

Scabies Testing for Clinicians

Central Zone

Skin Scraping

(Adapted from "Management of Scabies in Long Term Care Facilities" 2019 by Winnipeg Regional Health Authority).

Skin scraping is used with microscopy to identify mites, eggs, and feces (scybala). Negative tests do not rule out an infestation.

Equipment

- gloves
- magnifying glass (if available)
- light source
- alcohol swabs
- #15 scalpel blades
- sterile collection container (for example, a sterile, plastic screw-top container)

Site for Scrapings

Identify recent non-excoriated, non-inflamed, burrows or papules.

- Burrows are most commonly found between the fingers, sides and back of foot, folds on the front of the wrist, umbilicus and waistline, lower half of the buttocks and nearby thighs, back part of the elbow, above the kneecap, front and back of axillae, breasts (skin surrounding the areolae, especially in women), glans and shaft of penis, scrotum, and in infants and young children, on the head, neck, scalp, palms, and soles.

Procedure

1. Explain the procedure to the patient and perform hand hygiene.
2. Don gloves.
3. Use an alcohol swab to scrub the area to be scraped for 30 seconds and allow to air dry.
4. Scrape the selected area 6-7 times with the scalpel blade until tiny specks of blood appear.
5. Place scrapings on a piece of paper before transferring to the screw-top container, or directly into the container if practical.
 - **Do not add formalin.**
6. Ensure lid is closed tightly and contents cannot escape.
7. Doff and dispose of gloves.
8. Perform hand hygiene.
9. Label the sterile collection container with patient identifiers.

Submission

Please use the Alberta Precision Laboratories Microbiology Requisition ([20571](#)) or Connect Care equivalent.

- Under the “Parasites” section, select “Skin scrapings for scabies” and specify body site.
- If the specimen is related to a specific outbreak, add the exposure identification (EI) number under “Collection/clinical information/suspected organism”.

Burrow Ink Test (BIT)

(Adapted from "Management of Scabies in Long Term Care Facilities" 2019 by Winnipeg Regional Health Authority).

The Burrow Ink Test (BIT) can be used as an alternative to skin scrapings to assist with the diagnosis of scabies. It is less invasive and does not require professional training to perform. The ink test does not always identify the presence of scabies mites (which occasionally appear as a tiny dark dot at the end of a track), but it can help identify the mite’s track as it burrows. A negative test does not rule out scabies.

Equipment

- gloves
- alcohol swabs
- dark coloured, washable, wide-tipped marker

Site for BIT

See *Skin Scraping* (page 1).

Procedure

1. Explain the procedure to the patient and perform hand hygiene.
2. Don gloves.
3. Use the marker to colour over areas of suspected burrows.
4. Wipe off ink with alcohol swabs or alcohol-based hand rub and disposable towel.
 - The alcohol will remove most of the surface ink but will not remove ink taken up by the burrow, thus leaving a dark, irregular (often zig-zag) line indicating the burrow track(s).
 - If the patient has straight lines that take up ink, these may be due to scratching and not the presence of burrowing mites.

Case Reporting

Please report all cases and indicate if the diagnosis was based on a skin scraping, burrow-ink-test, or clinical findings.

Acute Care

- report to your local infection control professional (ICP)

AHS Occupational-Related Cases

- should be reported to Workplace Health and Safety at 1-855-450-3619, extension 3

Community-Related Cases

- family members or visitors, continuing care, supportive living, shelters should be reported to the Central Zone Medical Officer of Health (MOH) on-call at 403-356-6430

Please include the following information in reports:

- name
- date of birth
- Unique Lifetime Identifier (ULI)
- method of diagnosis: skin scraping, burrow ink test, or clinical
- date of onset
- relatedness to hospital case
- treatment provided (drug and dates)