

# Recommendations for the Prevention and Control of Scabies for School Districts and Child Care Facilities

This document was developed by the California Department of Public Health (CDPH) as a resource for local health departments, elementary schools, preschools, and child care facilities in making rational and informed decisions for scabies prevention, control, and outbreak management. Though the actual incidence of scabies in California is unknown because single occurrences of infestations are not reportable to the local health department, schools and child care facilities are encouraged to use the recommendations in this document to develop proactive policies and procedures to protect the health and safety of children, employees, volunteers, and visitors in these environments.

For the effective prevention, control, and outbreak management of scabies in schools and child care facilities, CDPH recommends a multipronged approach:

- Early detection and diagnosis by parents/caregivers and healthcare providers when children present with signs and symptoms consistent with a scabies infestation
- Treatment of children found to have scabies
- Distribution of educational material to school staff and parents/caregivers, such as <u>CDPH's Easy-to-Read Fact Sheet</u>
   (https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/ScabiesEasyRead.pdf) and <u>Scabies FAQs</u>
   (https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/ScabiesFAQs.pdf)
  - Parents/caregivers can also be directed to visit the <u>CDPH Scabies webpage</u> (https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Scabies.aspx)

# **Scables**

Scabies is a parasitic infestation of the skin caused by the human itch mite, *Sarcoptes scabiei* var. *hominis*. Scabies mites are tiny (difficult to see without a magnifying glass) and burrow into the upper layer of human skin. Mites can live in the skin for 1-2 months where they lay eggs, which then become egg-laying adult mites that can continue the infestation. Scabies is spread by direct, long-lasting, skin-to-skin contact with a person who has scabies. Contact must be prolonged: a quick handshake or hug will not spread scabies. Occasionally, transmission can occur by sharing clothes or bedding with a person who has scabies. Overall, scabies transmission is most common between sexual partners and household members who have direct skin-to-skin contact.

Scabies is found worldwide and can affect people of all races and socioeconomic levels. Scabies can spread rapidly under crowded conditions where close body and skin contact is frequent such as in nursing homes, extended-care facilities, prisons,

and child care facilities. Scabies mites, while a significant nuisance problem, do not transmit disease-causing bacteria or viruses to humans.

The most common signs and symptoms of scabies may include:

- Skin rash and severe itching due to an allergic reaction to the mites and their saliva and feces; especially at night
- Red bumps or pimple-like blisters on the skin, often between fingers or on the wrist, elbows, armpits, genital areas, waist, or shoulder blades
  - Children younger than 2 years are likely to be infested on the head, neck, palms, and soles of feet, or in a diffuse distribution over the body
- Zigzag or "S" pattern markings on the skin that indicate mite burrows ("tunnels" or tracks under the skin where the mites have burrowed)

# **Detection of Scabies**

Healthy persons with no prior history of exposure to scabies typically will not show signs or symptoms of infestation for 2-6 weeks post-exposure. In contrast, a person that has been infested with scabies before may experience symptoms within 1-4 days after exposure due to prior sensitization to the mite.

Diagnosis is usually made by a trained healthcare professional based upon the appearance and distribution of a rash and the presence of mite burrows in or on the skin. This is usually done by carefully removing a mite from a burrow in the skin or by obtaining a skin scraping to examine under a microscope for mites, eggs, or mite fecal material.

Once a diagnosis is confirmed in a child, the parent/caregiver should report the infestation to the day care staff, school nurse, or administration, and the appropriate staff should then notify other staff and parents of children that might have been exposed. The parents/caregivers of children, staff members, volunteers, and visitors that might have been exposed to the affected child should also be alerted to watch for scabies symptoms. However, it is important that confidentially be maintained to prevent stigmatization of the affected child.

All members of a household or close contacts who may have had direct skin-to-skin contact with the affected child (even if no signs or symptoms of scabies are present) should be treated at the same time to prevent re-exposure and reinfestation. Parents or caregivers should initiate treatment prior to the child returning to the classroom. If treatment was completed (usually overnight), the child should not be excluded from the classroom the next day.

#### **Environmental Control**

Scabies mites will live for only 2-3 days off the skin.

In a classroom setting, actions should be taken to reduce prolonged skin-to-skin contact (ex: hand holding). Sharing of clothing and bedding should be avoided as well.

Any items, such as clothing, towels, bedding, and stuffed toys, that the affected child may have had contact with three days prior to treatment should be laundered to kill any scabies mites or eggs. These items can be machine washed in hot water and dried using the high heat cycle. Belongings that cannot be washed may be dry cleaned or placed in sealed plastic bags for several days to a week to kill any mites. Vacuum the furniture, carpeting, and other fabric-covered items where the infested child sat or laid.

<u>Pesticide application to the school or home environment to treat scabies is generally</u> unnecessary and not recommended.

# **Treatment**

There are currently no 'over-the-counter' products available for the treatment of scabies; scabies treatments are available by prescription only. It is important that parents and caregivers always follow the label instructions or those provided by a healthcare provider or pharmacist when administering products to treat scabies.

# Available by prescription only:

- Elimite® \* (5% permethrin cream applied to skin) is a treatment for children 2
  months of age and older. Permethrin is a synthetic pyrethroid similar to naturally
  occurring pyrethrins, which are extracts from the chrysanthemum flower. This
  product kills the scabies mite and eggs and is the product of choice for the
  treatment of scabies.
- Sulfur (5-10%) ointment (multiple brand names; applied to skin) is a treatment for children 2 months of age and older. The odor and cosmetic quality may make this product unpleasant for some individuals.
- **Stromectol**® \* (ivermectin tablet taken orally) should be considered only for patients whose previous scabies treatment(s) have failed or who cannot tolerate FDA-approved topical medications for the treatment of scabies. The safety of ivermectin in children weighing less than 33 lbs. and in pregnant women has not been established.

Lotion or cream treatments should be applied to all areas of the body from the neck down to the feet and toes. When treating infants and small children, treatment should be applied to the entire head (avoiding the eyes, nose, and mouth) and neck because scabies can affect their face, scalp, and neck, as well as the rest of the body. The lotion or cream should be applied to a clean, dry body and left on for the recommended time provided by the product manufacturer before washing off (usually 8–14 hours). If the hands of the infested individual are washed during treatment, the lotion or cream should be reapplied to the hands and between the fingers. Clean clothing should be worn after treatment.

Itching may occur for several weeks after treatment due to an allergic reaction to mites, their saliva, and feces. This reaction often continues until the skin, containing the dead

mites and eggs, has been shed. If itching is still present more than 2-4 weeks after treatment, or if new burrows or pimple-like rash lesions continue to appear, retreatment may be necessary.

Please contact your local health department for more information. These recommendations, an easy-to-read fact sheet, and other CDPH publications can be found on the CDPH Scabies webpage.

The information provided in this document was derived from the <u>U.S. Centers for</u> <u>Disease Control and Prevention</u> (https://www.cdc.gov/parasites/scabies/index.html) and the <u>American Academy of Pediatrics</u> (https://www.aap.org/).

Recommendations by state and federal experts and existing standards of practice outlined in this document are intended to provide guidance to individuals and agencies involved with scabies prevention and control in California. The information provided in this document are recommendations provided for informational purposes only and are not intended to be regulatory in effect.

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<sup>\*</sup> Use of this product name does not imply commercial endorsement by the California Department of Public Health.