

# Scabies Guidelines for Institutions

Scabies is an infestation of the skin by human itch mites, which burrow into the upper layer of skin to live and lay eggs. The most common symptoms are intense itching and a pimple like skin rash. The mites are spread by direct, skin-to-skin contact with a person who has scabies.

Scabies can spread rapidly under crowded conditions and where close skin contact is frequent. Institutions such as nursing homes, extended care facilities, childcare facilities, and prisons are often sites of outbreaks.

Some immunocompromised, elderly, disabled, or debilitated persons are at risk for a severe form of scabies called crusted or Norwegian scabies. Persons with crusted scabies have thick crusts of skin that contain large numbers of scabies mites and eggs. The mites in crusted scabies are not more virulent than in non-crusted scabies; however, they are much more numerous (up to two million per patient). Because they are infested with such large numbers of mites, persons with crusted scabies are very contagious to others. In addition to spreading scabies through brief direct skin-to-skin contact, persons with crusted scabies can transmit scabies indirectly by shedding mites that contaminate items such as their clothing, bedding, and furniture. Persons with crusted scabies should receive quick and aggressive medical treatment for their infestation to prevent outbreaks of scabies.

## Prevention

Early detection, treatment, and implementation of appropriate isolation and infection control practices are essential to preventing scabies outbreaks. Staff in institutions should maintain a high index of suspicion that skin rashes and conditions may be scabies, even if characteristic signs or symptoms of scabies (rash, itching) are absent. New patients and employees should be screened carefully and evaluated for any skin conditions that could be compatible with scabies.

The onset of scabies in a staff member who had scabies previously can be an early warning sign of undetected scabies in a resident. Skin scrapings should be obtained and examined carefully by a person who is trained and experienced in identifying scabies mites. Appropriate isolation and infection control practices (gloves, gowns, avoidance of direct skin-to-skin contact) should be used when providing hands-on care to patients who might have scabies. Epidemiologic and clinical information about confirmed and suspected scabies patients should be collected and used for systematic review in order to facilitate early identification of and response to potential outbreaks.

## Medications

Products used to kill scabies mites are called *scabicides*. No "over-the-counter" (non-prescription) products have been tested and approved to treat human scabies.

The following medications for the treatment of **non-crusted scabies** are available only by prescription.

- **Permethrin cream 5%**, brand name: Elimate
- **Crotamiton lotion 10% and Crotamiton cream 10%**, brand name: Eurax; Crotan
- **Sulfur (5-10%) ointment**: many brand names
- **Ivermectin (oral)**, brand name: Stromectol
- **Lindane lotion**: although not commonly available, this product is sometimes used for patients who have failed or cannot tolerate other medications.

For treatment of **crusted scabies**, oral and topical agents should be used together. In addition to the products listed above, the following are recommended:

- **Benzyl benzoate 25%**, topical
- **Keratolytic cream**

## Control

A scabies outbreak is often the result of delayed diagnosis and/or treatment of individuals. Scabies in an institution may be unrecognized until it begins to appear among staff.

An institution-wide information program should be implemented to instruct all staff about scabies and how it is and is not spread.

Spokane Regional Health District (SRHD) should be notified of any facility outbreak to ensure adequate internal response as well as determine whether the outbreak may have community implications, including possible spread by patients or staff to other institutions.

Control measures for **non-crusted scabies** should consist of:

- Confirmation of the diagnosis of scabies.
- Early and complete treatment.
- Avoiding direct skin-to-skin contact with persons who have scabies and following any contact with hand washing. Skin-to-skin contact with scabies patients should be also avoided for at least eight hours after treatment.
- Machine washing and drying of bedding and clothing of case(s) using hot water and hot dryer cycles.
- Prophylactic treatment of staff, other patients, and household members who had prolonged skin-to-skin contact with case. Staff members can return to work after a dose of permethrin or ivermectin. Prophylactic

treatment of family members of staff receiving scabies treatment should be offered.

- Heightened surveillance for early detection of new cases.

Control measures for an outbreak involving cases of **crusted scabies** should consist of:

- Confirmation of the diagnosis; skin scraping is advised as persons may not have characteristic rash and itching.
- Early and complete treatment. Treatment should be strongly considered even in equivocal circumstances because of the complexity of controlling an institutional outbreak and the low risk associated with treatment.
- Isolating patients with crusted scabies from those not affected until treatment is successful.
- Assigning a cohort of caretakers to care only for patients with crusted scabies. This can reduce the potential for further transmission.
- Avoiding direct skin-to-skin contact with persons who have crusted scabies, including the use of protective garments such as gowns, gloves, and shoe covers.
- Thoroughly cleaning the patient's room, including machine washing and drying of bedding and clothing using hot water and hot dryer cycles.
- Identifying and treating all staff, volunteers, and visitors who may have been exposed to a patient with crusted scabies, or to clothing, bedding, or furniture used by the patient. All suspected and confirmed cases, as well as all potentially exposed patients, staff, visitors, and family members should be treated **at the same time** to prevent re-exposure.
- Heightened surveillance for early detection of new cases.
- Screening of all new patients and staff for scabies.

Remember that symptoms of scabies can take weeks to appear the first time a person is infested, but the person still can spread scabies during this asymptomatic period.

Long-term surveillance for scabies is imperative to eradicate scabies from an institution. SRHD staff can consult with your facility to best use these guidelines for preventing and controlling scabies outbreaks. For assistance, call 324.1442.

*The content presented here was adapted from CDC's Scabies in Institutions website. For very detailed information, see:*

[http://www.cdc.gov/parasites/scabies/health\\_professionals/institutions.html](http://www.cdc.gov/parasites/scabies/health_professionals/institutions.html)

### **For more information:**

**Spokane Regional Health District**

Disease Prevention and Response

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