

# Aotearoa New Zealand STI Management Guidelines for Use in Primary Care

## Ectoparasites

### Cause

- Pubic lice are caused by *Pthirus pubis*
- Scabies is caused by *Sarcoptes scabiei* var. *hominis*

### Overview

- The most common genital and pubic ectoparasite infestations are scabies and pubic lice (Pediculosis pubis or crabs)
- **Transmission** is through:

### Scabies

- Skin-to-skin contact with someone with scabies
- Occasionally acquired via bedding or furnishings

### Pubic lice

- Close contact
- Scabies is associated with crowded living or sleeping conditions and institutional outbreaks have been reported
- Pubic lice are less frequently seen in Aotearoa New Zealand since removal of pubic hair has become common
- Pubic lice can sometimes be found on coarse hair elsewhere on the body, e.g. eyebrows, eyelashes, chest and axillae

### Clinical presentation

<b>Signs and Symptoms</b>
<ul style="list-style-type: none"> <li>• Pubic or genital itch (especially at night with scabies)</li> <li style="padding-left: 40px;">• Rash</li> </ul>
<ul style="list-style-type: none"> <li>• Scabies: genital papulonodules with or without generalised itch</li> </ul>
<ul style="list-style-type: none"> <li>• Pubic lice: debris in underwear</li> </ul>
<b>Complications</b>
<p>Scabies: complications uncommon and mostly occur in crusted scabies</p> <ul style="list-style-type: none"> <li>• Fever (children)</li> <li>• Pain on movement</li> <li>• Sleep disturbance</li> <li>• Secondary bacterial infection</li> </ul>
<p>Pubic lice:</p> <ul style="list-style-type: none"> <li>• Complications uncommon</li> <li>• Fever, lethargy, irritability (more common in the young and frail)</li> <li>• Secondary bacterial infection</li> </ul>

See [STI Atlas](#) for images.

## Special Considerations

Scabies:

- Clinical signs are due to allergy to mite products; generalised signs vary from itch and excoriation to urticaria and dermatitis
- Usually survive for less than 48-72 hours off host

Pubic lice:

- Survive for less than 24 hours off host
- Fomite transmission plays little role
- Not a vector for other diseases

## Recommended tests

Consider full [sexual health check](#)

<b>Test</b>	<b>Considerations</b>

<p>Pubic lice: Direct visualisation with or without magnification of crab or nits (egg)</p>	<p>Adult lice infest coarse hairs (pubic hair, eyebrows, eyelashes, chest, axillae) Eggs (nits) are strongly attached to the hairs</p>
<p>Scabies: Often a clinical diagnosis If available dermatoscopy can be useful to identify burrows and mites Other methods not usually practical in general practice. Laboratory diagnosis by microscopy has very poor sensitivity, and is not usually recommended</p>	<p>Characteristic nodule and silvery skin burrows sometimes seen e.g. nodule on glans penis and scrotum concurrently, labial fold nodule, burrows (inter-digital folds, wrists and elbows, around breast and nipples)</p>

## Management

Infection	Recommendation	Alternative treatment
Scabies	<p>Apply <b>permethrin 5% cream or lotion</b> topically to dry skin from the scalp to soles of feet, paying particular attention to hands and genitalia. Avoid contact with eyes. Apply under the nails with a nailbrush. Leave on the skin for a minimum of 8 hours (usually overnight) and reapply to hands if they are washed. The time may be increased to 24 hours if there has been a treatment failure</p> <p>On day of treatment environmental decontamination should be performed by hot washing bedding and clothing</p> <p>Repeat treatment and washing in 1 week</p> <p>Family members and close contacts should be examined and treated if necessary</p>	<p><b>Ivermectin 200 microgram/kg</b> as a single dose</p> <p>Repeat treatment in 7 days</p> <p>Requires special authority, including discussion with dermatologist, infectious diseases (ID) physician or clinical microbiologist</p>
Pubic lice	<p>Apply <b>permethrin 5% cream or lotion</b> to all hairy parts of the body apart from the eyelids and scalp and wash off after 10 minutes</p> <p>Repeat treatment in 7-10 days if live lice are still found</p>	<p><b>Ivermectin 250 microgram/kg</b> as a single dose (unapproved indication/not funded)</p> <p>Repeat treatment in 7 days</p>

## Special Situations

Situation	Recommendation
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Complicated infection, e.g. crusted scabies	Occurs when mite population is very high due to poor host immune response. The patient may not be itchy Consider <u>HIV</u> serology Seek specialist advice for treatment (dermatology, ID or clinical microbiologist)
Persistent infection	Note it is common for itch to persist after scabies infestation for a few weeks after treatment (post scabietic itch) Ongoing symptoms may be due to: <ul style="list-style-type: none"> <li>• Lack of thorough treatment application</li> <li>• Lack of synchronising treatment with known close contacts leading to re-infection <ul style="list-style-type: none"> <li>• Resistance to treatment</li> </ul> </li> <li>• Development of irritant contact dermatitis due to topical scabicide</li> </ul> Seek specialist advice for treatment (dermatology, ID or clinical microbiologist)
Pregnancy and breastfeeding	Permethrin is safe in pregnancy and during breastfeeding
Infants	Seek specialist advice
Allergy or contraindications	Seek specialist advice for treatment (dermatology, ID or clinical microbiologist)
Eyelash infestation	Permethrin should not be applied near the eyes. Lice and nits can be removed by using a pair of fine forceps. Alternatively, petroleum jelly can be smeared on the eyelashes twice daily for at least 3 weeks. This suffocates the lice and their nits

## **Partner notification and management of sexual contacts**

### **Scabies:**

- Family members and close contacts should be examined and treated if necessary

### **Pubic lice:**

- Sexual contacts should be examined and treated if necessary

## **Follow up**

**Follow Up:**

- Not required unless symptoms persist or recur

**Test of cure:**

- Not required

**Retesting:**

- Consider testing for other sexually transmitted infections (STIs), if not undertaken at first presentation, or retesting after the window period

**Indications for specialist referral****Referral to or discussion with a specialist is recommended for:**

- Crusted scabies
- If special authority is required for ivermectin
- Persistent infection (re-infection excluded)
- Infants
- Allergy or contraindication to standard treatment options

**Useful patient resources**

<https://www.healthnavigator.org.nz/health-a-z/s/scabies/>

**References**

[New Zealand Medicines Formulary](#)

[Centers for Disease Control and Prevention](#)

[DermNet NZ](#)

**Endorsement:** These guidelines have been endorsed by the Blood Borne Viruses and Sexually Transmitted Infections Standing Committee (BBVSS).

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