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Dear Health Care Facility Administrators and Staff:

Scabies is an ectoparasitic infestation of the skin caused by the human itch mite. Outbreaks of scabies in health care facilities and single cases of atypical scabies are reportable to the City of Long Beach Department of Health and Human Services (LBDHHS). Scabies can be spread through direct, prolonged; skin-to-skin contact with a person who is infected. Such outbreaks can result in significant direct and indirect costs related to outbreak investigation and control, public relations, and the discomfort and anxiety of patients, employees, and their family members. In addition, scabies infestations can lead to common complications, such as bacterial skin infections. In severe cases, these infections can result in sepsis or even death.

Typical scabies infestations can present with intense itching and a pimple-like skin rash resulting from a reaction to the mite, its eggs, or its fecal material. A patient with typical scabies usually has only 10 to 15 live adult female mites on their body at any given time. Atypical scabies infestations can occur when diagnosis and treatment are delayed. In these cases, thick skin lesions with crusting and scaling develop. These types of infestations, which can involve hundreds to millions of mites, are more prevalent among institutionalized, debilitated, or immunosuppressed patients, and are highly contagious through the shedding of scales and flakes from crusted scabies.

The LBDHHS encourages all skilled-nursing and assisted-living facility administrators and nursing staff to review their infection control policies and provide in-services to staff on the guidelines for preventing and controlling scabies infestations in a healthcare setting. To assist you, the LBDHHS is providing you with the ‘Scabies Prevention and Control Toolkit for Health Care Facilities.’ This toolkit is intended to provide guidance for developing a decisive approach to reducing the risk of a scabies infestation. The information contained in this toolkit is based on best practices, as well as county, state, and federal scabies guidelines. The toolkit can be found online at: http://www.longbeach.gov/health/

Thank you for your continued vigilance and assistance with the early detection and reporting of this significant public health issue.

Sincerely,

Anissa Davis, MD, MPH
Health Officer
City of Long Beach Department of Health and Human Services
REPORTING A SCABIES OUTBREAK

Any outbreak of 2 or more cases of scabies identified in patients, residents, healthcare workers, volunteers, and/or visitors must be immediately reported to the LBDHHS Communicable Disease and Control Program (CDCP) at (562) 570-4302.

During after hours, weekends, and holidays, please call the Duty Officer line at (562) 500-5537.

If you have questions or need additional information, contact CDCP at (562) 570-4302.
WHAT IS SCABIES?

Scabies is an infestation of the skin by the human itch mite, *Sarcoptes scabiei var. hominis*.\(^2\) The scabies mite is microscopic. The mite burrows into the upper layer of the skin where it lives and lays its eggs. Persons with typical scabies usually have only 10 to 15 live adult female mites on the body at any given time.\(^1\) Persons with atypical scabies, which can occur when diagnosis and treatment are delayed, may have a significant infestation with hundreds to millions of mites.
WHAT ARE THE SIGNS AND SYMPTOMS OF SCABIES?

The most common symptoms of scabies are intense itching (pruritis) and a pimple-like skin rash (papular rash) with or without burrows. Itching is usually worse at night. The most common areas of the body in which rash and itching occur are the wrists, finger webs, inner elbows, breasts, waistline, lower abdomen, genitals, and buttocks. The rash also can include tiny blisters (vesicles) and scales. Scratching the rash can cause skin sores. Sometimes these sores become infected by bacteria. For persons with atypical scabies, thick (hyperkeratotic) skin lesions with crusting and scaling develop. Atypical scabies is a severe form of scabies that can occur in persons who have weak immune systems (immunocompromised), or are elderly, disabled, or debilitated.

HOW ARE SCABIES SPREAD?

Scabies is usually spread by direct, prolonged, skin-to-skin contact with a person who has scabies. Scabies is spread easily to sexual partners and household members. Scabies can also be spread indirectly by sharing clothing, towels, or bedding used by a person with scabies. Crusted scabies is highly contagious through contact with scales and flakes that have been shed from a person with scabies.

HOW LONG CAN SCABIES LIVE?

Scabies mites can live for as long as 1 to 2 months on a person and usually no more than 48 to 72 hours off a person. They will die if exposed to a temperature of 50° C (122° F) for 10 minutes.

HOW IS SCABIES TREATED?

