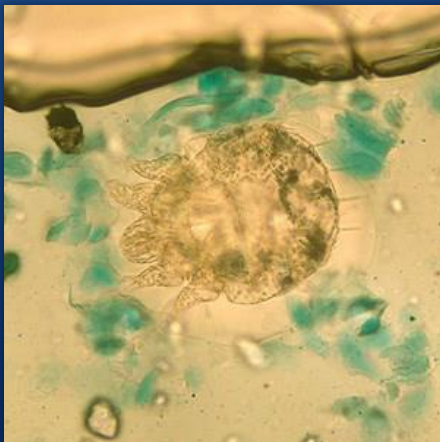




Scabies

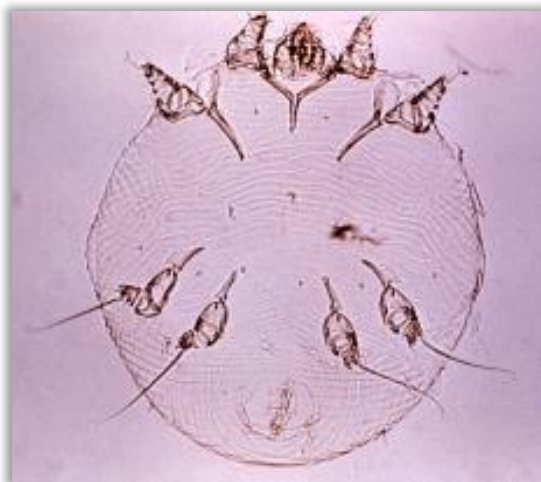
Management

Los Angeles County
Department of Public Health



What is Scabies?

- Scabies is an infection of the skin caused by the human itch mite, *Sarcoptes scabiei*

