

# Scabies

## Epidemiology

### Source: Human Transmission

- Direct skin-to-skin contact
- Indirect: fomites

### Incubation 4-6 weeks

(infection → symptom onset)

Symptoms develop within 1-4 days in previously infected people

### Clinical case definition

Papular eruption (start as tiny erythematous papules, progress to vesicles or pustules)

Intense itching (esp. at night)

Gray/white burrows

Skin lesions in finger webs, under arm, thighs, nipples, belt line, buttocks, male genitalia

Excoriation

Ulceration

**Complications:** Cutaneous secondary bacterial infection (commonly caused by *Streptococcus pyogenes* or *Staphylococcus aurea*)

### Outbreaks:

Common, esp. among household and school contacts

**Highly contagious** as long as person is infected (even before symptom onset)

~ 1 million cases per year in the US

Exclude until treated

## Diagnosis

*Sarcoptes scabiei* is a mite which penetrates the skin and forms burrows.

### Lab Diagnosis

**Confirmed by identification of the mite, mite eggs, or scybala (feces) from scrapings of papules or intact burrows**

- Mineral oil, microscope immersion oil, or water applied to the skin facilitates scraping collection
- Place scrapings/oil on a slide and examine on low power under a microscope

**Confirmed:** An individual from whom skin scrapings have been examined and mites identified

## Treatment, Prophylaxis

### Treatment

- Application of a lotion or cream containing scabicide over entire body, except head and neck
  - **5% permethrin cream**- safe for use in infants over 2 months, young children, and pregnant/ nursing women should use. Remove by bathing 8-14 hours after application
  - **Crotamiton**- applied once a day for 2 days followed by a cleansing bath 48 hrs later. Treatment failure is common. Should not be used on children.
  - **Lindane**- should only be used when patients fail to respond to other treatment. Many limitations. Use with caution.
  - **Ivermectin**- oral treatment used for severe or crusted scabies and in those who cannot tolerate topical treatment. (not FDA approved)
- Oral antihistamines and topical corticosteroids can help relieve itching
- Topical or systemic antimicrobial therapy is indicated for secondary bacterial infections of the excoriated lesions

### Prophylaxis

- Prophylactic therapy is recommended for household members and close contacts, especially those who have had prolonged direct skin-to-skin contact with the infected patient, especially because symptoms may not develop for weeks.
- Treat all household members at the same time

## Contact precautions

## Control

- Bedding and clothing worn 3 days prior to treatment should be washed in hot water and dried at high heat
- Thorough vacuuming of household and furniture
- Prophylactic treatment for anyone who has had skin-to-skin contact with infected persons.
- School should be instructed to search for unreported/unidentified cases among companions, household members

**Infested individuals should be excluded from school or work for 24 hours after treatment.**