Scabicides are products that are used to kill scabies mites and eggs. Only a doctor can prescribe a scabicide. There are no over-the-counter (non-prescription products) that have been tested and approved for humans. Treatment also is recommended for the infected person and all household members and sexual contacts, particularly those who have had prolonged skin-to-skin contact with the infested person. All persons should be treated at the same time to prevent re-infestation. It may be necessary for a second treatment, if itching continues for more than 2 to 4 weeks after treatment, or if new burrows or rash continue to appear. Never use a scabicide intended for veterinary or agricultural use to treat humans.
**WHO SHOULD BE TREATED?**

Anyone who is diagnosed with scabies, as well as his or her sexual partners and other contacts who have had prolonged skin-to-skin contact with the infested person, should be treated. Treatment is recommended for members of the same household as the person with scabies. All persons should be treated at the same time to prevent re-infestation.

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Sources/Additional Information:

To maximize the effectiveness of a scabies prevention and control program, ensure these elements are included:

1. Written policies and procedures for the prevention and management of scabies in a health care facility. Standard operation procedures should include steps for environmental cleaning of patient shared items, such as bedding and furniture, and personal items, such as clothing.

2. Regular in-service and training for health care workers on the identification (signs and symptoms) and reporting of suspected scabies among patients and themselves to administrators.

3. Procedures for screening newly admitted or transferred patients for scabies during the intake assessment.

4. Procedures for contact isolation and examination for patients who are suspected of having scabies.

5. Surveillance and early identification procedures for patients with atypical or crusted scabies.

6. Aggressive treatment procedures for patients with atypical or crusted scabies.

7. Employee/occupational health policies for symptomatic health care workers.

8. Access to an experienced scabies specialist or dermatologist to consult on or assess complicated, unusual, severe, or persistent cases.

9. Ongoing administrative and staff support for implementing scabies prevention, surveillance, identification, and control measures.

10. Adequate access to evaluation, treatment, and staffing resources during an outbreak.

### OUTBREAK MANAGEMENT

#### CHECK LIST

**1. Communication**

<table>
<thead>
<tr>
<th></th>
<th>Completed</th>
<th>Date</th>
<th>Completed By</th>
<th>Initial</th>
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<tbody>
<tr>
<td><strong>1.1.</strong> Facility administration notified.</td>
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<td><strong>1.2.</strong> Facility Infection Control notified.</td>
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<tr>
<td><strong>1.3.</strong> Outbreak immediately reported to LBDHHS Communicable Disease Control Program (562)570-4302.</td>
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<td><strong>1.4.</strong> Reported to the California Department of Public Health Licensing and Certification Local Office.</td>
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<td><strong>1.5.</strong> Patients, staff, volunteers, relatives, and visitors notified.</td>
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<td><strong>1.6.</strong> Date of last admission identified.</td>
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<td><strong>1.7.</strong> Facility closed to new admissions.</td>
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<td><strong>1.8.</strong> Facility reopened to new admissions.</td>
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**2. Investigation and Monitoring**

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<th>Completed</th>
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<th>Completed By</th>
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<tbody>
<tr>
<td><strong>2.1.</strong> Symptomatic healthcare workers removed from work, referred to Employee Health, and/or evaluated by a clinician.</td>
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<td><strong>2.2.</strong> Patients evaluated for scabies and placed on contact precautions.</td>
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<td><strong>2.3.</strong> Employee line list completed.</td>
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<tr>
<td><strong>2.4.</strong> Patient line list completed.</td>
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<tr>
<td>2. Investigation and Monitoring</td>
<td>Completed</td>
<td>Date</td>
<td>Completed By</td>
<td>Initial</td>
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<td>2.5. Confirm scabies diagnosis by skin scraping symptomatic persons.</td>
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<td>2.6. Daily skin assessments documented on all exposed patients.</td>
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<tr>
<th>3. Treatment</th>
<th>Completed</th>
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<th>Completed By</th>
<th>Initial</th>
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<tr>
<td>3.1. Symptomatic persons treated with scabicide.</td>
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<td>3.2. Prophylactic treatment offered to staff and volunteers.</td>
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<tr>
<td>3.3. Prophylactic treatment offered to family members and visitors.</td>
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<tr>
<th>4. Environmental Cleaning</th>
<th>Completed</th>
<th>Date</th>
<th>Completed By</th>
<th>Initial</th>
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<tbody>
<tr>
<td>4.1. Enhanced environmental cleaning conducted throughout the outbreak period.</td>
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<tr>
<th>5. Education</th>
<th>Completed</th>
<th>Date</th>
<th>Completed By</th>
<th>Initial</th>
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</thead>
<tbody>
<tr>
<td>5.1. Scabies identification, prevention, and control in-service and training provided to all staff and volunteers.</td>
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</table>

