



SCABIES (crusted or atypical and outbreaks)

1. **Agent:** *Sarcoptes scabiei*, a mite.

2. **Identification:**

- a. **Symptoms:** An infestation of the skin caused by a mite whose penetration of the skin is visible as papules or vesicles, or as tiny linear burrows containing the mites and their eggs. Lesions are prominent around finger webs, flexor surfaces of wrists, extensor surfaces of elbows, axillary folds, belt line, thighs, abdomen and lower portion of the buttocks. Lesions also may be found on external genitalia in men and on breasts and nipples in women. Itching may be intense, especially at night. For recurrent cases, rash and itching may occur over the entire body, not limited to sites of entry.

Norwegian, atypical or crusted scabies are the terms used to designate a severe infection with the same mite that causes typical scabies. It is usually found in institutionalized patients, particularly those with developmental disabilities, and in individuals who are debilitated or immunosuppressed. Crusted scabies is characterized by unusual skin manifestations such as scaling or thickening suggestive of psoriasis. Thickened nails, alopecia, generalized hyperpigmentation, and pyoderma with lymphadenopathy also may occur. Itching may be educed or absent, making diagnosis more difficult. It is highly communicable because of the large number of mites. The incubation period may be as short as several days.

- b. **Differential Diagnosis:** Contact dermatitis, allergic dermatitis, drug reaction, psoriasis, and pyoderma.
- c. **Diagnosis:** Microscopic demonstration of the mite, ova, or fecal matter obtained from a skin scraping and/or clinical signs and symptoms.

3. **Incubation:** Generally 4 to 6 weeks in primary infestation; but may be less than 1 week for subsequent infestations or following exposure to crusted scabies. The pruritic response to

scabies is actually an allergic (IgE) phenomenon. Therefore, primary infestation is slow to become pruritic, while repeated infestation re-activates the immune memory in just a few days.

4. **Reservoir:** Humans. Other species of mites from animals may infest man but do not reproduce on humans.
5. **Source:** Infested human or fomite.
6. **Transmission:** Direct or indirect contact.
7. **Communicability:** Until mites and eggs are destroyed; potentially from date of contact through date of adequate treatment.
8. **Specific Treatment:** Topical scabicides: permethrin 5% (Elimite®) is considered the drug of choice. The usual adult dose is 30 grams. Treatment details vary with regular scabies versus crusted scabies; refer to package insert or **Guidelines for Prevention and Control of Scabies in Health Care Facilities (B-274, 8/98)**. Itching may persist for 1-2 weeks following successful treatment. One treatment with permethrin, properly applied, is usually curative. Lindane 1% (Kwell®) is no longer sold in California. Ivermectin (Stromectol, mectizan) (administered in a single oral dose of 200 mg per kilogram) appears to be effective but is not as yet FDA-approved for this purpose.

REPORTING PROCEDURES

1a. Individual cases of crusted scabies, in a health facility or under home health care, are reportable in Los Angeles County.

Report Form: OUTBREAK/ UNUSUAL DISEASE REPORT FORM (DHS 8554, 03/00).

1b. Outbreaks (not in a health facility or under home health care) are reportable, *California Code of Regulations, Section 2500.*

Report Forms: OUTBREAK/ UNUSUAL DISEASE REPORT FORM (DHS 8554, 03/00).



1c. For health facility or home health care agency outbreaks and individual case investigation of crusted scabies in these settings:

CD OUTBREAK NOTICE—HEALTH CARE FACILITY (H-1163, 5/88).

CD OUTBREAK INVESTIGATION—HEALTH CARE FACILITY (H-1164, 5/92).

2. Epidemiologic Data:

- a. Date of onset.
- b. List of potential contacts.
- c. Immunocompromising condition(s).
- d. Hospitalization(s) within incubation period.
- e. Skilled nursing or home health care within incubation period.
- f. Outpatient care within incubation period.
- g. Other institutionalized care within incubation period.
- h. Previous treatment(s) for scabies, date(s), medication(s) prescribed.

CONTROL OF CASE, CONTACTS & CARRIERS

Investigate single cases of crusted (Norwegian) scabies and known or suspected outbreaks of regular and crusted scabies. Initiate evaluation within 24 hours.

CASE:

1. Isolation:

- a. **Community:** Exclude from school, work, and public gatherings until adequately treated.
- b. **Healthcare facility or congregate living:** Contact precautions until adequately treated. Crusted scabies cases should

have negative skin scrapings from at least five different anatomic sites or should be cleared by a dermatologist before contact precautions are discontinued.

2. Concurrently launder linen and clothing used or worn within 72 hours prior to treatment.

CONTACTS:

For individual cases of scabies, household members, roommates, care givers, and other direct contacts should be treated prophylactically. For outbreaks of scabies, assess extent of potential spread and extend prophylactic treatment for scabies as appropriate.

INSTITUTIONAL OUTBREAKS:

Refer to **GUIDELINES FOR THE PREVENTION AND CONTROL OF SCABIES IN HEALTH CARE FACILITIES (B-274, 8/98).**

PREVENTION-EDUCATION

1. Emphasize recognition of early signs and symptoms of infestation and the importance of appropriate treatment, and increase awareness of atypical presentations of scabies.
2. Stress proper laundering (140°F) of linen and clothing worn 72 hours prior to treatment. Dry clean or place non-washable items in tightly closed plastic bag for 7-10 days.
3. For community settings issue **DIRECTIONS FOR SCABIES TREATMENT OR PROPHYLAXIS WITH ELIMITE** and **SCABIES FACT SHEET** (B-274, 10/05, Appendices C and D).
4. Issue **B-274, 10/05** if appropriate.

DIAGNOSTIC PROCEDURES

Skin scraping. The procedure is described in **B-274, 10/05**, "Diagnosis of Scabies by Skin Scraping," Appendix A.