

## STANDARD TREATMENT WORKFLOW (STW)

### Scabies

Binod K Khaitan<sup>1</sup>, Deepika Pandhi<sup>2</sup>, Ananta Khurana<sup>3</sup>, Dipankar De<sup>4</sup>, Rahul Mahajan<sup>5</sup>, Renu George<sup>6</sup>, Vishal Gupta<sup>7</sup>

<sup>1</sup>All India Institute of Medical Sciences, New Delhi; <sup>2</sup>University College of Medical Sciences, New Delhi; <sup>3</sup>Dr. Ram Manohar Lohia Hospital, New Delhi; <sup>4</sup>Postgraduate Institute of Medical Education and Research, Chandigarh; <sup>5</sup>Postgraduate Institute of Medical Education and Research, Chandigarh; <sup>6</sup> Christian Medical College, Vellore; <sup>7</sup>All India Institute of Medical Sciences, New Delhi

#### CORRESPONDING AUTHOR

Dr Binod K Khaitan, Department of Dermatology, All India Institute of Medical Sciences, New Delhi  
Email: [binodkhaitan@hotmail.com](mailto:binodkhaitan@hotmail.com)

#### CITATION

Khaitan BK, Pandhi D, Khurana A, De D, Mahajan R, George R, Gupta V. Scabies. Journal of the Epidemiology Foundation of India. 2024;2(1Suppl):S97-S98.

DOI: <https://doi.org/10.56450/JEFI.2024.v2i1Suppl.049>

*This work is licensed under a Creative Commons Attribution 4.0 International License.*

*@The Author(s). 2024 Open Access*

#### DISCLAIMER

This article/STW, was originally published by Indian Council of Medical Research (ICMR) under Standard Treatment Workflow. The reprinting of this article in Journal of the Epidemiology Foundation of India (JEFI) is done with the permission of ICMR. The content of this article is presented as it was published, with no modifications or alterations. The views and opinions expressed in the article are those of the authors and do not necessarily reflect the official policy or position of JEFI or its editorial board. This initiative of JEFI to reprint STW is to disseminate these workflows among Health Care Professionals for wider adoption and guiding path for Patient Care.

July/2022



Department of Health Research  
Ministry of Health and Family Welfare, Government of India



icmr  
INDIAN COUNCIL OF  
MEDICAL RESEARCH  
Serving the nation since 1951

### Standard Treatment Workflow (STW)

#### SCABIES ICD-10-B86



- Scabies is an infestation by a mite - *Sarcoptes Scabiei var hominis*
- Transmission occurs by skin to skin contact, sexual contact and infested fomites (like towels, clothes, beddings)
- Symptoms start 3-6 weeks after primary infestation but faster (2-3 days) after a re-infestation
- Multiple cases may occur in schools/orphanages and other such cluster settings

#### SYMPTOMS AND SIGNS

- Intense itch that is worse at night
- Other members of the family are often also affected
- Red, itchy papules and excoriations are seen mainly over fingers (interdigital spaces), wrists, periumbilical area, breasts, buttocks, axillary folds, waist, genitalia, and extensor aspects of the limbs
- The face, palms and soles are usually spared in adults; but typically involved in young children
- Burrow is the most characteristic lesion of scabies, but is often not observed
- Burrows should be looked for in web spaces and wrists and appear as thin, brown-grey lines of 0.5-1 cm
- Sometimes, vesicles are also seen
- Lesions may be sparse in those with

#### OTHER PRESENTATIONS

- Extremely itchy, persistent nodules may develop over male genitalia
- Secondary bacterial infection can occur in those with poor hygiene, especially in children
- CRUSTED SCABIES
  - Severe form of scabies that develops in those with predisposing factors such as immunosuppression (due to disease or drugs - including topical steroids), neurological disorders, or physical incapacitation or mental retardation- associated inability to scratch
  - Thick, yellow brown crusts form that are densely packed with mites
  - The thick crusts may be localised to hands and feet



**Standard Treatment Workflow (STW)**

**SCABIES**  
ICD-10-B86



- Scabies is an infestation by a mite - *Sarcoptes Scabiei var hominis*
- Transmission occurs by skin to skin contact, sexual contact and infested fomites (like towels, clothes, beddings)
- Symptoms start 3-6 weeks after primary infestation but faster (2-3 days) after a re-infestation
- Multiple cases may occur in schools/orphanages and other such cluster settings

