

	POLICIES & PROCEDURES Number: 55-50 Title: Scabies Outbreak
Authorization: [X] SHR Regional Infection Prevention & Control Committee	Source: Infection Prevention & Control Date Initiated: November 2006 Date Reaffirmed: Date Revised: May 2007, August 2010 Scope: SHR Agencies & Affiliates

Any PRINTED version of this document is only accurate up to the date of printing. Saskatoon Health Region, (SHR) Infection Prevention & Control (IP&C) can not guarantee the currency or accuracy of any printed policy. Always refer to the IP&C internal website for the most current versions of documents in effect. SHR IP&C accepts no responsibility for use of this material by any person or organization not associated with SHR. No part of this document may be reproduced in any form for publication without permission of SHR IP&C.

Introduction

1. Definitions:

Suspected case: Person has clinical features of scabies infestation (See #2 below).

Clinical case: Person has the clinical features of scabies but skin scraping does not positively confirm the presence of scabies.

Confirmed case: Person has skin scraping showing mites, eggs or fecal pellets, or a written opinion by a dermatologist based on signs and symptoms.

Close contact: Unprotected, direct contact with skin, clothing or linens of a person with untreated scabies.

Crusted (Norwegian) scabies: This form of scabies is characterized by widespread, extensive crusting and scaling of the skin. Rash may be present and on any area of the body and up to 2,000,000 mites may be present. This form is usually seen in immune compromised people, may have been present for an extended period of time and is considered highly infectious.

Outbreak: Two or more patients/residents/clients in one unit/facility/home diagnosed with scabies within a 4 to 6 week period (1 incubation period) OR

One patient/resident/client on one unit/facility/home plus one or more staff members providing caring for that patient/resident/client are diagnosed with scabies within a 4 to 6 week period (1 incubation period).

2. Clinical features of scabies infestation:

- Skin penetration visible as papules or vesicles.
- Burrows formed by mites under the skin are visible as linear tracts.

Number: 55-50
Title: Scabies Outbreak

- Lesions are seen most frequently in inter-digital spaces, anterior surfaces of wrists and ankles, axillae, folds of skin, breasts, genitalia, belt-line and abdomen. Infants may have lesions of the head, neck, palms, and soles.
- Itching does not always occur with a primary infestation, but when it does, it is most intense at night or after a hot bath or shower.

Policy

1. The Infection Control Officer or his/her designate will direct the investigation and management of a scabies outbreak.

Purpose

1. To control and prevent further spread of scabies.
2. To provide guidelines for the investigation and management of a scabies outbreak.

Procedure

1. Validation:

Infection Prevention & Control validates the outbreak and its extent. This may involve consultation with a dermatologist to confirm the diagnosis by positive skin scrapings or through clinical signs and symptoms.

Assessment of all current patients/residents/clients, staff, volunteers and students in the unit/facility/homes for symptoms must be carried out prior to administration of treatment of cases or prophylaxis of contacts. All patients/residents/clients cared for and staff assigned to these individuals within the last 6 weeks (one incubation period) will be traced and contacted (See Appendix A - Protocol for Scabies Investigation).

2. Laboratory Samples:

A person trained in collection of the specimen obtains skin scrapings and are analyzed by the Microbiology Laboratory. Obtain 4 to 6 scrapings from different parts of the body. Contact the laboratory on how to collect and transport the specimens to the lab.

Note: A negative scraping may be a false negative.

3. Outbreak Control Team:

See Outbreak Management policies 55-10 or 55-20 regarding membership and purpose of the outbreak control team.

The Infection Control Professional /IC liaison arranges a planning meeting in conjunction with the Unit/Department Manager/ Director of Care and the Infection Control Officer or Medical Health Officer and Public Health Services staff.

4. Control Measures:

Upon validation of an outbreak, in acute care the unit is closed to admissions and transfers. Discharged patients should be assessed for symptoms and advised of the need for treatment or prophylaxis.

In long term care and the community service facilities, infection control measures are to be put into place to prevent the further spread of scabies.

A physician order is required for patient/resident/client treatment and should be written by the Medical Health Officer or the family physician.

Only patients/residents/clients who have symptoms or positive skin scrapings need to be placed on Contact Precautions until 24 hours after initiation of treatment. Patients with Crusted scabies must remain on precautions until symptoms have resolved (no expansion of rash and red itchy spots and no new burrows). This may be from 4 days to several weeks. Contact investigations are to be conducted to identify additional cases and contacts.

Treatment of symptomatic cases and prophylaxis of all contacts (including asymptomatic patients, residents, clients, staff, volunteers and visitors and/or caregivers/family members of cases) should take place within the same 24 hour period.

