Antibiotic prescribing in primary care: Therapeutic Guidelines summary table 2025

Most antibiotic use in Australia occurs in primary care. This table summarises information in ***Therapeutic Guidelines*** about the management of common conditions in primary care with the aim of avoiding the unnecessary use of antibiotics and promoting narrow-spectrum therapy. Information in this table should be used in conjunction with **clinical judgement**. Prescribers should consider the **benefit–harm profile** of a drug in each patient (eg consider potential drug interactions, risk of adverse effects).

For detailed and up-to-date information, including **second-line treatment** options and management of **special patient groups** (eg penicillin hypersensitivity, kidney impairment), see *Therapeutic Guidelines*.

For indications not covered in this primary care summary table, see *Therapeutic Guidelines*.

If the recommended antibiotic is in shortage, for general guidance, see the Antimicrobial Shortages – Clinician Guidance factsheet from the Australian Commission on Safety and Quality in Health Care website. For current antibiotic shortages, check the Therapeutic Goods Administration medicine shortage reports database.

Indication	First-line treatment	Notes
acute rhinosinusitis	**symptomatic therapy**	Antibiotic therapy is rarely required — most cases are viral and self-limiting. See *Therapeutic Guidelines* for an approach to discussing managment with the patient or carer.
acute otitis media in children	adequate **pain relief** alone for most children	More than 80% of cases spontaneously resolve without antibiotic therapy. Advise the patient or carer to return if symptoms do not improve within 2 days. Antibiotic therapy does not improve pain at 24 hours or significantly reduce the risk of complications. For every 100 children treated with an antibiotic, only 5 children will be better at 2 to 3 days; almost 5 000 children would need antibiotic therapy to prevent one case of mastoiditis. See *Therapeutic Guidelines* for resources to support discussion with the patient or carer. Antibiotic therapy is more likely to **prevent complications** in children: • with a cochlear implant • with immune compromise • who reside in a remote community with a prevalence of chronic suppurative otitis media more than 4%. Antibiotic therapy **may reduce symptom duration** by approximately 12 hours in children: • with otorrhoea • younger than 6 months • younger than 2 years with bilateral infection • who are systemically unwell (fever alone is not an indication). For children more likely to benefit from antibiotic therapy, use: **amoxicillin** 15 mg/kg up to 500 mg orally, 8-hourly for 5 days OR if adherence to an 8-hourly regimen is unlikely **amoxicillin** 30 mg/kg up to 1 g orally, 12-hourly for 5 days. For risk assessment and treatment recommendations for Aboriginal and Torres Strait Islander children, see the Otitis Media Guidelines for Aboriginal and Torres Strait Islander Children.

Indication	First-line treatment	Notes
acute pharyngitis and tonsillitis	patients ***not* at high risk** of acute rheumatic fever: **symptomatic therapy** for most cases patients **at high risk** of acute rheumatic fever: **phenoxymethylpenicillin** 500 mg (child: 15 mg/kg up to 500 mg) orally, 12-hourly for 10 days OR **benzathine benzylpenicillin** intramuscularly, as a single dose adult: 1.2 million units (2.3 mL) child less than 10 kg: 0.45 million units (0.9 mL) child 10 kg to less than 20 kg: 0.6 million units (1.2 mL) child 20 kg or more: 1.2 million units (2.3 mL)	Most cases are viral. For patients not at high risk of acute rheumatic fever, even if infection is bacterial, antibiotic therapy is of limited benefit. See *Therapeutic Guidelines* for resources to support discussion with the patient or carer. For patients at high risk of acute rheumatic fever, antibiotic therapy is recommended because the increased risk of acute rheumatic fever and resultant rheumatic heart disease outweighs the risk of harms from potentially unnecessary antibiotic therapy. For assessment of risk of acute rheumatic fever, see *Therapeutic Guidelines*.
acute bronchitis	**symptomatic therapy**	Antibiotic therapy is **not** indicated. Most cases are viral; even if infection is bacterial, antibiotic therapy is of limited benefit. See *Therapeutic Guidelines* for resources to support discussion with the patient or carer.
COPD exacerbation	**nonantibiotic therapy** (eg inhaled bronchodilators, oral corticosteroid therapy)	Antibiotic therapy is **not** routinely recommended for a COPD exacerbation; the benefit of antibiotic therapy is related to the likelihood of bacterial infection and the severity of the exacerbation. For patients suitable to be managed in the community, it is **safe to withhold** antibiotic therapy because treatment does not consistently improve outcomes. However, **consider** antibiotic therapy if there is an increase in sputum purulence with increased sputum volume and/or increased dyspnoea. If antibiotic therapy is indicated, use: **amoxicillin** 500 mg orally, 8-hourly for 5 days OR if adherence to an 8-hourly regimen is unlikely **amoxicillin** 1 g orally, 12-hourly for 5 days OR **doxycycline** 100 mg orally, daily for 5 days. See *Therapeutic Guidelines* for more information and resources to support discussion with the patient or carer.
low severity community-acquired pneumonia in adults	**amoxicillin** 1 g orally, 8-hourly; see Notes column for duration of therapy	Review the patient's preferences, comorbidities and goals of care to decide whether hospital admission is required – see *Therapeutic Guidelines*. For patients suitable to be managed in the community, develop a follow-up plan. If the patient has a significant medical comorbidity (eg advanced heart, liver or kidney disease; frailty) and follow-up within 48 hours may not occur, consider using initial combination therapy (eg amoxicillin plus doxycycline) – see *Therapeutic Guidelines*. The usual **duration of therapy** is 5 days; consider stopping on review at day 3 if the patient is clinically stable. If the patient is not clinically stable by day 5, see *Therapeutic Guidelines* for advice on patient review and duration of therapy.
low-severity community-acquired pneumonia in residents of an aged-care facility	**amoxicillin** 1 g orally, 8-hourly; see Notes column for duration of therapy	Establish whether the resident has an advance care plan, and if antibiotic therapy is appropriate. If antibiotic therapy is indicated, determine the location of care. If pneumonia is suspected to be caused by atypical pathogens [NB1] (eg *Legionella* species), see *Therapeutic Guidelines*. The usual **duration of therapy** is 5 days; consider stopping on review at day 3 if the resident is clinically stable. If the resident is not clinically stable by day 5, see *Therapeutic Guidelines* for advice on patient review and duration of therapy.

