**PURPOSE:**

Scabies is an ectoparasitic infestation of the skin caused by the human itch mite, *Sarcoptes scabiei* var. *hominis.* Secondary bacterial skin infection is a common complication of scabies infestation that, in elderly or immunocompromised individuals, can lead to sepsis and even death (refer to Attachment A and B for fact sheet)

A number of factors influence the extent of scabies transmission within a facility, including the mite load and the required level of care of the source case, as well as the duration of the exposure period. Each scabies outbreak is unique and requires an individualized approach. The purpose of the following policy is to prevent transmission of scabies, define exposure, and establish guidelines for patient placement and management.

**DEFINITIONS:**

Typical Scabies

Scabies infestation occurs when the adult female *Sarcoptes scabies* enters and burrows under the upper layers of the skin. The eggs are laid in the tunnels created by the burrowing mites. A papular rash with or without burrows occurs following an asymptomatic period of 4-6 weeks; areas of the body commonly involved are wrists, finger webs, antecubital fossae, anterior axillary folds, breasts, waistline, lower abdomen, genitals, and buttocks. In infants and young children, infestation involves the head, neck, palms and soles, areas usually spared in older individuals.

Itching is intense, especially at night, but complications are limited to lesions secondarily infected with scratching. The risk of acute glomerulonephritis is present of scabies is complicated by beta-hemolytic streptococcal infection. The rash and pruritus result from an immune- mediated delayed hypersensitivity reaction to the mite, its eggs, and fecal material.

Atypical Scabies

When diagnosis and treatment are delayed, scabies can have an unusual or atypical presentation, involving heavy infestation with hundreds to thousands of mites. Atypical clinical presentations are more prevalent in institutionalized or debilitated patients, or those who are immunosuppressed from underlying disease or drug therapy.

When extensive hyperkeratotic skin lesions with crusting and scaling develop, the infestation is called crusted scabies or hyperkeratotic (formerly Norwegian") scabies. Crusted scabies is highly contagious because thousands of mites are imbedded in the thick crusts and easily shed in scales and flakes from affected skin. Crusted scabies is commonly misdiagnosed by dermatologists and primary care physicians as psoriasis, drug reaction, or eczema; treatment with topical steroids intensifies the scabies infestation. Even non-sensitized persons exposed to patients with crusted scabies may develop symptoms of typical scabies in as little as a few days.

General Information

Transmission of the mite is usually by direct skin-to-skin contact. Procedures such as bathing a patient, applying body lotions, back rubs, or any extensive hands-on contact can provide an opportunity for mite transmission. Mites may also be transmitted via clothing, bed linen or other fomites. Fomites play a minor role in situations where the infestation in the source case is typical scabies. The inanimate environment of patients with crusted scabies, however, has been shown to be heavily contaminated with infectious mature and immature mites.

The incubation period in a previously unexposed individual is usually 4-6 weeks. In persons who have been sensitized to the mite by a previous infestation, re-exposure may produce symptoms in 48 hours or less. Following exposure to a course case with crusted scabies involving extremely large numbers of mites, the incubation period may be reduced from the usual time of 4-6 weeks to as little as a few days. Since the scabies mite is an ectoparasite, **an exposed individual is potentially immediately infectious to others, even in the absence of symptoms**. Cases are communicable from the time of infestation until mites and eggs are destroyed by treatment.

Definitive diagnosis requires microscopic identification of the mite and/or its eggs or fecal pellets on specimens collected by skin scraping, biopsy or other means. A negative skin scraping from a person with typical scabies does not conclusively rule out scabies infestation; mites are easily recovered, however, in skin scrapings from persons with crusted scabies.

**PROCEDURES:**

Management of Isolated Case

1. Immediately place any patient in whom scabies infestation is suspected in contact isolation and maintain isolation until treatment is completed and/or case is determined to be non-infectious.
2. Treat with an approved scabicide.
3. Perform environmental cleaning of case-patient's room/area.

Scabies Outbreak Management

Often the first indications of a scabies outbreak are complaints of itching and rash in two or more health care workers or patients. Properly performed skin scrapings will almost always be positive in persons with crusted scabies but are generally negative in cases of typical scabies, even when performed by experienced operators. Nonetheless, it is recommended that efforts be made to confirm the diagnosis of scabies in at least one symptomatic individual.

1. Any health care worker with signs and symptoms of scabies should refer to Employee Health Services (EHS) and not report to work.
2. Evaluate patients on affected unit and immediately place patients with suspected scabies in contact isolation.
3. Prepare a line listing of symptomatic patients and health care workers and a separate line listing of their contacts. Evaluate contacts for scabies.
4. Inform EHS and Infection Prevention and Control. Nosocomial scabies outbreaks and single cases of atypical (crusted) scabies infestation are reportable to the the LA Department of Public Health.
5. Treat symptomatic patients and health care workers with an approved scabicide, provide prophylactic scabicide to all contacts of symptomatic cases, and perform environmental cleaning of affected units. Ideally, these steps (treatment, prophylaxis, and environmental cleaning) should all be accomplished within the same 24 hour period to prevent re-infestation of treated or prophylaxed individuals.
6. Arrange for follow-up evaluation and prophylactic treatment of discharged patients who were contacts to scabies.

Management of Contacts

A contact is any personnel who had direct, skin-to-skin contact, (without wearing gloves) with a patient infested with scabies. In a heavily infested patient, transfer from undergarments or bed cloth may occur if the articles were contaminated by the patient immediately beforehand.

1. HCW contacts to scabies will be closely monitored for signs/symptoms.
2. Examine in-house patient contacts (those who had direct contact to a HCW or other patient with scabies or who resided on the same ward as a crusted scabies case during the exposure period) to determine presence of signs and symptoms of scabies. If symptomatic, manage as a case and apply prophylactic scabicide to in-house patient contacts as described.
3. Notify discharged patient contacts of their potential exposure to scabies. Screen discharged patients for symptoms of scabies. Symptomatic patients should receive treatment and their family contacts should receive prophylaxis. Asymptomatic patients should receive prophylactic treatment if 6 weeks or less have elapsed since date of last potential exposure.
4. Notify facilities to which patient contacts have been transferred of their potential exposure.
5. Facility-wide (mass) prophylaxis of all patients and at-risk employees (employees involved in direct patient care or exposed to patient care environment) should be considered if positive scrapings are found in patients or employees assigned to 2 or more areas of the facility where no direct link with an infested case-patient or HCW can be established.

**REFERENCES:**

1. LACDPH Acute Communicable Disease Program. Scabies Prevention and Control Guidelines Acute and Long-term Care Facilities, 2015.
2. APIC Text of Infection Control and Epidemiology. Chapter 99: Parasites, 2014.

**POLICY OWNER:**

*Director, Accreditation & Licensing, Infection Prevention, and Emergency Management*