A. Symptomatic Patients/Residents/Clients

Treatment of symptomatic cases:

1. Ensure there are adequate supplies of linen, scabicide, nail and toenail clippers, long sleeved gown/long sleeved shirt, laundry bag, and any other supplies that will be required.
2. Use Contact Precautions (glove and gown) while in health care facilities (see Contact Precautions 30–10 in the Infection Prevention and Control Manual) and (gloves and a long sleeved shirt) if in the home to assist individual in applying the scabicide. If staff and family members are applying the scabicide to more than one individual, they are to change their gloves and gown/shirt, do hand hygiene and put on a clean gown/shirt and gloves after each individual.
3. Ensure infested individual has clean, dry skin, no jewelry, and short clean fingernails and toe nails.
4. Apply scabicide as ordered and according to the drug information insert. Do not forget to do under the fingernails and toenails. Use the appropriate amount of scabicide and cover the entire body from the neck down. Check head and scalp for infestation as these areas may also need treatment in severe infestations and those with minimal hair (e.g. babies).
5. If children (under the age of two) and pregnant women are infested, have them see their family doctor for treatment recommendations.
6. Leave the scabicide on the body for the amount of time in the directions (usually 8 to 14 hours). This is best done before bed. Put on clean nightwear.
7. If the individual gets up to use the bathroom during the night and wash their hands, have them reapply scabicide to the hands before going back to bed.
8. In the morning, have a bath or shower to remove the scabicide. Put on clean clothing.

Environment:

1. At the same time as the treatment, the infested individual's bed should be stripped, cleaned and disinfected and remade. If the mattress can not be disinfected, clean and vacuum the mattress and vacuum the rug around the bed.
 - a. In acute care, it works well to arrange a clean empty room system where treated patients can be relocated while their room is stripped, cleaned, and disinfected to accommodate the next treated patient, and so on.
 - b. In the home, it is best to have the individual sleep in an alternate bed while the main bed is cleaned and vacuumed and left vacant for 72 hours.
 - c. If infested individual sleeps or lounges on other furniture, these need to be cleaned and vacuumed as well and left unused for 72 hours.
 - d. Vacuum the rugs in the bedroom and areas where individual lounges.
 - e. Remember to clean and vacuum the 2nd bed (alternate sleeping area) and to launder the linen after use for those 72 hours.
 - f. Once vacuuming has been completed, remove the vacuum bag and put it directly into a garbage bag, tie closed and remove to the outside garbage.
2. Clean and disinfect all items with which infested individuals have had skin contact in the previous two days. These include blood pressure cuffs, wheelchair arms and cushions, any hand contact surfaces, etc.

Laundry:

1. All towels, facecloths, clothes, pajamas, housecoats, slippers, furniture throws used by the infested individual 3 days prior to treatment with a scabicide should be laundered in hot soapy water and dried in a hot dryer.
2. The bed linen is stripped and sent to be laundered. Wash in hot soapy water and dry in a hot dryer. Once the individual has been treated and baths/showers in the morning, the bed linen is stripped again and laundered in the same manner. If individual has slept in an alternate bed, the linen from this bed must also be laundered in hot soapy water and dry in a hot drier.
3. In acute care, patient's clothing is bagged and sent home for the family to launder.
4. In long term care and in the home, the laundry is to be taken to the laundry area, washed with hot soapy water and dried in a hot dryer.
5. If a child sleeps with a stuffed animal, it should be laundered and put into a hot dryer. If the stuffed animal can not be washed and/or put into a hot dryer, place it into a plastic bag, tie closed, and store it for at least 7 days before reusing or place it into the freezer for 72 hours.
6. Any other items that can not be washed and hot air dried can also be placed into a plastic bag, tie closed and stored for at least 7 days or placed into a freezer for 72 hours.

B. Asymptomatic Individuals

Prophylaxis

1. Prophylaxis of asymptomatic individuals is limited to close contacts, spouses, roommates and staff that have had skin to skin contact with the infested individuals.

2. These individuals receive a one-time application of scabicide. Apply scabicide as ordered and according to drug information insert, including under the fingernails and toenails before bed.
3. Individuals leave the scabicide on for the recommended time. Bath or shower in the morning and put on clean clothes. Launder nightwear and bed linen in hot soapy water and dry in a hot dryer. Remake the bed with clean bed linen.

C. Symptomatic Staff

1. Every employee case must be reported to Occupational Health & Safety, who can facilitate medical consultation and staff case management.
2. Staff and students who have worked on this unit/facility/home since the source case or the previous 6 weeks, whichever is the shorter time, must be contacted and assessed.
3. Staff diagnosed with scabies are relieved of direct patient contact until 24 hours after initiation of treatment.
4. Staff members whose symptoms do not resolve (e.g. develop new burrows and rash expands) are to be assessed by Occupational Health and Safety as they may need a second treatment and be cleared prior to returning to work.
5. Follow directions above under symptomatic patients/residents/clients for cleaning the environment and doing the laundry.
6. Household, sexual and other close contacts (skin to skin contact or sharing clothes or bed linens) of a staff case should receive treatment (if symptomatic) or prophylaxis during the same 24 hour period as the staff treatment.

