

BCCDC Non-certified Practice Decision Support Tool: Scabies

Scope

RNs may diagnose and recommend over-the-counter (OTC) treatment for classic scabies.

Etiology

A parasitic infestation of the skin caused by *Sarcoptes scabiei*.

Classified as:

- classic scabies
- crusted (or “Norwegian”) scabies – a more severe form of highly contagious hyperinfestation with scabies presenting predominantly in severely immunocompromised, elderly, or institutionalized individuals

Epidemiology

Scabies is a common skin infestation in British Columbia.

Risk Factors

- direct or prolonged skin-to-skin contact with an individual who has scabies
 - transmission is unlikely with casual skin contact
- crowded conditions (e.g., residing in an institution)
- sharing of personal articles (e.g., clothing or bedding) with someone who has scabies

Clinical Presentation

Classic scabies: severe itching that is worse at night

- scabies-related to sexual contact typically present on the:
 - abdomen
 - genitals
 - thighs

- Other commonly affected areas:
 - hands (between fingers and around nailbeds)
 - axilla
 - elbows and wrists
 - around the areola, usually when there is more breast/chest tissue
 - umbilicus

Crusted scabies: itching may be milder or absent; additional areas affected include the head, face, neck, palms of hands and soles of feet.

Physical Assessment

A head-to-toe assessment is recommended. Adult mites are 0.30 to 0.45 mm (eggs: 0.10 to 0.15 mm), making them difficult to visualize without a microscope.

Classic scabies

- typically 10 to 15 mites
- wavy lesions approximately 2 to 10 mm long (“burrows”) that are grey, white, red, brown or skin coloured that can be difficult to find
- can present as papules (pimple-like rash), hives, tiny bites, or eczema (scaly patches)
- can be erythematous and excoriated if there has been scratching
- prior use of topical steroids can result in atypical presentation, more similar to eczema
- less common: firm, erythematous and itchy nodules (bumps), often seen on scrotum or penis

Crusted scabies

- up to 2 million mites
- thick, crusted lesions that can be scaly, erythematous and/or malodourous

Diagnostic and Screening Tests

No diagnostic or screening tests available. Diagnosis based on clinical presentation and physical assessment.

Diagnosis can be supported by visual imaging techniques such as dermoscopy or microscopy of skin scraping from burrow.

Management

Diagnosis and Clinical Evaluation

The following individuals require treatment:

- those diagnosed with scabies
- household, sexual, and other close contacts, who may have had prolonged direct skin-to-skin contact with someone diagnosed with scabies within the prior month

Consultation and Referral

Consult with or refer to a physician (MD) or nurse practitioner (NP) all individuals who:

- are pregnant or breast-/chest-feeding
- require an alternate treatment
- have no improvement, or new burrows or rash appearing 2 to 4 weeks following treatment
- develop a secondary infection potentially requiring antibiotics
- have extensive scabies or crusted scabies
- present with nodules
- have extensive dermatitis, pruritus or pre-existing skin condition(s)

Treatment

Treatment	Notes
First Choice	
permethrin 5% Cream (e.g., Kwellada-P Lotion or Nix 5%)	<ul style="list-style-type: none"> • refer to the product monograph for specific instructions • prior to applying treatment clean environment as outlined in “Additional Education” • apply treatment to clean, cool skin from the neck down and put on clean clothing • leave on for 8 - 14 hours, then wash off and put on clean clothing • wash clothing and bedding used during treatment • re-apply to hands and nailbeds if soap is used to wash hands within 8 hours of application • a single 30 g treatment is adequate for most adults <ul style="list-style-type: none"> ○ physically larger individuals may require more, but treatment should not exceed 60 g in any single treatment • elderly people: although normally contraindicated, apply product to the neck, face, side of the head and forehead, avoiding mucous membranes
Alternative Treatment	
Ivermectin (Requires MD or NP order)	<ul style="list-style-type: none"> • consult with or refer to MD or NP if unable to take recommended treatments • Ivermectin 200 mcg/kg in individuals weighing > 15 kg is the recommended oral treatment for scabies <ul style="list-style-type: none"> • dose should be repeated in 7 - 14 days

Monitoring and Follow-up

- **Repeat testing:** No
- **Test-of-cure (TOC):** No
- **Follow-up:** further treatment may be indicated if:
 - new burrows or rash occur 2 to 4 weeks after the first treatment

- itching continues for more than 4 weeks after adequate treatment

Partner Notification

Though not a reportable infection, scabies is highly contagious. To help prevent its spread and possible reinfection, notification of all household, sexual and other close contacts is highly recommended.

- **Reportable:** No
- **Trace back period:** 1 month
- **Recommended partner follow-up:** assess and treat even in the absence of symptoms

Potential Complications

- secondary bacterial infection from skin excoriation
- potential for sepsis in crusted scabies

Additional Education

- inadequate application of treatment can result in persistence of infection
- secondary skin infections can occur if lesions are scratched
- to avoid re-infection:
 - no sexual contact until adequate treatment has been completed, and current sexual contacts have received adequate treatment
 - for classic scabies, wash all clothes, bedding, and fomites (e.g., pillows, toys) used within the prior 3 days in hot water (50°C) and dry in a hot dryer or dry-cleaned. Alternatively, place in plastic bags for at least 3 days
 - vacuum mattresses, upholstered furniture, and carpets
- pruritus may persist for several weeks after treatment
- itching can be controlled by antihistamines, local anesthetic creams and topical steroid creams which can be purchased OTC
- [Standard Education for Sexually Transmitted & Blood-Borne Infection \(STBBI\)](#)

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