Government of **Western Australia**
Department of **Health**

Enhanced Access Community Pharmacy Pilot
Impetigo

Clinical practice guideline

Service restricted to patients aged one year or over.

Ineligibility for treatment as part of a prescribing service does not preclude a patient from accessing services provided as part of usual pharmacy care.

The information and content in this clinical practice guideline do not constitute medical advice, diagnosis, or treatment recommendations for individual patients. Pharmacists must exercise professional discretion and judgement consistent with their qualifications and legislative authority. This guideline does not override the responsibility of the pharmacist to undertake clinical assessments and to make decisions appropriate to the circumstances of the individual and the relevant standards of care, in consultation with the patient and/or their parent/caregiver. This clinical practice guideline may only be used by pharmacists who have been approved by the Department of Health to participate in the Enhanced Access Community Pharmacy Pilot (EACPP) and are authorised to prescribe under the *Medicines and Poisons Regulations 2016* (WA). This document alone does not provide an authorisation for a pharmacist to prescribe.

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Refer when

- The patient is aged below one year (does not preclude a patient from accessing usual pharmacy care)
- The patient is allergic to available treatment options
- Unclear diagnosis
- Concurrent condition is suspected that cannot be treated in the community pharmacy setting
- Widespread painful rash
- Raised purple rash that doesn't blanch
- Generalised erythema that covers ≥ 90 per cent of skin surface
- Blistering of skin and mucous membranes
- Systemic signs or symptoms
- Chronic sores or ulcers
- The impetigo is widespread or severe
- Immunocompromised
- Inadequate response to previous optimal treatment
- Infection reoccurs frequently:
  - Two or more episodes in the past 3 months, or 3 or more episodes in the past 12 months.

Treat and concurrently refer

- At high risk of acute rheumatic fever (ARF) (refer to Table 1)
- Patient resides, or has recently resided in an endemic community (refer to Table 1).