D. Asymptomatic Staff/Volunteers/Physicians

Prophylaxis

1. Staff collect scabicide (coordinated by Occupational Health & Safety) on or before treatment day or at the end of their shift on treatment day, apply the medication at home, and then bath or shower as per the drug information insert.
2. Follow asymptomatic individual directions above.
3. Family members of asymptomatic staff do not require prophylaxis.

PLEASE NOTE: If pregnant, consult a physician prior to treatment.

E. Pets

1. Pet prophylaxis is not needed as animal scabies is a different species.

5. Outbreak Conclusion:

1. In Acute Care, the unit may be reopened to admissions and transfers when all patients involved have received treatment or prophylaxis and follow-up baths. Symptomatic patients may still be cared for in isolation.
2. Staff and families are to continue to monitor for at least 6 weeks following the last exposure for development of any new cases.

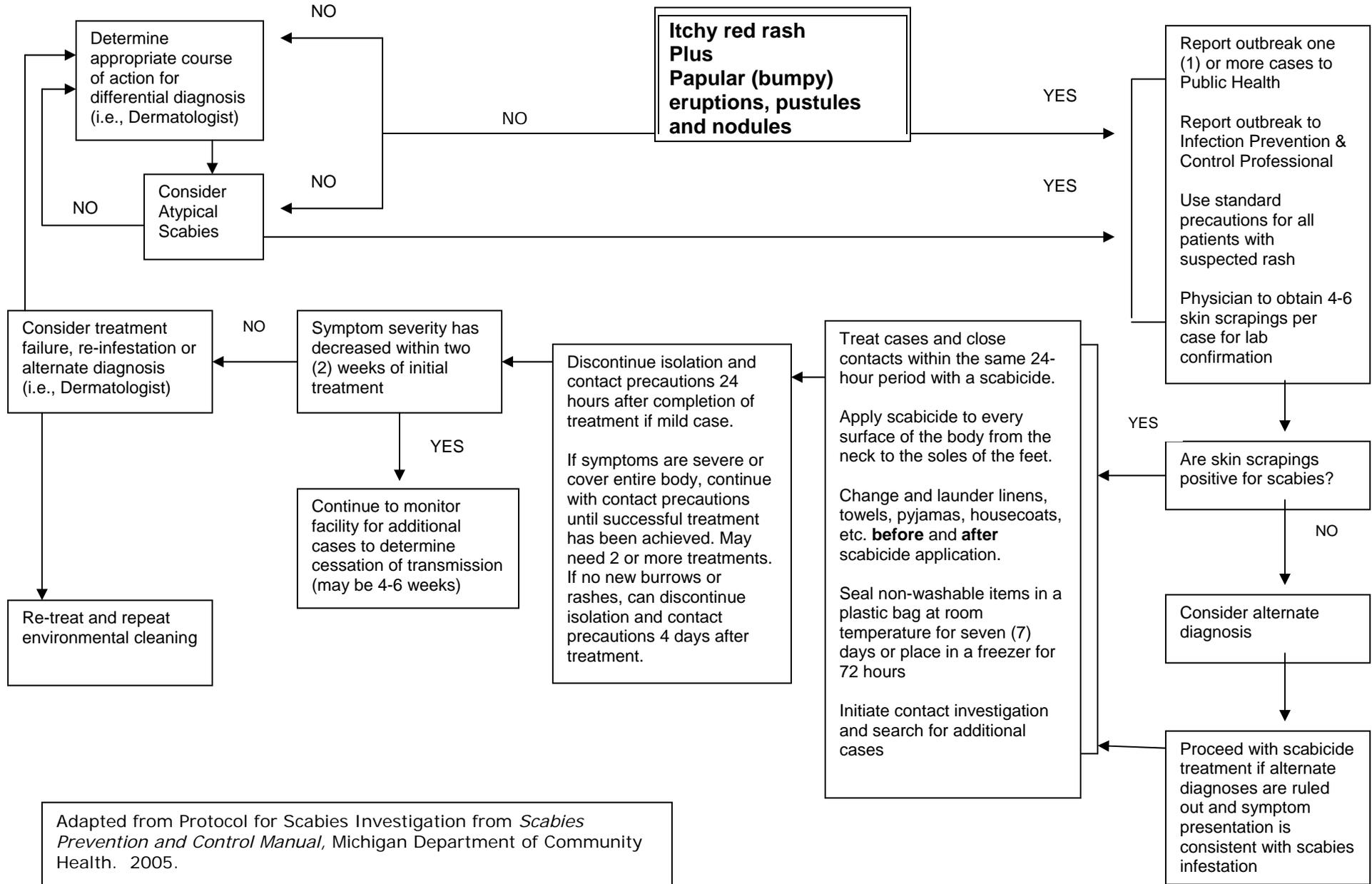
Number: 55-50
Title: Scabies Outbreak

References:

