SCABIES (atypical or crusted 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.

   Atypical, crusted or Norwegian scabies are 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. Atypical 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 reduced 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.
3. **Diagnosis**: Microscopic demonstration of the mite, ova, or fecal matter obtained from a skin scraping and/or based on clinical signs and symptoms. A negative skin scraping does not conclusively rule out scabies infestation. Mites are easily recovered, however, in skin scrapings from persons with atypical or crusted scabies.
4. **Incubation**: Generally, 2 to 6 weeks in primary infestation; but may be less than 1 week for subsequent infestations or following exposure to atypical scabies. The pruritic response to scabies is 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.
5. **Reservoir**: Humans. Other species of mites from animals may infest man but do not reproduce on humans.
6. **Source**: Infested human or fomite.
7. **Transmission**: Direct or indirect contact.
8. **Communicability**: Until mites and eggs are destroyed; potentially from date of contact through date of adequate treatment.
9. **Specific Treatment**: Topical scabicide: permethrin 5% (Elimite®) is considered the drug of choice. The usual adult dose is 30 grams. Treatment details vary with typical versus atypical scabies; refer to package insert or Scabies Prevention and Control Guidelines for Healthcare Settings.

Itching may persist for 1-2 weeks following successful treatment. One treatment with permethrin, properly applied, is usually curative. Ivermectin Stromectol®) (administered in a single oral dose of 200 mcg per kilogram) appears to be effective but is not yet FDA-approved for this purpose.

REPORTING PROCEDURES

1. **Outbreak Definition:** Individual cases are not reportable. Outbreaks are reportable, *California Code of Regulations*, Section 2500. Investigation should be conducted by telephone unless directed by the AMD. In-person site visits might be considered for locations that require extra guidance, have special considerations (i.e., locations with vulnerable or special needs populations), or if requested. Outbreaks include a minimum of two (2) clinically suspect or confirmed cases and epidemiologically linked (i.e., within a single classroom, team, or group).
2. Outbreaks (not in a health facility or under home health care) are reportable, *California Code of Regulations*, Section 2500.

   Report Forms: **Outbreak/ Other Reportable Disease or Disease of Unusual Occurrence Form (CDPH 8554)**.

1. **Outbreaks reportable**. Outbreaks in a healthcare facility are defined as two (2) or more clinically suspect or confirmed cases of scabies identified in patients/residents, healthcare workers, volunteers and/or visitors during a six (6) week period.
4. Outbreaks of scabies in acute care facilities will be investigated by ACDC.

5. Outbreaks of scabies in non-acute healthcare facilities or other community locations will be investigated by community services (CS).

   For outbreaks of scabies in healthcare facilities (non-acute care) use:

Report Forms: CD Outbreak Investigation—Sub-Acute Health Care Facility (H-1164, Sub-Acute).

5. **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 known or suspected scabies outbreaks. 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**: Maintain contact precautions/isolation until treatment is completed and/or case is determined to be non-infectious by a healthcare clinician, dermatology consultant or other experienced designee. If individual is residing in a homeless shelter, refer to Guidance for Scabies in Homeless Shelters.

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

CONTACTS:

For individual cases of typical scabies, household members, roommates, care givers, and other direct contacts should be treated prophylactically.

If a scabies case requires transfer to an acute care hospital or other healthcare facility during investigation of a skilled nursing facility or other group setting, ensure notification to the receiving facility. The patient/resident interfacility transfer form should accompany the patient/resident, and document if the patient/resident requires additional scabicide treatment or other follow-up instructions post discharge.

For outbreaks of scabies, assess extent of potential spread and extend prophylactic treatment for scabies as appropriate.

INSTITUTIONAL OUTBREAKS:

Refer to Scabies Prevention and Control Guidelines for Healthcare Settings. A fillable sample line-listing form is available for healthcare facilities in this guideline and listed below:
http://publichealth.lacounty.gov/acd/Diseases/EpiForms/OBScabListHealth.xlsx

PREVENTION/EDUCATION

1. Upon identification of a suspected or confirmed case, immediately place the individual in a private room.
2. Wash all clothing in hot water for at least 10 minutes along with hot dryer cycle or dry cleaning. Any unwashable items can be placed in a tightly sealed plastic bag for at least 3 days (scabies mites generally don't survive longer than 3 days away from human skin). There are no special considerations for furniture except to vacuum fabric. Clean all surfaces with disinfectant.
3. Identify close contacts. Place individuals in private rooms as needed.
4. Contact a medical provider for assessment and treatment options.

For community settings, see CDC Prevention and Control Guidance.

For congregate facilities serving people experiencing homelessness, see Guidance for Scabies in Homeless Shelters.

For healthcare settings, see Scabies Prevention and Control Guidelines for Healthcare Settings.

DIAGNOSTIC PROCEDURES

Skin scraping. The procedure is described in Scabies Prevention and Control Guidelines For Healthcare Settings - Diagnosis of Scabies by Skin Scraping (Appendix C).