**SYMPTOMS AND SIGNS**

- Intense itch that is worse at night
- Other members of the family are often also affected
- Red, itchy papules and excoriations are seen mainly over fingers (interdigital spaces), wrists, periumbilical area, breasts, buttocks, axillary folds, waist, genitalia, and extensor aspects of the limbs
- The face, palms and soles are usually spared in adults; but typically involved in young children
- Burrow is the most characteristic lesion of scabies, but is often not observed
- Burrows should be looked for in web spaces and wrists and appear as thin, brown-grey lines of 0.5-1 cm
- Sometimes, vesicles are also seen
- Lesions may be sparse in those with a good hygiene

**OTHER PRESENTATIONS**

- Extremely itchy, persistent nodules may develop over male genitalia
- Secondary bacterial infection can occur in those with poor hygiene, especially in children
- **CRUSTED SCABIES**
  - Severe form of scabies that develops in those with predisposing factors such as immunosuppression (due to disease or drugs - including topical steroids), neurological disorders, or physical incapacitation or mental retardation- associated inability to scratch
  - Thick, yellow brown crusts form that are densely packed with mites
  - The thick crusts may be localised to hands and feet (including nails)



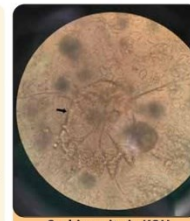
Excoriated papules at the typical sites – breasts, abdomen, web spaces of fingers and wrists



Crusting in finger webs in localised crusted scabies

**DIAGNOSIS**

- Diagnosis is usually clinical
- Demonstration of mite, mite eggs, or mite faeces (scybala) may be attempted from burrows (if visible) or by dermoscopy (if available) and from the thick crusts in case of crusted scabies (where mite is easily demonstrable)



Scabies mite in KOH smear (400X)

**TREATMENT**

**GENERAL MEASURES**

- All family members and close contacts must be simultaneously treated to prevent re-infestation
- The clothes and other fabrics such as towels and bed linen used by the patient in preceding three days must be washed with hot water and dried in the sun
- The items may also be kept sealed in a plastic bag for atleast 3 days (also useful for shoes and other non washable items)

**Most patients are treated with topical alone**

- **Permethrin 5% cream:** Apply over the whole skin surface (neck downwards) on dry and clean skin; wash off after 8-12 hours (advice to apply late evening and keep overnight)
- In infants, the face and scalp must also be treated
  - **Special attention** must be given to **interdigital webspaces, axillae, area under the fingernails and toenails the wrists the external genitalia and the buttocks**
  - To ensure 8 hours of contact time, Permethrin should be re-applied if hands are washed
  - **About 30 grams of cream is used for one application in adults and children ≥ 5 years; 15 grams for children < 5 years**
  - The application is to be repeated after 7-14 days
- **Alternatively, 1% Gamma Benzene Hexa-Chloride (GBHC/ lindane):** may be used for application as above for permethrin. Avoid use in infants
- **Oral treatment for patients with poor compliance or response to topicals therapy**
- **Oral Ivermectin:** at a dose of 200 mcg/kg (upto 12 mg); two doses 1 week apart; taken with food
- **Avoid Ivermectin in infants, children < 5 years old or <15 kg, and in pregnancy. Permethrin has been safely prescribed in these situations**
- Antihistamines should be prescribed as per the patient's requirement

- **Treatment of secondary infection (Staphylococcal/ Streptococcal):** Refer to Bacterial skin infection STW
- **Treatment of crusted scabies:** Ivermectin on days 1, 2, 8,9 and 15 (additionally on days 22, 29 days in severe cases) with Permethrin 5% cream daily for 7 days, then twice weekly until cure. A keratolytic such as 3-6% Salicylic acid may be used over crusts
- **Nodular lesions:** Potent topical steroid (Clobetasol propionate) or intralesional steroid (Triamcinolone acetonide 10 mg/mL) may be required for persistent nodules

**POST TREATMENT ADVISE**

- The patients must be explained that itching can continue for several weeks after successful treatment and repeated applications are not required; continue antihistamines for symptomatic management
- However, if itching persists for more than 3-4 weeks/ or if new lesions are noted - a reinfestation is likely. This can occur if all close contacts were not simultaneously treated

**TREAT THE ENTIRE SKIN, NOT LESIONS ALONE; TREAT THE FAMILY/CONTACTS, NOT THE PATIENT ALONE**

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the website of DHR for more information: [stw.icmr.org.in](http://stw.icmr.org.in) for more information. ©Department of Health Research, Ministry of Health & Family Welfare, Government of India.