Indication	First-line treatment	Notes
low-severity community-acquired pneumonia in children 2 months or older	**amoxicillin** 25 mg/kg up to 1 g orally, 8-hourly for 3 days	Viruses are the main cause of community-acquired pneumonia in children 2 months or older, but clinical features do not reliably distinguish between viral and bacterial pathogens. Children who have widespread pulmonary wheeze or crackles but no focal changes on chest X-ray are more likely to have viral pneumonia. Consider performing NAAT (eg PCR) to detect respiratory viruses. If a viral cause is suspected or confirmed, symptomatic therapy alone is recommended. If the child is not improving after 48 to 72 hours, or symptoms worsen at any time, reassess the diagnosis – see *Therapeutic Guidelines*.
localised odontogenic infection	a **dental procedure**	Prescribe analgesia and **refer** the patient to the dentist for urgent treatment. Explain that antibiotic therapy without dental intervention will not be effective. If a dental procedure is unlikely to occur within 24 hours or the infection is spreading and causing facial swelling, see *Therapeutic Guidelines*.
acute cystitis in nonpregnant adult females [NB2] who require antibiotic therapy, including residents of an aged-care facility	**nitrofurantoin** 100 mg orally, 6-hourly for 5 days	Many nonpregnant adult females younger than 65 years become symptom-free within 1 week without antibiotic therapy. See *Therapeutic Guidelines* for the approach to nonantibiotic therapy. For indications for taking a urine sample for culture and susceptibility testing, see *Therapeutic Guidelines*. Retrospective data suggest that nitrofurantoin is safe and effective for acute cystitis in patients with a GFR of 30 mL/min or more. Do **not** use ciprofloxacin or norfloxacin unless susceptibility testing rules out all alternative antibiotics — see *Therapeutic Guidelines*. For additional considerations for residents of an aged-care facility, see *Therapeutic Guidelines*.
acute cystitis in pregnancy	**nitrofurantoin** 100 mg orally, 6-hourly for 5 days	Take a urine sample for culture and susceptibility testing before starting antibiotic therapy, and repeat 1 to 2 weeks after treatment is completed. Avoid using nitrofurantoin close to delivery – see *Therapeutic Guidelines*.
acute cystitis in children 3 months or older	children who **can swallow** tablets or capsules: **nitrofurantoin** orally, 6-hourly for 5 days child 29 kg to 50 kg: 50 mg child more than 50 kg: 100 mg children who **weigh less than 29 kg** or **cannot swallow** tablets or capsules: **cefalexin** 12.5 mg/kg up to 500 mg orally, 6-hourly for 3 days OR if adherence to a 6-hourly regimen is unlikely **cefalexin** 20 mg/kg up to 750 mg orally, 8-hourly for 3 days	It can be difficult to distinguish pyelonephritis from cystitis in young children. If bacteriuria and either fever (38 °C or higher) or loin pain or tenderness are present, treat as acute pyelonephritis; see *Therapeutic Guidelines*. Take a urine sample for culture and susceptibility testing before starting treatment. For information on methods to obtain urine samples, see *Therapeutic Guidelines*.
localised infection of bites and other wounds caused by teeth (including human, cat, dog) without systemic symptoms	**amoxicillin+clavulanate** 875+125 mg (child 2 months or older: 22.5+3.2 mg/kg up to 875+125 mg) orally, 12-hourly for 5 days	The recommended management of bites and clenched-fist injuries is thorough cleaning, irrigation, debridement, elevation and immobilisation. Check the patient's tetanus immunisation status. Antibiotic therapy may **not** be required if the wound is not infected – see *Therapeutic Guidelines*.