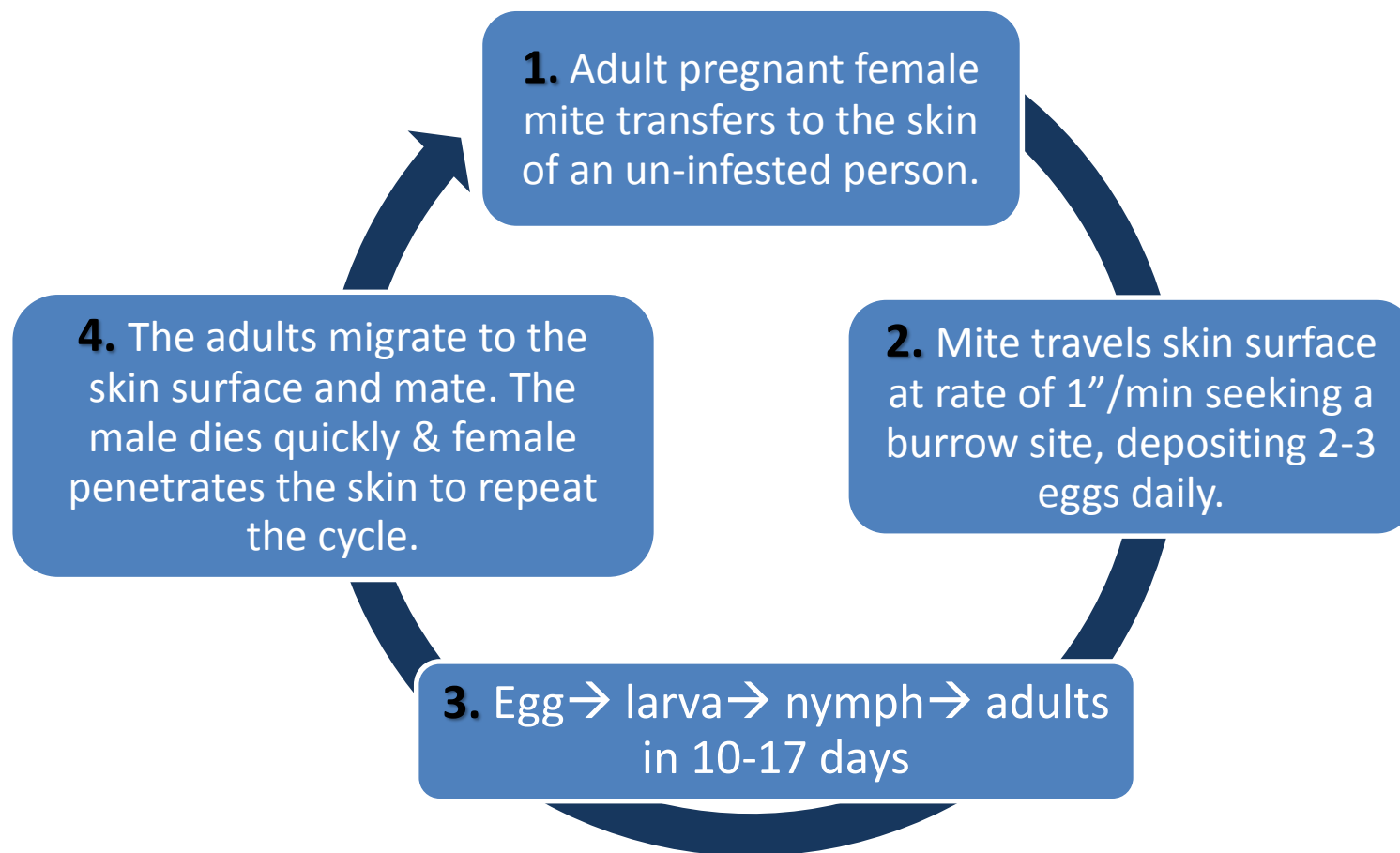




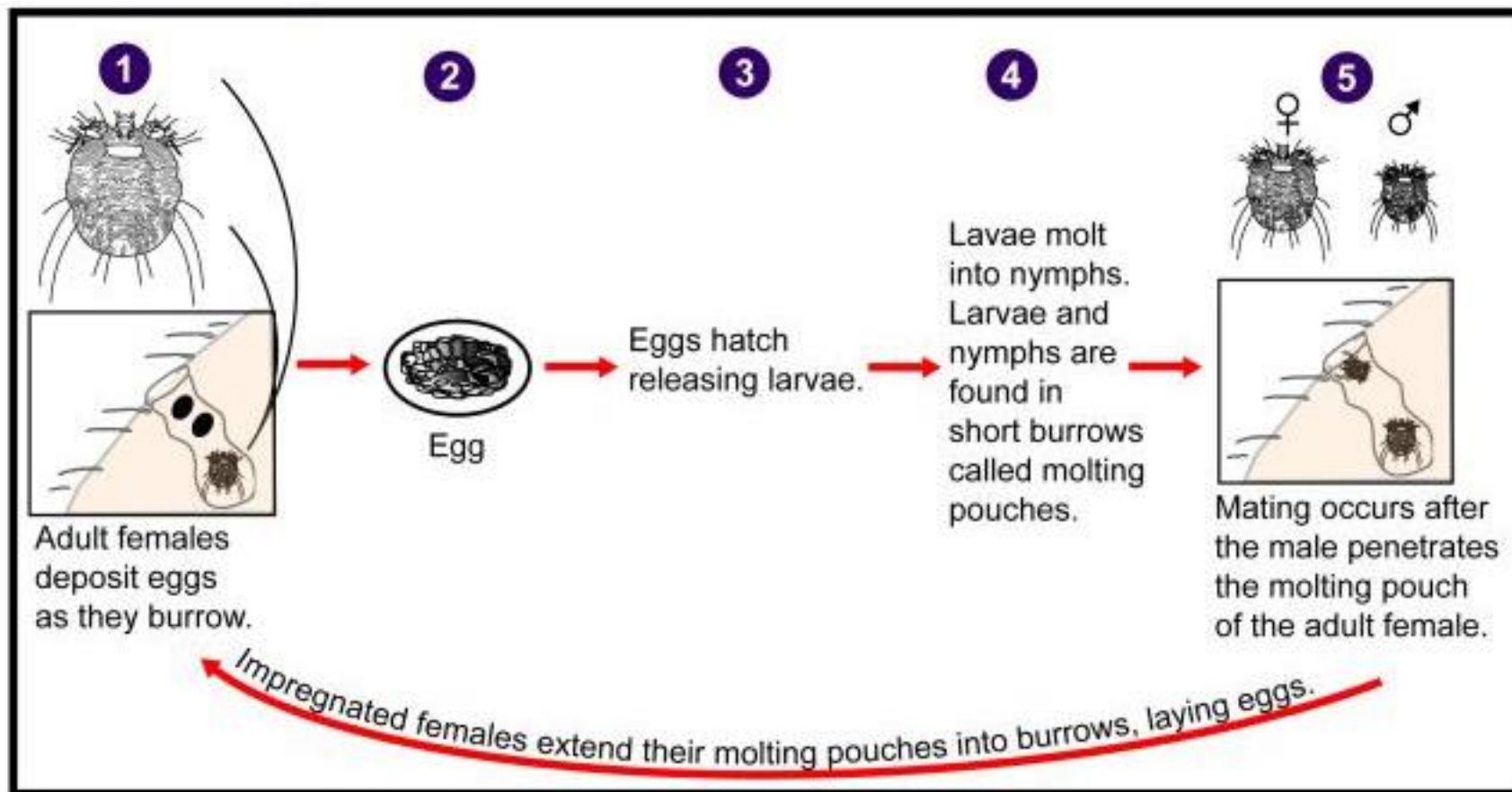
Types of Scabies

- Typical (Conventional): Patients usually have only 10-15 live adult females on the body at any given time
- Atypical (Crusted, formerly known as Norwegian): Heavy infestation with up to 2 million mites per patient. Caused when treatment & diagnosis is delayed. Highly communicable!

The Life Cycle of Scabies

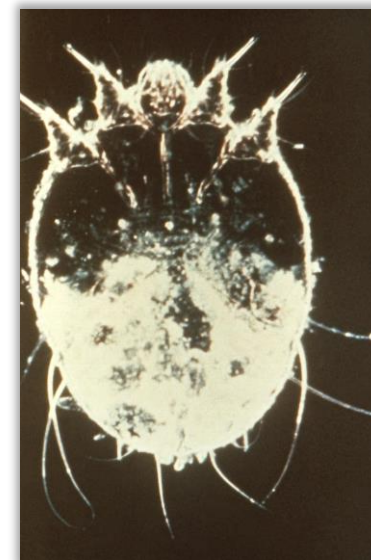


The Life Cycle of Scabies (2)



Scabies Facts

- On the body, a scabies mite can live up to 4-6 weeks
- Once away from the human body, mites do not survive more than 48 – 72 hours
- Scabies cannot jump