OUTBREAK MANAGEMENT LINE LISTS

I. PATIENT LINE LIST

II. HEALTH CARE WORKER LINE LIST
III. PATIENTS WITH TYPICAL SCABIES

1. Place patients with typical scabies on contact precautions during the treatment period of 24 hours after application of 5% permethrin cream or 24 hours after last application of scabicides requiring more than one application.

2. Health care workers must wear gloves and a long-sleeved gown for direct hands-on contact and wash hands after removal of gloves.

3. Place bed linens, towels and clothing used by an affected person during the 4 days prior to initiation of treatment in plastic bags inside the patient’s room. Bedding and clothing should be handled by gloved and gowned health care workers without sorting and washed in hot water for at least 10 minutes.

4. The hot cycle of the dryer should be used for at least 10 to 20 minutes. Non-washable blankets and articles can be placed in a plastic bag for at least 72 hours, dry cleaned, or tumbled in a hot dryer for 20 minutes.

5. Change all bed linens, towels, and clothes daily.

6. Disinfect multiple patient-use items, such as walking belts, blood pressure cuffs, stethoscopes, wheelchairs, etc., before using on other patients.

7. Discard all creams, lotions, or ointments used prior to effective treatment.

8. General cleaning and vacuuming are recommended. Vacuum mattresses, upholstered furniture, and carpeting. There is no need for special treatment of furniture, mattresses, or rugs.

9. Routine disinfection procedures are adequate.

10. Symptomatic health care workers can return to work as soon as treatment is completed but should use gowns and gloves for direct patient care to prevent re-infestation until all control measures for affected units/areas have been completed.
IV. PATIENTS WITH ATYPICAL OR CRUSTED SCABIES

1. Maintain contact precautions until treatment is completed and/or patient is determined by dermatologist or primary care provider to be scabies free.

2. Assign patient to a private room, if possible. Restrict visitors until treatment regimen is completed. Alternatively, require visitors to gown and glove as required for contact isolation precautions. If resources permit, cohort employees to care for this patient only (no other direct care responsibilities) until effective treatment is completed.

3. Health care workers must wear gloves and a long-sleeved gown with the wrist area covered when attending to patients, conducting housekeeping duties, and handling laundry. Gowns must be removed before leaving the room. Wash hands.

4. Bed linens, towels and clothing used by the affected persons during the 4 days prior to initiation of treatment should be placed in plastic bags inside the patient’s room, handled by gloved and gowned laundry workers without sorting, and laundered in hot water for at least 10 minutes. The hot cycle of the dryer should be used 50° C (122° F) for at least 10 to 20 minutes. Non-washable blankets and articles can be placed in a plastic bag for 7 days, dry cleaned, or tumbled in a hot dryer for 20 minutes.

5. Change all bed linens, towels and clothes daily.

6. Blood pressure cuffs, walking belts, stethoscopes, etc. should be designated for single patient use and left in the patient’s room. Discard all creams, lotions or ointments used prior to effective treatment.

7. Upholstered furniture containing any cloth fabric should be removed from the room and, if necessary, replaced with plastic or vinyl furniture. Mattresses must be covered with plastic or vinyl.

8. The patient’s room should be vacuumed daily with a vacuum cleaner designated for this room alone, followed by routine room cleaning and disinfection. The vacuum cleaner bag should be changed daily. Removal and disposal of contaminated bags should be performed in accordance with infection control protocols.

