South Eastman Health
Santé Sud-Est

	No: IC - AC – 6.7 LTC - 6.7
Approved By: Regional Management Team	**Category: Infection Control** **Source: Regional Infection Control Committee**
New/Replaces: New **Date Approved: February 10, 2012** **Reviewed:** **Revised:**	**Subject: Management of Scabies**

POLICY

Suspected and confirmed cases of Scabies shall be managed following Routine Practices and Contact Precautions.

DEFINITIONS

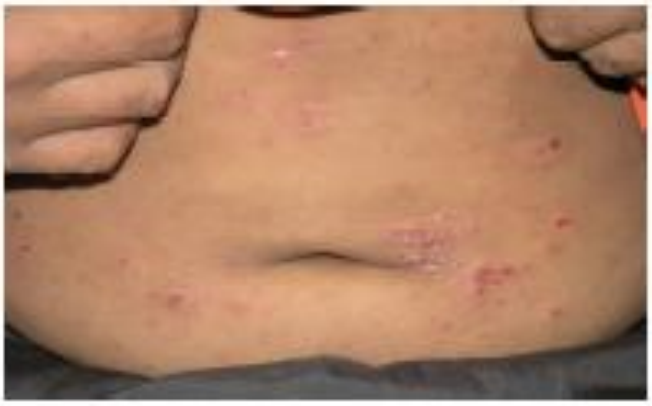
Typical Scabies: Scabies is an infestation of the skin caused by the scabies mite *Sarcoptes scabiei*. The mite is very tiny, 0.2-0.4mm long, and cannot be seen easily without magnification. It occurs worldwide and in all races and social classes. Scabies infestation is not an indication of poor hygiene.

Scabies mites tend to infest the skin where there are creases, such as between the fingers, on the front of the wrists and in the folds of the elbows, armpits, buttocks, genitals and women's breasts. Infants and children often have atypical lesions that are generally distributed; however, the lesions are usually concentrated on the hands and feet, and in body folds and also often seen on the scalp. Young children and infants may develop bullous (blister) lesions on any body surface, including the scalp, neck, palms, and soles of the feet.

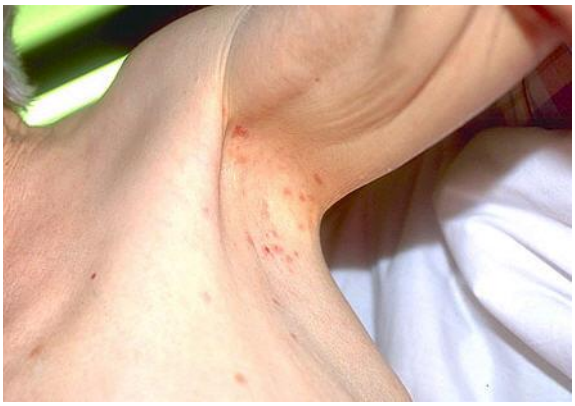
Scabies mites cause intense itching, especially when the body is warm; for example after a hot shower or bath or while in bed at night. Thread-like "tunnels", approximately 10mm long, may be visible as grey lines in the skin, but they are often difficult to detect. Scabies infestation may appear on the genitals as small itchy lumps.

Scabies is usually transmitted by direct skin-to-skin contact, or less commonly by bedding, clothes and towels freshly contaminated by an infested person. Transmission can occur as long as the infested person remains untreated and until 24 hours after

treatment. In persons without previous exposure, symptoms may not develop for four to six weeks after contact. In persons with previous exposure to scabies, itching may develop in one to four days after contact. Without skin contact for four days, the scabies mites can not survive.



Scabies lesions – abdomen



Pruritic red papules present in the axilla of an adult.

Crusted (Norwegian) scabies: is a severe form of scabies in which thousands to millions of mites infest an individual (most normal scabies cases involve only 10 to 20 mites). Crusted scabies often occurs in physically incapacitated and immunocompromised patients and results in intense crusting and scaling of the skin, however, the itch generally associated with scabies may be mild or absent. Crusted scabies is highly contagious.

PROCEDURE

1. Identify Case

Evaluate client's skin lesions or rashes immediately. If scabies is suspected initiate Contact Precautions.