- Visible by magnifying glass & microscope



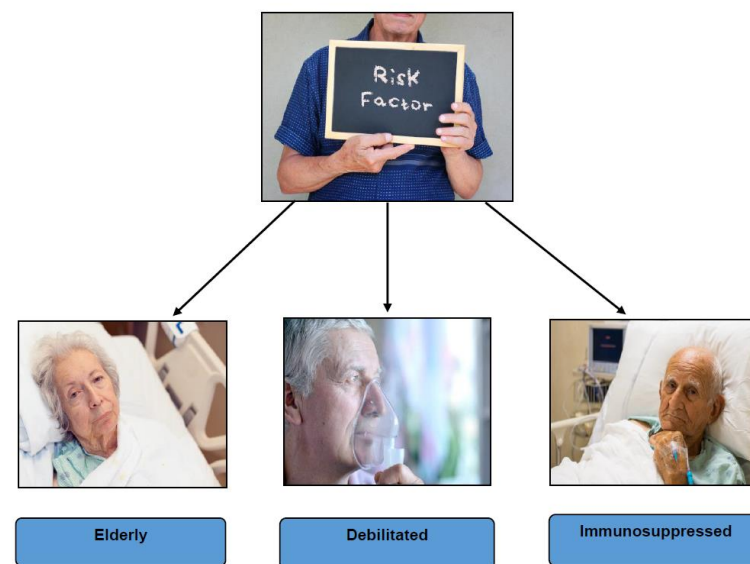
How is Scabies Spread?

- By direct, prolonged, skin-to-skin contact with a person infested with scabies (e.g. bathing, back rubs, & applying lotion)
- By indirect contact, sharing clothing, towels, and bedding



Who is at Risk for Infestation?

- People who live or work in institutions such as:
 - Prisons
 - Homes for the developmentally disabled
 - Skilled nursing facilities/nursing home
- People who live and/or work in crowded conditions
- Immunocompromised, elderly, and debilitated individuals





Incubation Period

When do first symptoms appear?