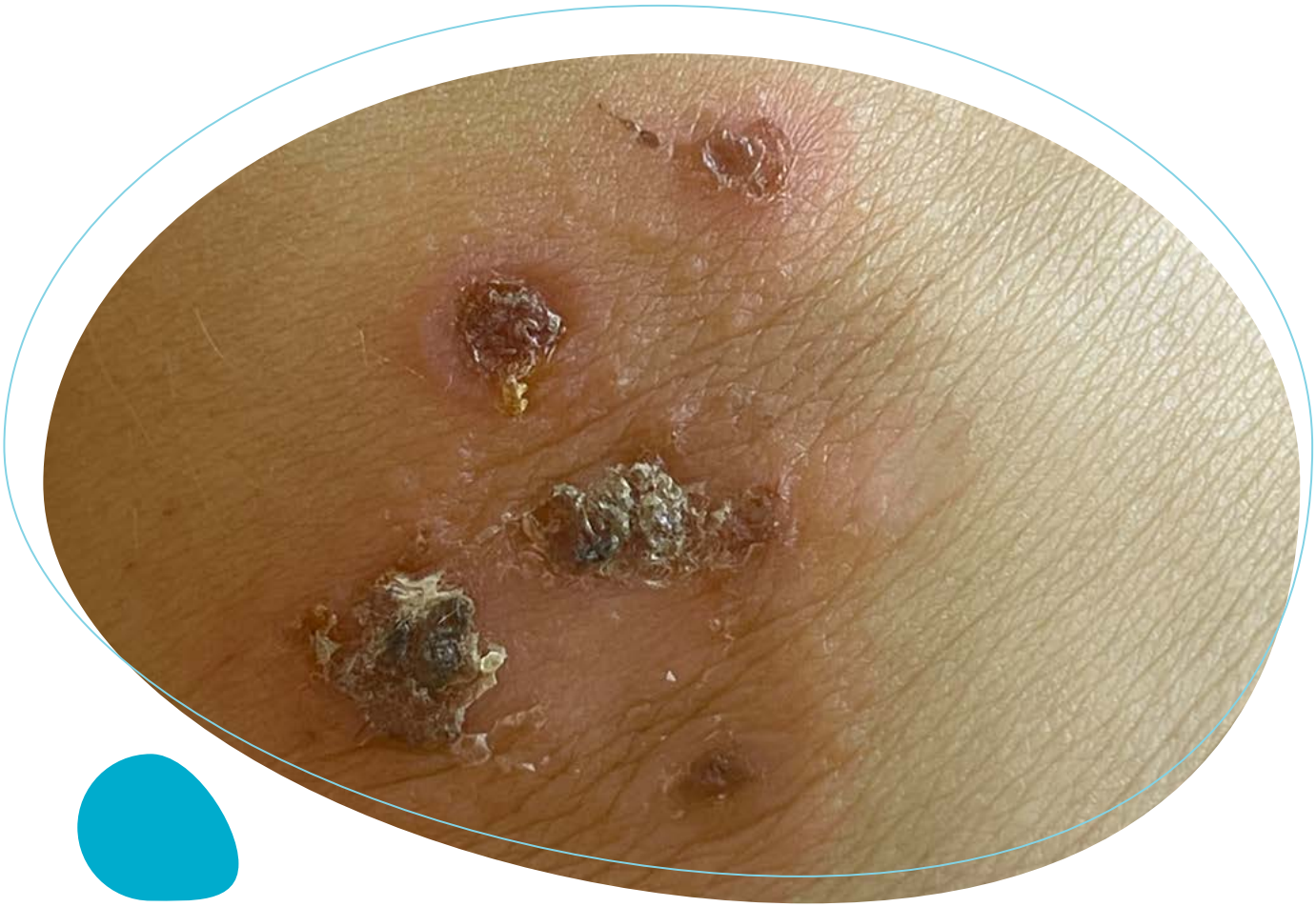
Key points

- Impetigo commonly affects children but may also affect adults[1].
- School aged children and children in day care must have impetigo lesions covered and have completed > 24 hours of antibiotics before returning to day care/school[2].
- While impetigo can resolve without treatment over the next month, Australian guidelines advise that all patients with impetigo require anti-infective treatment to heal quickly, minimise discomfort, and reduce transmission to others[3, 4]. Household contacts should be assessed and treated if affected.
- Rare complications of impetigo include ARF, acute post-streptococcal glomerulonephritis (APSGN), and sepsis. Pharmacists must escalate care and refer the patient to a medical practitioner where the risk of complications is high after treatment is initiated[4, 5].
- The management of impetigo consists of antibiotics in addition to general measures for the patient, family, and community to reduce the spread[6]. Washing hands regularly and covering impetigo with a bandage will help reduce transmission[2].
- Western Australia (WA) has higher rates of MRSA, so the first line empirical oral therapy is trimethoprim+sulfamethoxazole[7].
- Aboriginal and Torres Strait Islander children are a high-priority population with the highest reported burden of impetigo in the world, influenced by social determinants of health arising from colonisation, dispossession, and systemic inequities(4). A shared, strengths-based approach to care that recognises each patient's cultural determinants and individual circumstances is essential, and pharmacists should ensure they are familiar with relevant local services and supports[3]. Given this high burden, all efforts to provide treatment when they present should be made. The evidence for treatment of impetigo with 3 days of trimethoprim+sulphamethoxazole was generated in Australia with and for Aboriginal and Torres Strait Islander people[4].

Refer when

Refer the patient to an appropriate healthcare provider (including emergency services, if required) in the following situations:

- The patient is aged below one year (does not preclude a patient from accessing usual pharmacy care)
- the patient is allergic to the available treatment options
- unclear diagnosis
- concurrent condition is suspected that cannot be treated in the community pharmacy setting (e.g. viral infection, eczema herpeticum, cellulitis)
- widespread, painful rash
- raised purple rash that doesn't blanch
- generalised erythema that covers ≥ 90 per cent of skin surface
- blistering of skin and mucous membranes (including mouth and eyes)
- systemic signs or symptoms, including fever, lethargy, headache, rash, nausea, and vomiting
- chronic sores or ulcers
- the impetigo is widespread or severe
- immunocompromised
- inadequate response to previous optimal treatment
- infection reoccurs frequently (2 or more episodes in the past 3 months, or 3 or more episodes in the past 12 months).



Treat (if clinically appropriate) and concurrently refer

Provide initial treatment and concurrently refer to an appropriate healthcare provider (including emergency services, if required) in the following situations:

- at high risk of acute rheumatic fever (ARF) (refer to Table 1)
- patient resides or has recently resided in an endemic community (refer to Table 1)

Patient history and assessment

Patient history

Obtain sufficient information from the patient to assess the safety and appropriateness of any recommendations and medicines.

The patient history should consider:

- age
- weight (if a child)
- pregnancy and lactation status (if applicable)
- ethnicity (Aboriginal and Torres Strait Islander, Māori, or Pacific Islander)
- ARF risk assessment as per Table 1
- onset, duration, nature, location, and extent of lesions
- recent skin, throat or other infections (e.g. respiratory tract infection), and treatment received

- other signs and symptoms e.g. pain, lymphadenopathy, signs of sepsis or other complications (including APSGN and ARF) such as fever, confusion, tachycardia, hypotension or hypertension, clammy skin, vomiting and diarrhoea, facial or peripheral oedema, severe headache, joint pain and/or hot swollen joints, swelling beneath impetigo lesions
- potential trigger for impetigo e.g. insect bites, scabies, head lice, tinea, grazes, eczema, skin trauma, contact with people with impetigo
- underlying medical conditions including skin conditions e.g. eczema or immunosuppression that may lead to complications
- current and recently ceased treatments (including prescribed medicines, vitamins, herbs, other supplements, and over-the-counter medicines)
- drug allergies/adverse reactions
- other risk factors including poor hygiene, day care settings, crowding, and malnutrition.

