

## Scabies

Scabies is a highly contagious parasitic disease of the skin caused by a mite called *Sarcoptes scabiei*, which infects only humans. The female mite burrows under the skin to lay her eggs, which hatch and start the infestation cycle. Symptoms include an intense itchy (worse at night) rash, with red bumps and characteristic mite burrows—gray or white, wavy, thread-like lines that are generally obliterated by scratching long before the person sees the health care provider. In adults and older children, the mite burrows are typically seen between fingers and toes; in the flexor areas of the wrist; around the elbows; under the arms; and around the beltline, thighs, navel, penis, nipples, abdomen, and buttocks. In infants younger than 2 years of age, eruption is often blister-like and occurs on the head, neck, palms, and soles of feet. These areas are usually spared in older children and adults. Symptoms appear within 4-6 weeks of exposure in previously unexposed persons and 1-4 days in repeat exposures.

## Transmission

Scabies is transmitted by prolonged direct skin-to-skin contact. Transfer of parasites from undergarments and bedclothes occurs only if these have been contaminated by infested persons immediately beforehand. Mites can burrow beneath the skin in 2 ½ minutes. Scabies can be transmitted as long as the person remains infected and untreated, including the interval before symptoms develop.

The incubation period is from 2 to 6 weeks before onset of itching in people without previous exposure. People who have been previously infested develop symptoms 1 to 4 days after re-exposure.

## School Exclusion Guidelines

**Communicable:** The mite survives only a few days off the human body. Transmission occurs most often by close personal contact. Scabies is transmittable until mites and eggs are destroyed by treatment, ordinarily after 1 or occasionally 2 courses of treatment, a week apart.

**Case:** Exclude from school until 24 hours of antibiotic treatment has been completed.

**Contacts:** Direct inspection of body. School exclusion is not indicated in the absence of infestation. Must practice good hand-washing technique.

## Diagnosis

Scabies is usually diagnosed by the typical appearance of the rash and accompanying symptoms and by examining skin scrapings under a microscope to detect the mite or its eggs. Diagnosis may be made after review of symptoms or history. Burrows are grayish-brown with threadlike lesions; may note a black dot at the end of a lesion. Child will complain of intense itching especially at night. Diagnosis could be based on recent exposure to scabies at home or school.

## **Treatment**

Scabies is usually treated with one of several prescriptions, mite-killing creams or lotions applied once to the skin and then washed off after a specified period of time. Medication to relieve the itching is often necessary as well. Even after effective therapy, itching may persist for up to 4 weeks. Prophylactic therapy is recommended for household members. All members of the family should be treated at the same time to prevent re-infection. Bedding and clothing worn next to the skin should be laundered in a washer with hot water and a hot water and a hot dryer cycle. The parasites do not survive more than 3 to 4 days without contact with the skin. Clothing that can not be laundered should be removed from the person and stored for several days to a week or more to avoid re-infestation. Isolation depends on the age and development level of the student and the location of the lesions. Practice good hand-washing!

## **Notification Guidelines**

When scabies occurs within the school population, school health personnel in consultation with school administrators should determine whether some or all parents should be notified.

## **Prevention Guidelines**

- Wash and rinse on the hot cycle all washable items that have come in contact with an infected individual's skin during the 72 hours prior to treatment. Use a hot dryer for at least 20 minutes.
- Store difficult-to-wash items, such as stuffed toys and pillows, in tightly closed plastic bags for 1 to 2 weeks before using again.
- Thoroughly vacuum all carpets and upholstered furniture.
- Consult with the school health personnel if the problem persists.