- Symptoms may appear 4-6 weeks after exposure to an infested person or environmental contacts (clothing, bedding, etc.) in primary infestation
- If previously infested with scabies or following exposure to atypical scabies, symptoms may appear within 1-4 days

Scabies Symptoms

- Rash (small red bumps)
- Papules (pimple-like rash)
- Vesicle (blister-like rash)
- Intense itching, especially at night and over most of the body
- Rash & itching are caused by a hypersensitivity reaction (allergic response) to the mite, eggs, & feces
- Burrows/tunnels (may look brown or black)
- Track marks (thin thread-like lines)



Scabies Symptoms (2)

- Scaly skin (flakes)
- Chafed skin (irritation caused by friction)
- Swollen skin
- Crusty (scabs) or toughened skin
- Sores on the body caused by scratching
- Secondary bacterial infections or scarring caused by scratching



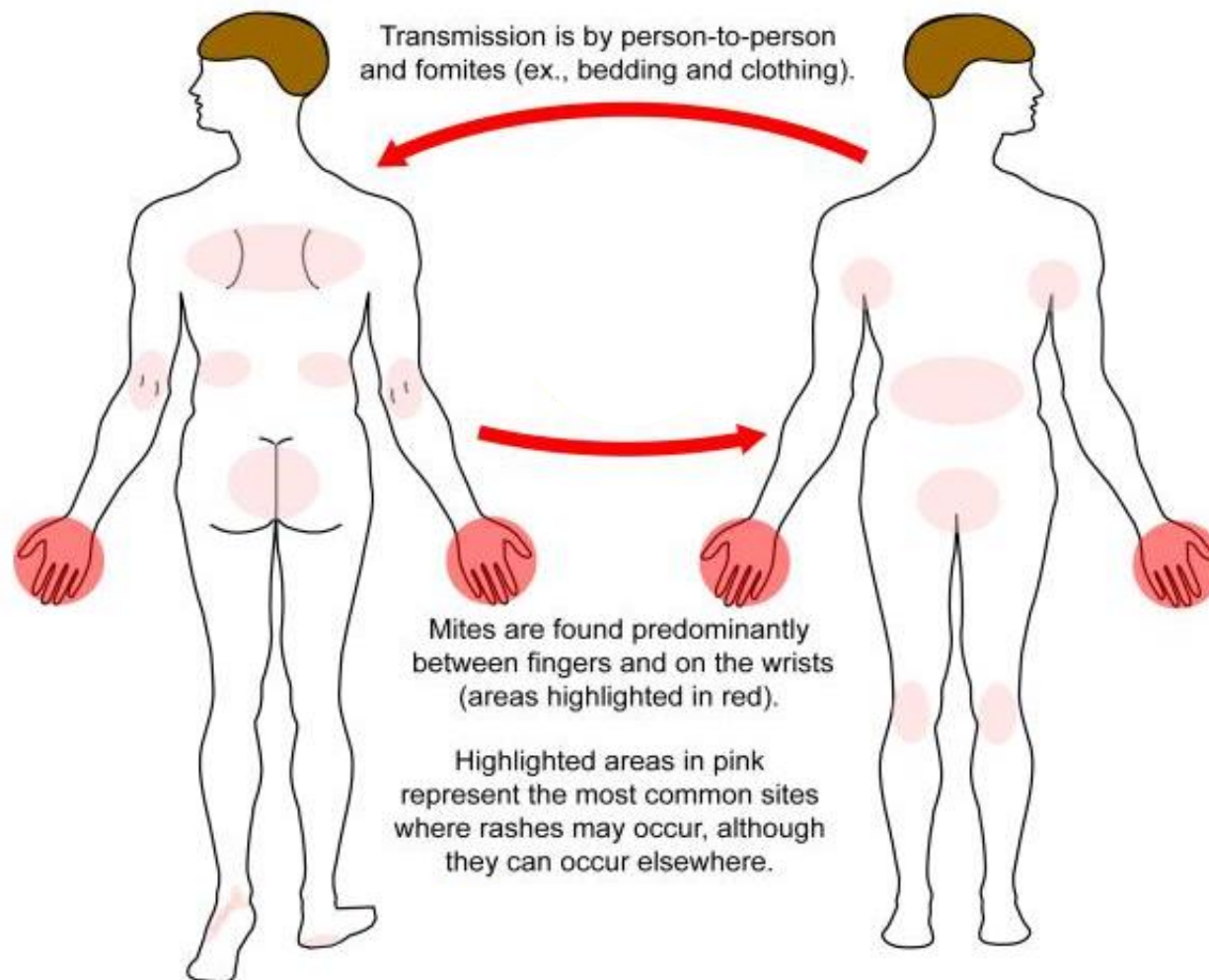
Secondary severe excoriations on lower legs, resulting from the patient having scratched at the primary maculopapular rash caused by the scabies bites.



