



School Health Advisory: SCABIES

“Scabies is an infestation by mites. They are spread by skin to skin contact. A prescription medication will eliminate the mite and her eggs.”

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THE BUGS

Scabies is an infestation of the skin by the human itch mite (*Sarcoptes scabiei* var. *hominis*). The microscopic scabies mite burrows into the upper layer of the skin where it lives and lays its eggs. Scabies is found worldwide and is spread by direct, prolonged, skin-to-skin contact with a person with scabies. Sites of frequent outbreaks are nursing homes, prisons, child-care facilities, and schools.

Crusted or Norwegian scabies is a more severe reaction to the mite and is seen in an immunocompromised, elderly, disabled, or debilitated person. The crusted lesions contain large numbers of mites and eggs and can be spread by direct contact or by (fomites) items like clothing, bedding, and furniture. Persons with crusted scabies should receive quick and aggressive treatment to prevent an outbreak of scabies.

THE BITES

The location is usually in the webs between fingers, wrists, elbows, armpits, waist, nipples, genitalia, and buttocks. In infants and young children scabies may infest their head, face, neck, palms, and soles which are not commonly found areas in older children and adults.

THE LIFE OF A MITE

As a female burrows under the skin she lays 2-3 eggs per day. The eggs hatch in 3 to 4 days. The hatched larva surface and then burrow shallow into the skin forming molting pouches. The larva molt into nymphs twice before becoming adults. Adults are round sac-like eyeless mites. Females are .35mm and the males are half that size. Mating occurs once after an active male penetrates a molting pouch of an adult female. She is then fertilized for life. After being fertilized she creates a permanent burrow where she lays her eggs for the rest of her life of 1 to

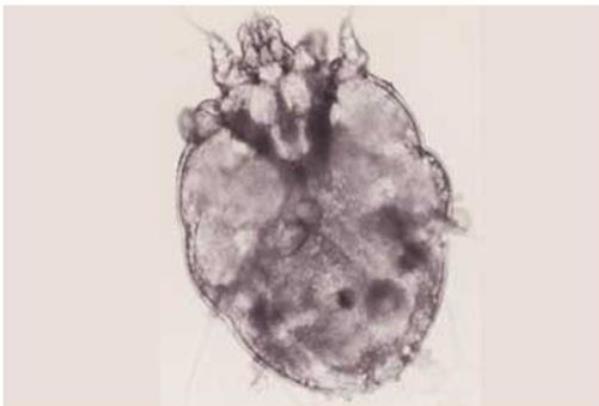


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2 months. Transmission occurs by skin to skin contact of a fertilized female. Males make temporary shallow pits to feed until they find a female to mate. Scabies can live only 48 to 72 hours off of a person.

SYMPTOMS

Scabies cause a rash that appears 2 to 6 weeks after the mites enter the skin. If the child has had a previous infestation of scabies the symptoms may occur as soon as 1 to 4 days. The rash is caused by the body's reaction to the protein, eggs, and excretions of the mites. The rash is pimple-like with intense itching especially at night.



Human itch mite: This female mite, shown magnified 100 times, is full of eggs. She will burrow into human skin to lay her eggs.





DIAGNOSIS

Diagnosis of scabies infestation usually is made based on the customary appearances and distribution of the rash and presence of burrows. When possible the diagnosis should be confirmed by scraping the lesions and looking under the microscope for the mite, mite eggs, or mite fecal matter (sycbala). Finding the mites may be hard to do because there may only 10 to 15 mites present on the entire body. The exception would be crusted scabies where thousands of mites may be found.

TREATMENT

- Scabicides are used to treat scabies. These medications can be obtained by physician prescription only.
- Permethrin 5% (Eliminate) cream which kills both mites and their eggs is the treatment of choice. It can be used in children down to 2 months of age. It is applied from the neck down over the entire body being careful to cover all surfaces. In infants and young children the cream should also be applied to the head, scalp, and neck. The medication is left on overnight (8 to 14 hrs) and washed off in the morning. The doctor may order a second dose in a week.
- In children less than 2 months a sulfur preparation may be used.
- Anyone who has had prolonged skin to skin contact with the infested person should also be treated, including household members and sexual partners. All contacts should be treated at the same time.
- Once treated, no new burrows should develop and itchiness should subside in 2 to 4 weeks. Benadryl may be used to decrease the itchiness.
- Crusted scabies is usually treated with both oral Ivermectin and topical permethrin.
- Scabies do not live away from human skin for more than 2 to 3 days. Items such as bedding, clothing, and towels used by a person with scabies should be decontaminated by machine washing in hot water and drying on a hot cycle or by dry cleaning. Items that cannot be cleaned should be placed in a garbage bag for 72 hours to insure that no live mites are present.

REFERENCES

1. Scabies Info: www.healthychildren.org/English/health-issues/conditions/skin/Pages/Scabies.aspx
2. Parasites: Scabies: www.cdc.gov/parasites/scabies