Indication	First-line treatment	Notes
cellulitis or erysipelas without systemic symptoms or extensive erythema	**dicloxacillin** 500 mg (child: 12.5 mg/kg up to 500 mg) orally, 6-hourly; see Notes column for duration of therapy OR **flucloxacillin** 500 mg (child: 12.5 mg/kg up to 500 mg) orally, 6-hourly; see Notes column for duration of therapy if ***Streptococcus pyogenes*** (group A streptococcus [GAS]) or **other beta-haemolytic streptococci** are suspected based on clinical presentation (eg nonpurulent, recurrent cellulitis): **phenoxymethylpenicillin** 500 mg (child: 12.5 mg/kg up to 500 mg) orally, 6-hourly; see Notes column for duration of therapy	Beta-haemolytic streptococci, including *Streptococcus pyogenes* (group A streptococcus [GAS]), are the most common cause of nonpurulent, recurrent cellulitis. *Staphylococcus aureus* is often associated with purulent cellulitis, penetrating trauma or ulceration. See *Therapeutic Guidelines* for when to consider other pathogens, including MRSA. See *Therapeutic Guidelines* for the management of periorbital, orbital and peritonsillar cellulitis. The usual **duration of therapy** is 5 days. Advise patients to return for review after 5 days if symptoms are not improving; see *Therapeutic Guidelines* for advice.
impetigo	patients with **nonrecurrent limited nonbullous impetigo** (up to 2 sores) who are ***not* at high risk** of acute rheumatic fever: **mupirocin** 2% ointment or cream topically to crusted areas, 8-hourly for 5 days patients with **extensive** (more than 2 sores), **recurrent or bullous impetigo *and* patients at high risk** of acute rheumatic fever: **dicloxacillin** 500 mg (child: 12.5 mg/kg up to 500 mg) orally, 6-hourly for 5 days. Stop after 3 days if infection has resolved OR **flucloxacillin** 500 mg (child: 12.5 mg/kg up to 500 mg) orally, 6-hourly for 5 days. Stop after 3 days if infection has resolved	For assessment of risk of acute rheumatic fever, see *Therapeutic Guidelines*. For a printable patient handout with general measures to reduce the spread of impetigo, see *Therapeutic Guidelines*. If impetigo is not improving, take a skin swab for culture and susceptibility testing.
acute mild infection of diabetes-related foot ulcers	**dicloxacillin** 500 mg orally, 6-hourly; see Notes column for duration of therapy OR **flucloxacillin** 500 mg orally, 6-hourly ; see Notes column for duration of therapy	Typically, **10 days of therapy** is sufficient. See *Therapeutic Guidelines* if the patient has: • systemic symptoms • infection involving structures deeper than the skin or subcutaneous tissue • erythema extending more than 2 cm from the wound margin • infection or ulcer that has been present for 4 weeks or longer • used an antibiotic within the last few weeks • risk factors for MRSA infection.
lactational mastitis requiring antibiotic therapy	**dicloxacillin** 500 mg orally, 6-hourly. If symptoms and signs resolve rapidly, 5 days of therapy may be sufficient; otherwise continue treatment for 10 days OR **flucloxacillin** 500 mg orally, 6-hourly. If symptoms and signs resolve rapidly, 5 days of therapy may be sufficient; otherwise continue treatment for 10 days	For patients **without** systemic symptoms, increased breastfeeding and gentle expression of milk from the affected breast for 24 to 48 hours may resolve symptoms without antibiotic therapy. If this fails to resolve symptoms, and in all patients with systemic symptoms, antibiotic therapy is recommended to minimise the risk of abscess. Advise the patient to continue breastfeeding and gentle milk expression. Consider lactation support.

COPD = chronic obstructive pulmonary disease; GFR = glomerular filtration rate; MRSA = methicillin-resistant *Staphylococcus aureus*; NAAT = nucleic acid amplification testing; PCR = polymerase chain reaction
NB1: There is no universally accepted definition of atypical pathogens. The term is used to describe bacteria that are intrinsically resistant to beta lactams and not identifiable by standard blood or sputum cultures.
NB2: The term 'female' is used to include all people presumed female at birth.