1. Andersen E. That Little Itch Responding to Scabies in the Workplace. *AAOHN Journal*. June 2004. Vol. 52, No. 6.
2. BC Center for Disease Control. *Scabies Control Guidelines*. February 2005.
3. Buehlmann M, Beltraminelli H, Strub C, Bircher A, Jordan X, Battegay M, Itin P, Widmer A. Scabies Outbreak in an Intensive Care Unit with 1,659 Exposed Individuals – Key Factors for Controlling the Outbreak. *Infection Control and Hospital Epidemiology*. April 2009, Vol. 30 No. 4.
4. Centre for Disease Control and Prevention. Prevention and Control and Treatment for Scabies. Sited on line and retrieved June 16, 2010
<http://www.cdc.gov/gov/scabies/treatment>
5. Chan C, Lin S, Chan Y, Lio Y. Infestation by Norwegian Scabies. *CMAJ* September 2009 181(5).
6. Maltezou H. Nosocomial Scabies. *Department for Interventions in Health Care Facilities*. 2010.
7. Michigan Department of Community Health. *Scabies Prevention and Control Manual*. May 2005.

Appendix A – Protocol for Scabies Investigation

Does the patient/resident/client have symptom presentation consistent with scabies infection?



Appendix B – Patient/Resident (Symptomatic) Line Listing for Scabies

DATE: _____ SITE/FACILITY/UNIT: _____ PHONE #: _____

If no addressograph, please include:		<i>Addressograph</i>	<i>Addressograph</i>	<i>Addressograph</i>
Full Name PHN DOB Physician				
Room #				
Onset Date and Time				
Diagnosed (By Who/When)				
Isolation Yes/No				
SYMPTOMS	Symmetrical skin eruptions			
	Wavy lines (about 1" long)			
	Itching			
	Flaky, scaly skin			
	Dots surrounded by redness/streaks			
	Rash - list location(s)			
	Rash face/scalp (Peds)			
	New/undiagnosed rash			
	Rash hand/feet (Peds)			
Other (Specify)				
RX started				
2 nd Treatment (as applicable)				
Update and Comments				

Appendix D – Scabies Client Treatment Listing

Date: _____

Unit/Facility: _____

Clinical features of scabies infestation:

- Skin penetration visible as papules or vesicles.
- Burrows formed by mites under the skin are visible as linear tracts.
- Lesions are seen most frequently in inter-digital spaces, anterior surfaces of wrists and ankles, axillae, folds of skin, breasts, genitalia, belt-line and abdomen. Infants may have lesions of the head, neck, palms, and soles.
- Itching does not always occur with a primary infestation, but when it does, it is most intense at night or after a hot bath or shower.

Outbreak: Two or more patients/residents/clients in one unit/facility/home diagnosed with scabies within a 4 to 6 week period (1 incubation period) **OR**

One patient/resident/client on one unit/facility/home plus one or more staff members providing caring for that patient/resident/client are diagnosed with scabies within a 4 to 6 week period (1 incubation period).

If no client sticker, please include:	<i>Client Sticker</i>	<i>Client Sticker</i>	<i>Client Sticker</i>	<i>Client Sticker</i>
Full Name				
HSN				
DOB				
Sex				
Physician				
Room #				
Bed #				
PREPARATION	Y/N	Y/N	Y/N	Y/N
Linen (two changes of bed linen, towels, pyjamas)				
Gowns and gloves (contact precautions)				
Laundry bags				
Finger/toe nail clippers (single use)				
Scabicide				
TREATMENT CHECKLIST	Y/N	Y/N	Y/N	Y/N
Clean dry skin (client bath or shower)				
No jewellery (e.g., rings)				
Nails trimmed by authorized staff (e.g., podiatrist, footcare nurse, site policy). Fingernails are the priority.				
Clean bed linens				
Clean nightwear				
Apply scabicide (entire body from neck to toes, genital area, under nails)				
Leave scabicide on as indicated in product monograph (e.g., 8-14 hours)				
Reapply scabicide if client up during night (e.g., use of washroom, wash hands, reapply scabicide to hands)				
Bath or shower client after scabicide contact time (e.g., in the morning if applied prior to bed)				
Provide clean clothing for client				
Change bed linens				
Launder nightwear and bed linen in hot, soapy water and dry in hot dryer				
Have family members take home personal clothes and belongings in a bag.				