Reminder

Pharmacists can access a range of clinical information in a patient's My Health Record, including details about current and past medication history, allergies, and current medical conditions.

Examination

Clinical features and presenting symptoms

Impetigo occurs as a result of a break in the skin. Breaks in the skin can occur from minor trauma (e.g. grazes, itchy skin, eczema), other skin infections (e.g. tinea, scabies, head lice), and insect bites (e.g. mosquitoes, midgies, bed bugs). It is important to assess for an underlying cause that may also need treatment. Impetigo with pus or crust always needs treatment[4].

Impetigo often presents as a small blister, that fills with pus and may become up to 1 to 3 cm round or linear lesions with pus or thick yellow-brown crust. As the impetigo heals, the crust will eventually fall off and leave a pale, dry, and flat lesion on the skin. Refer to the National Healthy Skin Guidelines for images[4].

Impetigo may co-occur with other common skin conditions including thermal burns, dermatophytosis, eczema, scabies, herpes zoster, head lice, varicella, or molluscum contagiosum[4-5, 8].

Investigations

The primary pathogenic driver of impetigo is Streptococcus pyogenes, with Staphylococcus aureus acting as a secondary colonising pathogen[9].

Microbiological swabs are not required unless the diagnosis is uncertain or impetigo is recurrent (referral required), as the inciting pathogen is known and effective empirical oral therapy with cotrimoxazole provides coverage for S. pyogenes and S. aureus, including MRSA, as confirmed in the Australian context[4].

Complications of Impetigo

Complications of impetigo include[4, 6, 8, 10-13]:

- abscess that requires incision and drainage
- lymphangitis, lymphadenitis
- cellulitis
- bacteraemia
- APSGN and chronic kidney disease
- ARF and rheumatic heart disease (RHD)
- sepsis
- osteomyelitis, septic arthritis.

APSGN

- APSGN is an immune-mediated sequalae of nephritogenic strains of S. pyogenes.
- May occur approximately 2 to 3 weeks after a skin or throat infection of S. pyogenesbacteria[14, 15].
- May affect any age but most commonly affects children aged between 12 months and 17 years[14, 15].
- Common symptoms and clinical features include obvious facial and orbital swelling, particularly upon waking, elevated blood pressure, proteinuria and macroscopic haematuria with dark brown urine, lethargy, weakness, and/or anorexia[15].

ARF

- ARF is an immune-mediated sequalae of S. pyogenes involving multiple organs, including the heart, joints, and central nervous system[16, 17].
- May occur between 1 to 5 weeks post-streptococcal infection, and is most common after recurrent streptococcal infections, particularly pharyngitis and impetigo[16, 17].
- Most frequently affects children aged between 5 and 14 years, although recurrent episodes may continue into the fourth decade of life[16].
- Common symptoms and clinical features include painful and/or swollen joints, fever, Sydenham chorea[8].

People considered at high risk of developing ARF are specified in Table 1. These factors should be considered by pharmacists as part of the risk assessment process. People at risk of developing ARF must be prioritised for access to treatment.

Table 1: Individuals at high risk of developing ARF [13,16,18]

- Aboriginal and Torres Strait Islander people residing in a rural or remote area, or living in a household affected by household overcrowding (> 2 people per bedroom) or experiencing socioeconomic disadvantage.
- Māori and/or Pacific Islander person living in a household affected by overcrowding (> 2 people per bedroom) or experiencing socioeconomic disadvantage.
- A person with a personal history of ARF or RHD.
- A person with a family or household member with a recent history of ARF or RHD.

Additional risk factors for individuals aged ≤ 40 years (particularly between 5 to 20 years)

- People living in a household affected by household overcrowding (> 2 people per bedroom) or experiencing socioeconomic disadvantage.
- People with current or prior residence in (or frequent or recent travel to) an area with a high rate of ARF e.g. refugees and migrants from low-middle income countries, rural and remote communities.

Develop management plan

Treatment of impetigo achieves resolution within 7 days and prevents the development of more serious complications (e.g. sepsis, bone and joint infections, poststreptococcal complications including ARF)[3].

