensure the service user/staff member has a prescription for treatment (Permethrin, Ivermectin or both)			
	Ensure two doses are prescribed for the topical treatment			
	Ensure that enough topical cream has been prescribed for the size of the person (2-4 tubes to cover both treatments) and enough applicators			
For outbreak only	If 2 or more linked cases within an 8-week period, assess all residents and staff for scabies infection. Full body to be checked			
	Identify contacts using the red, amber, green (RAG) risk assessment			
	Keep a line listing of confirmed, suspected, exposed, and treated cases			
	Gather information on symptomatic individuals with itching, rash, or crusted scales to confirm an outbreak			

	Ensure all service users/staff/contacts have a prescription for treatment (Permethrin, Ivermectin or both).			
	Nominate specific staff to observe the accurate application of the treatment (this may mean ensuring extra staff are rota' d on)			
	Treat all persons (staff/residents) within 24 hours of the staff/resident's first treatment.			
	Synchronize treatment with changing all bed linen and towels, environmental disinfection, including laundry disinfection (extra domestic/laundry staff may need to be rota' d on)			
Infection Control	Implement contact precautions and strict use of personal protective equipment (PPE) for caregivers in contact with symptomatic patients until 24 hours after treatment			
	Limit visitors or require they use PPE until 24 hours post treatment			
	Evaluate effectiveness of control measures			
	Furlough symptomatic staff from work until 24 hours after treatment			

Environmental Control	Wash fabrics on a 'hot wash' (at least 50°C (122°F)) and then dry immediately in a tumble dryer			
	Items that cannot be washed/tolerate a hot wash should be secured in a plastic bag for at least 4 days			
	Increase environmental cleaning			
	Require use of PPE for housekeepers or laundry handlers			
Education and Communication	Provide education and methods of communication for staff, residents, and visitors on symptoms, control			
	Assign a person to notify contacts, visitors, health department, and regulatory agency			
	Notify receiving facilities or units before transferring patients (see transfer document)			

The home is currently experiencing an outbreak of scabies infection.

We would like to assure all visitors and relatives that expert advice has been sought and all appropriate actions are being undertaken.

If you would like to know more about scabies infection, please approach staff who are happy to discuss any concerns that you may have.

Thank You