9. The room should be terminally cleaned upon discharge or transfer of the patient.

# SCABIES TREATMENT OPTION

<table>
<thead>
<tr>
<th>Scabies Classification</th>
<th>Treatment Option</th>
<th>How to Treat</th>
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</thead>
<tbody>
<tr>
<td>Typical Scabies</td>
<td>Option 1: Permethrin cream 5% (Brand name product: Elimite)</td>
<td>Two (or more) applications, each about a week apart, may be necessary to eliminate all mites</td>
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<td></td>
<td>Option 2: Ivermectin (Brand name product: Stromectol)</td>
<td>two doses of oral ivermectin (200µg/kg/dose) should be taken with food, each approximately one week apart.</td>
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<td></td>
<td><strong>Oral ivermectin should be considered for patients who have failed treatment with or who cannot tolerate FDA-approved topical medications for the treatment of scabies</strong></td>
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<tr>
<td>Atypical Scabies</td>
<td>Option 1: Ivermectin and Permethrin cream 5%</td>
<td>Depending on infection severity, ivermectin should be taken in either: three doses (approximately days 1, 2, and 8), five doses (approximately days 1, 2, 8, 9, and 15), seven doses (approximately days 1, 2, 8, 9, 15, 22, and 29).</td>
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<tr>
<td></td>
<td><strong>In addition, topical cream needs to be applied:</strong></td>
<td>Topical permethrin should be administered every 2-3 days for 1-2 weeks to treat crusted scabies.</td>
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<tr>
<td></td>
<td>Option 2: Ivermectin and Benzyl benzoate 25% (with or without tea tree oil)</td>
<td>Depending on infection severity, ivermectin should be taken in either: three doses (approximately days 1, 2, and 8), five doses (approximately days 1, 2, 8, 9, and 15), seven doses (approximately days 1, 2, 8, 9, 15, 22, and 29).</td>
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<tr>
<td></td>
<td><strong>In addition, topical cream needs to be applied:</strong></td>
<td>Benzyl benzoate may be used as an <em>alternative topical agent to permethrin</em>. However, this agent may cause immediate skin irritation.</td>
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Long Beach Skilled-Nursing Facility
Infection Prevention and Control
1234 Healthy Lane
Long Beach, CA 90801
Phone: (552) 555-5555

October 29, 2015

Dear Patients, Families, and Visitors:

During your recent hospitalization, you may have been exposed to scabies. Although it is unlikely that the exposure will result in you becoming infected with scabies, we are sending you this notification to inform you that we are currently working with the City of Long Beach Department of Health and Human Services to investigate potential exposures and provide you with appropriate follow-up information, if needed.

Scabies is a contagious skin condition caused by a mite that requires skin-to-skin contact. Signs and symptoms include a rash and itching, especially at night. A rash can appear anywhere on the body but is usually on the hands, wrists, elbows, breasts, armpits, waistline, and groin. The rash can also include tiny blisters and scales. Scabies has a long incubation period (the time from possible exposure to the time symptoms develop); usually four to six weeks. Persons who have scabies are infectious to others, even before symptoms develop. Scabies is diagnosed by a physician or nurse looking at the rash and/or taking a scraping from the skin. Usually, scabies is easily treated by a medicated cream or oral medication prescribed by your physician.

Public Health recommends that you check your skin daily and, if a rash and/or itching occurs, notify your personal physician as soon as possible. You may also call me at (562) 555-5555 if you have any questions or concerns.

We appreciate your cooperation.

Sincerely,

John Snow, Infection Prevention and Control Manager
SAMPLE NOTIFICATION FOR PHYSICIANS OF DISCHARGED PATIENTS

Long Beach Skilled-Nursing Facility
Infection Prevention and Control
1234 Healthy Lane
Long Beach, CA 90801
Phone: (552) 555-5555

October 29, 2015

Dear Physician:

Our facility is currently experiencing an outbreak of scabies. The period of potential exposure was from September 1, 2015 to October 22, 2015.

Patients whose last date of exposure was more than six weeks ago should be questioned regarding symptoms consistent with scabies. Those patients found to be symptomatic should be evaluated and treated as necessary. Family members and other close contacts should receive prophylactic scabicide therapy at the same time the patient is treated. Permethrin cream 5% (Elimite) is the recommended agent for treatment of scabies.

Patients whose last date of exposure was less than six weeks from this date should be treated with topical scabicide or monitored for symptoms until the six-week period is over. Close contacts of symptomatic patients should also receive treatment or monitoring as well.

Enclosed is a list of your patients who are considered exposed and their last date of exposure. Please notify John Snow at (562) 555-5555 if any of your patients develop scabies. Thank you for your assistance.

Sincerely,

John Snow, Infection Prevention and Control Manager