Pharmacist management of impetigo involves:

- **non-pharmacological measures:**
  - advice and education to reduce the spread of impetigo as per the Therapeutic Guidelines: Antibiotic (Skin and soft tissue infections - Impetigo)[3] and the Royal Children's Hospital Melbourne: Impetigo (school sores) fact sheet[2]
- **examination and treatment of co-occurring skin conditions:**
  - (e.g. eczema, scabies, head lice, tinea) or referral to an appropriate healthcare provider
- **pharmacotherapy:** [NB1]
  - a topical or oral medicine mentioned in the ChAMP Skin and Soft Tissue Infections - Paediatric Empiric Guidelines[3]. Note: first line empirical oral therapy in WA is cotrimoxazole
  - topical anti-infectives are considered sufficient treatment for patients with impetigo (up to 2 sores) who are not at high risk of ARF
  - topical antibiotics are not appropriate if the infection is widespread or multiple family/community members are infected, due to the risk of antimicrobial resistance developing[1, 3, 4]
  - remember to ask the patient or family about their preferred treatment. Where intramuscular benzathine benzylpenicillin is preferred, the patient must be referred to an appropriate healthcare provider.

NB1: The correct use of antibiotics is essential. Prolonged or incorrect use may increase the risk of antimicrobial resistance, particularly for topical antibiotics[6, 19]. Discussing the treatment regimen with patients (and/or parent/caregiver) reduces the risk that antibiotics will be incorrectly used[6].

Confirm management is appropriate

Consult the ChAMP Guidelines, Therapeutic Guidelines, Australian Medicines Handbook and other appropriate resources to confirm that management is appropriate, including for:

- contraindications and precautions
- pregnancy and lactation
- drug interactions.

Reminder

The Therapeutic Guidelines: Antibiotic (Impetigo) provides useful information for impetigo but the first line empirical oral therapy recommended is not appropriate for WA due to high MRSA rates. Refer to ChAMP Skin and Soft Tissue Infections - Paediatric Empiric Guidelines.

Communicate agreed management plan

Comprehensive advice and counselling (including supporting written information when required) should be provided to the patient regarding:

- individual product and medicine use
- non-pharmacological measures
- how to manage adverse effects
- when to seek further care and/or treatment, including recognising complications of impetigo, particularly ARF and APSGN.

It is the pharmacist's responsibility to ensure the suitability and accuracy of any resources provided to patients (and/or parents/caregivers) and to ensure compliance with all copyright conditions.

The agreed management plan should be shared with members of the patient's multidisciplinary healthcare team, with the patient's consent.

Patient resources

- The Royal Children's Hospital Melbourne Fact sheet: Impetigo (school sores)
- The Kids Research Institute Australia: Skin sores (impetigo)
- The Kids Research Institute Australia: Strong Skin App

General advice

At the time of initial consultation, patients (and/or parents/caregiver) should be advised to see an appropriate healthcare provider if:

- the condition does not improve within 5 to 10 days of starting treatment
- the patient's signs or symptoms worsen
- the patient develops new signs or symptoms (e.g. systemic signs or symptoms)
- the condition reoccurs after treatment course is completed
- the adverse effects of treatment cannot be managed in the pharmacy setting.

Clinical review

Clinical review is generally not required. Pharmacists should prescribe a quantity of medicine that aligns with the expected duration of therapy. Advise patients (and/or parents/caregivers) to see an appropriate healthcare provider if the condition does not improve or resolve (see Refer when and General advice).

Pharmacist resources

- Western Australia:
  - ChAMP Skin and Soft Tissue Infections - Paediatric Empiric Guidelines
  - Perth Children's Hospital Emergency Department Guidelines: Impetigo
- CARPA Standard Treatment Manual:
  - Impetigo (school sores)
- Therapeutic Guidelines: Antibiotic:
  - Impetigo
  - Acute rheumatic fever
- Australian Medicines Handbook:
  - Antibacterials (skin)
  - Antibacterials
  - Skin and soft tissue infections
- Australian Pharmaceutical Formulary and Handbook (APF): Treatment guideline for pharmacists (Impetigo)
- Queensland Health and Royal Flying Doctors Service (Queensland branch): Primary Clinical Care Manual (12th ed. 2025)
  - Impetigo
  - Acute post streptococcal glomerulonephritis
  - Acute rheumatic fever
- DermNet NZ:
  - Impetigo
  - Ecthyma
- MSD Manual (Professional version): Impetigo and Ecthyma
- Australian Family Physician (Royal Australian College of General Practitioners): Managing skin infections in Aboriginal and Torres Strait Islander children
- The Australian Healthy Skin Consortium: National Healthy Skin Guideline: for the Diagnosis, Treatment and Prevention of Skin Infections for Aboriginal and Torres Strait Islander Children and Communities in Australia (2nd edition), 2023
- Rheumatic Heart Disease Australia: ARF RHD Guideline and risk calculator
- Australian Journal of General Practice: A refresher on the primary care and public health management of acute post-streptococcal glomerulonephritis
- Skin Deep: An open-access bank of high-quality photographs of medical conditions in a wide range of skin tones for use by both healthcare professionals and the public.

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