Common Infection Sites

- Wrists
- Finger webs
- Elbows
- Skin folds
- Under breasts
- Waistline
- Lower abdomen
- Genitals
- Buttocks

Skin Assessment

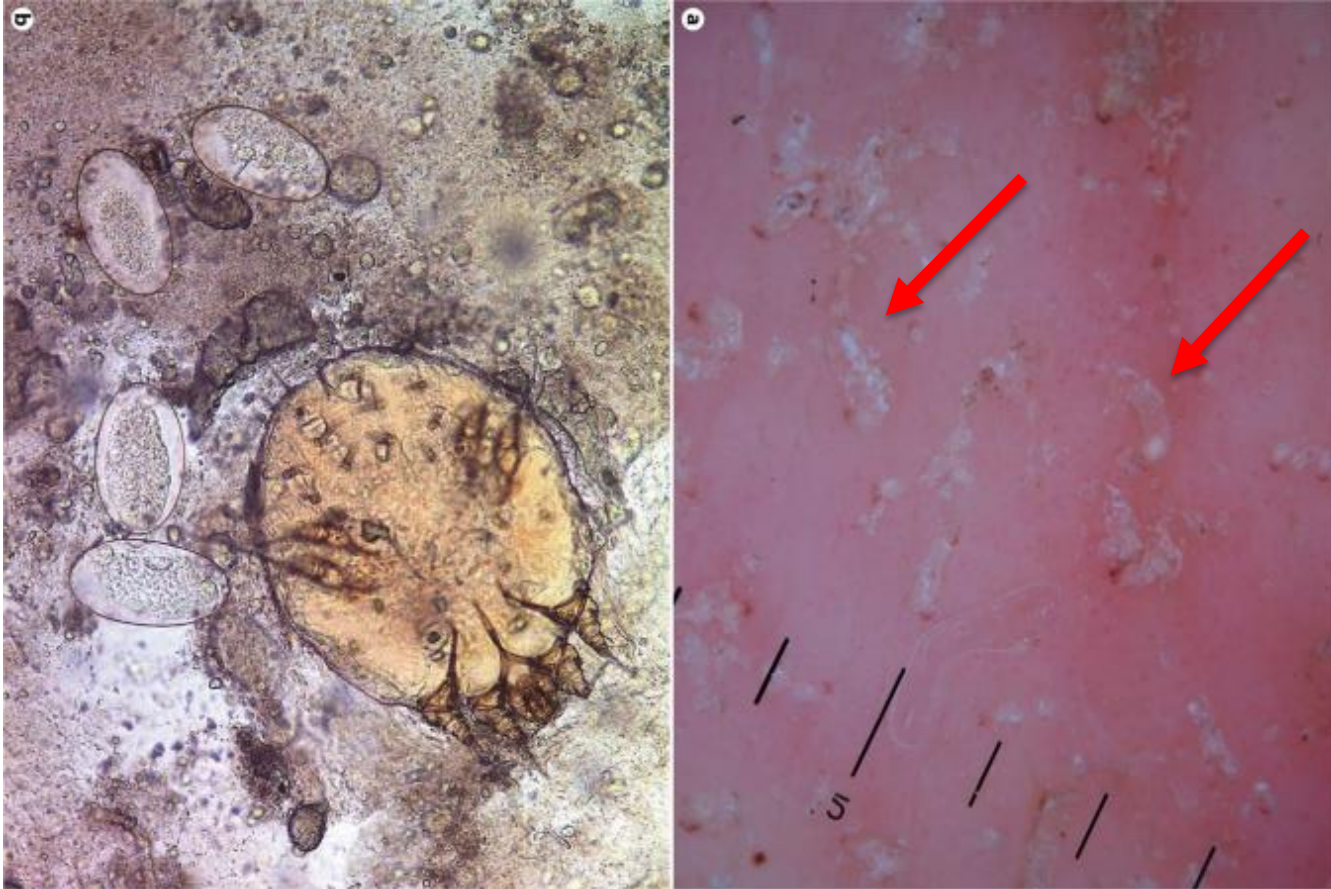


Elbow and Feet

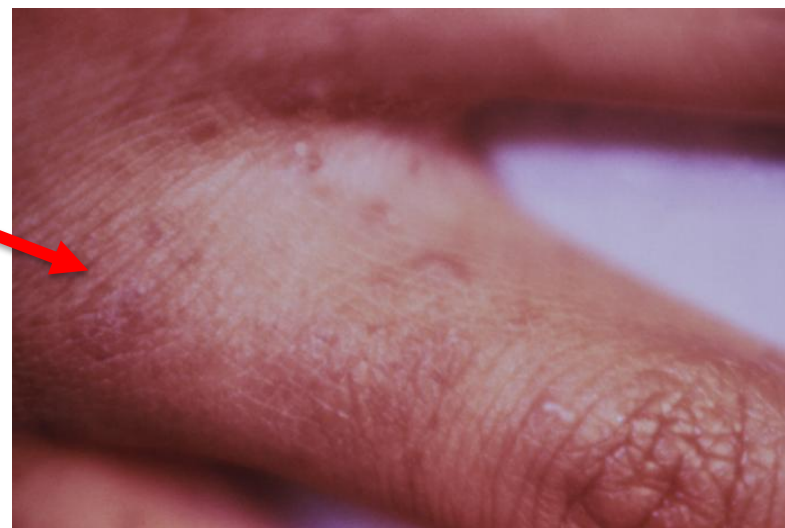


Clinical composite of images taken one week after biopsy showing a skin eruption consistent with typical scabies.

Burrows/tracks



Finger Webs



Hands



Superimposed atypical (crusted) scabies

Diagnosis of Scabies

- Often misdiagnosed
- Clinical evaluation: Clinical signs and symptoms
- Skin scraping: Microscopic demonstration of the mite, ova, or fecal matter obtained from a skin scraping
- A negative skin scraping does not rule out scabies infestation





Who should be treated for Scabies?

- Anyone diagnosed with scabies
- Persons who have close, prolonged contact with the infested person should also be treated:
 - Patients -Household members
 - Employees -Co-workers
 - Sexual partners -Friends
- Everyone should receive treatment at the same time to prevent re-infestation

Scabies Treatment Options

- Topical scabicide (most frequent)
 - 5% Permethrin cream (Elimite, Acticin)
 - 10% crotamiton lotion (Eurax)



Scabies Treatment Options (2)

- Oral anti-parasitic agent
 - Ivermectin (Mectizan or Stromectol)
 - Often prescribed but not currently approved by FDA for scabies treatment





Scabicide Application

- Bathe or shower, dry skin thoroughly before applying scabicide
- Medication should be massaged into the skin from below the chin to the soles of the feet
- Fingernails & toenails should be clipped & scabicide applied under nails
- In infants, toddlers, the elderly & the immunocompromised, the head (forehead, temples and scalp) require application of scabicide



Scabicide Application (2)

- Contact with the eyes and mouth should be avoided
- If scabicide is washed off during hand washing, toileting or perineal care, it must be reapplied to that area
- Apply medication to the skin and wash off after 8-14 hours (can be applied at bedtime and washed off in the morning)
- Itching may persist for 1-2 weeks following successful treatment

Health Care Workers

Symptomatic HCWs:

- Must report symptoms consistent with scabies to employer IMMEDIATELY
- Must be removed from work and referred to employee health
- Can return to work as soon as treatment is completed but should use gowns and gloves for direct patient care to prevent re-infestation



Isolation & Environmental Control Measures

- Contact isolation during treatment period
- HCWs must wear gloves & long-sleeved gowns for hands-on contact. Wash hands after removal of gloves
- Washable items such as bed linens, towels & clothing, etc., used during the 72 hrs. prior to treatment must be washed
- Keep laundry in a plastic bag inside patient's room, sorted & handled by gloved & gowned laundry worker, and washed in hot water for at least 10 minutes