2. Confirm Diagnosis

A definitive diagnosis should be obtained at least for the index case. This is made through a combination of history of intense itching (especially at night), a classic rash, and the identification of mites from scrapings of affected skin. Note that rashes are often atypical in long term care residents. Skin scrapings should be done by a healthcare professional who has been trained to perform the procedure; a dermatologist may need to be consulted. (Appendix A)

If skin scrapings are negative or unavailable and all other symptoms point to a scabies infestation it may be necessary to proceed with the control measures based on symptoms rather than a verified diagnosis.

If crusted scabies is suspected, at least one skin scraping should be done. Negative scrapings in a person with suspected crusted scabies should lead to a reconsideration of the diagnosis.

3. Implement Infection Control Precautions

For typical scabies, implement Contact Precautions (gowns, gloves) as soon as scabies is suspected, and continue precautions until 24 hours after the start of effective treatment.

Restrict client(s) to their room(s) until 24 hours after the start of effective treatment, and emphasize good hand hygiene.

For crusted (Norwegian) scabies, Contact Precautions must be maintained until the client's rash has resolved. Effective eradication often requires more than one treatment.

4. Reporting

The Clinical Resource Nurse (CRN)/designate will report suspected/diagnosed cases of scabies to the Regional Infection Control Coordinator, who will then notify the Medical Officer of Health.

5. Application of Treatment

Obtain a physician order for treatment. Refer to product monograph for product specific information. Strict adherence to product monograph directions is essential as treatment failure is often due to poor compliance.

Permethrin 5% product is the recommended treatment of choice. Sulphur in petrolatum is the recommended alternative. Apply scabicide according to product monograph. Following Contact Precautions, wearing gloves and gown, thoroughly massage the prescribed cream/lotion into the skin from the hairline to the soles of the feet, paying particular attention to the areas between the fingers and toes, wrists, axillae, neck, temple, forehead, external genitalia and buttocks. It is not necessary to apply a thick visible layer of cream into the skin. Reapply to the hands if they are washed off within eight hours of application. Scabies rarely spreads to the scalp of adults. For crusted (Norwegian) scabies, application of the treatment should also include under the fingernails, skin folds and umbilicus. Following application, client is to wear clean clothes/gown. Treatment is to be washed off (shower or bath) after 12 to 14 hours.

Ivermectin (oral antiparasitic) is recommended as an adjuvant to permethrin in Norwegian scabies. Note: For the release of Ivermectin from Health Canada, an Infectious Disease consult is required (1-204-787-2071).

Anti-pruritic medication may be used to relieve the pruritis associated with scabies. The itching may persist for up to three weeks after treatment, even though all mites are dead. Post treatment itching is not an indication to repeat scabicide, unless live mites are identified.

Secondary skin infections may occur and may require treatment.

6. Environmental measures
Coordination of environmental measures is essential to avoid re-infestation of client. Following treatment, i.e. while client is being bathed, and before the client returns to the room, designated staff will perform the tasks listed below while maintaining Contact Precautions.

Laundry

- Remove all bed linens, including blankets and spreads, towels, wash cloths, and clothes worn by the client after the scabicide has been washed off.
- Bag linen at point of care and launder.
- Linen, clothes and all washable items that have come into direct skin contact, including wheelchair cushions, shoes, slippers, coats, lap blankets, etc. should be washed in hot water (55º C or 130º F) and tumble dried in hot dryer for 20 minutes, or dry cleaned. Items that cannot be washed or dry cleaned should be sealed in a plastic bag and stored for 7 days.
- Laundry personnel shall follow Routine Practices when handling contaminated laundry/linens.

Equipment

- Clean and disinfect, with facility approved disinfectant, multiple use equipment, e.g. Walking belts, slings, blood pressure cuffs.
- Clean and disinfect, with facility approved disinfectant, mattress, pillow covers and bedside equipment after scabicide has been washed off and before client is returned to the room.

Housekeeping

- Terminally clean the client's room following treatment.
- Vacuuming is sufficient for carpeted areas.
- Vacuum any fabric-covered chairs, launder if possible, otherwise remove from use for 7 days, i.e. wrap in plastic bag and isolate chair.

7. Education
The CRN/designate in consultation with the Regional Infection Control Coordinator and the Medical Officer of Health will provide education and resources for staff regarding scabies and its treatment. Staff fears of spreading the infestation to their own family members should be addressed. The facility management staff will be responsible to communicate with staff, clients/families to keep them informed of the control measures.

8. Outbreak Management
Consider the possibility of an outbreak if more than one client meets the criteria for diagnosis of typical scabies. Consider an outbreak of crusted (Norwegian) scabies highly likely if only one client is diagnosed with this condition.

Follow the Outbreak Identification and Management Protocol IC-6.4. The CRN/designate is responsible to complete and fax to Infection Control the Outbreak

Report Manitoba Health Form as per IC-6.4. For ease of tracking, document cases using the Scabies Management Tool – Facility (Appendix B).

As for all outbreaks, the Medical Officer of Health will provide direction in terms of management and treatment. Typical recommendations will usually involve the following: Treat all symptomatic residents and their symptomatic and asymptomatic facility contacts at the same time. Treatment should ideally be carried out within a 24-hour period. If the identified source person is diagnosed with Norwegian scabies and has been in the facility for many days or weeks, mass prophylaxis may be necessary.

After treatment of the index case and contacts of typical scabies, do not re-treat unless there is demonstration of live mites at least one week after treatment. New rashes may just represent an allergic response to dead mites that have not yet been shed from the skin.

It is not unusual in a facility setting to have one or two secondary cases after the initial treatment, but transmission should cease with the implementation of Contact Precautions.

9. Surveillance
The CRN/designate will continue to monitor all residents/patients for signs and symptoms of scabies weekly up to 6 weeks following last case. New cases will be documented on the Scabies Management Tool (Appendix B) and reported to the Regional Infection Control Coordinator.

If outbreak control measures have been successful, no new cases should be seen within several weeks following treatment. Cases can still occur as late as 6 weeks following the last exposure. If cases are still occurring several weeks following prophylaxis, the source case was not identified, was not treated appropriately, or there is a new unidentified source(s) somewhere in the facility.

APPENDICES

A – Skin Scraping Procedure
B - Scabies Management Tool - Facility

CROSS REFERENCE

Outbreak Identification and Management Protocol - IC-6.4

REFERENCES

Scabies: treatment. Centers for Disease Control and Prevention, 2011.

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Scabies. Communicable Disease Management Protocol, Manitoba Health, 2001.
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A Guide to Specimen Management in Clinical Microbiology, 2nd Edition, 1999. J. Michael Miller Ed., American Society for Microbiology. Washington D.C.

SKIN SCRAPING PROCEDURE

Specimen: Skin Scrapping (Dermatophyte Culture)

Collection Instructions:
1. Cleanse the affected area with 70% alcohol.
2. Gently scrape the surface of the skin at the margin of the lesion, **do not draw blood.**
3. Place sample in a clean container or on black glassine paper (if available) then into a clean container.

Device and/or minimal volume: Sterile screw cap container. Obtain enough scrapings to cover the head of a thumb tack.

Storage/Transport: Local: less than or equal to 24 hours, store at room temperature.
Courier/Local storage: less than or equal to 48 hours, store at 4°C.

Rejection Criteria: Patient request requisition and sample must have appropriate patient identifiers (refer to Diagnostic Services of Manitoba Sample Acceptance Policy).

Comments: Indicate any recent antifungal therapy on ordering requisition.

Source: Sample Collection Procedure Manual, Diagnostic Services of Manitoba Inc. – Microbiology, page 42 of 60.

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Appendix B

Infection Control Scabies Outbreak Worksheet

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Facility:		Unit:		Date of onset of outbreak:				Outbreak code:
Clinical Cases				Diagnosis			Treatment	
Name and Date of birth	Client Room # OR Staff Job*	Date of initial symptoms	Location of rash	By whom	Skin scraping done yes or no and date	Visual exam only date	Date	7 days follow-up assessment results and comments

***Job Classification:** 1: LPN; 2: RN; 3: Aide; 4: Housekeeping; 5: Dietary; 6: Office/clerical; 7: Laundry; 8: Other