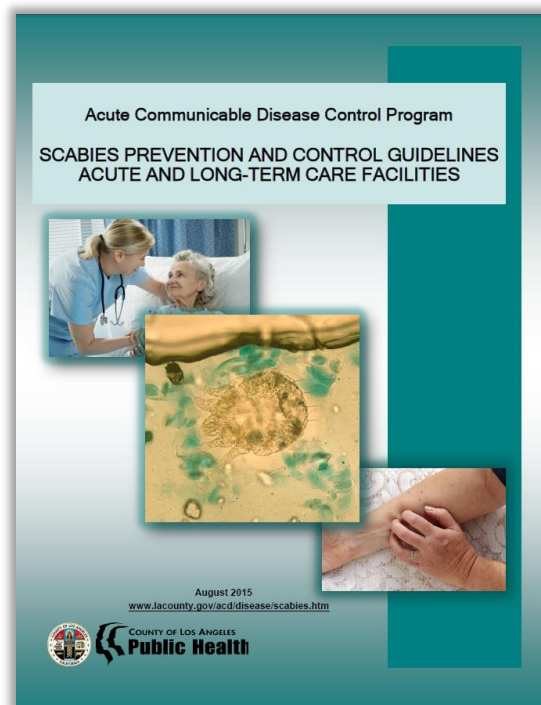
Isolation & Environmental Control Measures (2)

- Non-washable items **MUST** be placed in tightly sealed plastic bags for 7 days
- Change all bed linens, towels & clothes daily
- Disinfect multiple patient-used items (walking belts, wheelchairs, blood pressure cuffs, etc.)
- Vacuum mattresses, upholstered furniture & carpeting; throw away vacuum bag afterwards
- Routine disinfection procedures are adequate



Guidelines

- Scabies Prevention and Control Guidelines
Acute and Sub-Acute Care Facilities (August 2015)

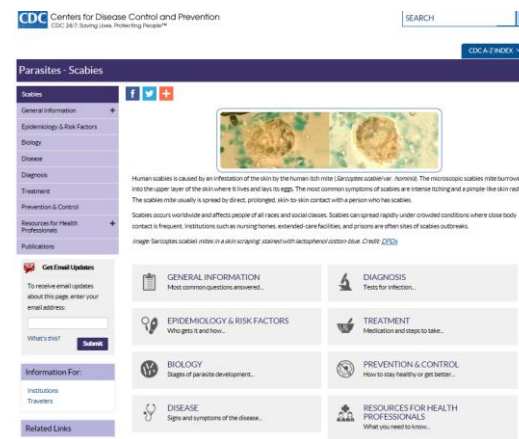
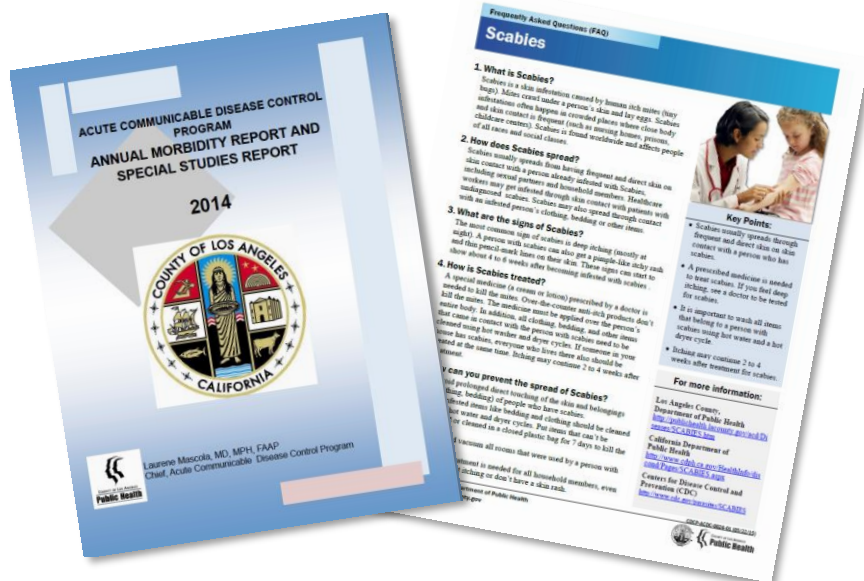


Available PDF online:

<http://publichealth.lacounty.gov/acd/docs/Scabies/ScabiesGuidelinesFinal.pdf>

Additional Resources

- Scabies FAQ sheet (English/Spanish):
<http://publichealth.lacounty.gov/acd/HealthEd.htm>
- Guidelines and information from CDC and CDPH
- Annual Morbidity Report: Scabies outbreaks in LA County
<http://publichealth.lacounty.gov/acd/Publications.htm>





Questions??

References

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- Thinkstock, by Getty Images: <http://www.thinkstockphotos.com/>



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