

## Antibiotic prescribing in primary care: Therapeutic Guidelines summary table 2024

This table summarises information in *Therapeutic Guidelines* about the management of common conditions in primary care. For detailed and up-to-date information, including **second-line treatment options** and management of **special patient groups** (eg penicillin hypersensitivity, renal impairment), see [Therapeutic Guidelines](#).

For indications not covered in this primary care summary table, see [Therapeutic Guidelines](#).

This table should be used in conjunction with **clinical judgement**. Prescribers should consider the **harm–benefit profile** of a drug in each patient (eg consider potential drug interactions, risk of adverse effects).

Antibiotics that are **overused** in primary care include **amoxicillin+clavulanate, cefalexin, cefaclor, roxithromycin** and **erythromycin**.

If the recommended antimicrobial is in shortage, see the Antimicrobial Shortages - Clinician Guidance [factsheet](#) from the Australian Commission on Safety and Quality in Health Care for general guidance. For current antimicrobial shortages, check the Therapeutic Goods Administration [medicine shortage reports database](#).

Indication	First-line treatment	Notes
<b>acute rhinosinusitis</b>	symptomatic treatment	Antibiotic treatment is required rarely—most cases are viral. See <a href="#">Therapeutic Guidelines</a> for more information and resources to support discussion with the patient or carer.
<b>acute otitis media in children</b>	symptomatic treatment for most children	<p>80% of cases spontaneously resolve without antibiotic treatment. Advise the carer to return if symptoms do not improve within 72 hours. Consider a delayed prescription for antibiotic therapy.</p> <p>Treat the following groups:</p> <ul style="list-style-type: none"> <li>• infants younger than 6 months</li> <li>• children younger than 2 years with bilateral infection</li> <li>• children who are systemically unwell (eg lethargic, pale; fever alone is not sufficient)</li> <li>• children with otorrhoea</li> <li>• Aboriginal and Torres Strait Islander children at high risk of complications—for risk assessment and treatment recommendations, see the <a href="#">2020 Otitis media guidelines for Aboriginal and Torres Strait Islander children</a></li> <li>• children at high risk of complications (eg immunocompromised children).</li> </ul> <p>Amoxicillin is first-line treatment for these groups:  <b>amoxicillin</b> 15 mg/kg up to 500 mg orally, 8-hourly for 5 days</p> <p>See <a href="#">Therapeutic Guidelines</a> for resources to support discussion with the patient or carer.</p>
<b>acute pharyngitis/ tonsillitis</b>	<p><b>patients not at high risk of acute rheumatic fever:</b> symptomatic treatment for most cases</p> <p><b>patients at high risk of acute rheumatic fever:</b>  <b>phenoxymethylpenicillin</b> 500 mg (child: 15 mg/kg up to 500 mg) orally, 12-hourly for 10 days  OR  <b>benzathine benzylpenicillin</b> 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)</p>	<p>Most cases are viral. In patients not at high risk of acute rheumatic fever, even if infection is bacterial, antibiotic treatment is of limited benefit. See <a href="#">Therapeutic Guidelines</a> for resources to support discussion with the patient or carer.</p> <p>In patients at high risk of acute rheumatic fever, antibiotic treatment is recommended for all patients because the increased risk of acute rheumatic fever and resultant rheumatic heart disease outweighs the risk of harms from potentially unnecessary antibiotic treatment.</p> <p>See <a href="#">Therapeutic Guidelines</a> for assessment of risk of acute rheumatic fever.</p>

Indication	First-line treatment	Notes
<b>acute bronchitis</b>	symptomatic treatment	Antibiotic treatment is <b>not</b> indicated—over 90% of cases are viral. See <a href="#">Therapeutic Guidelines</a> for resources to support discussion with the patient or carer.
<b>COPD exacerbation where antibiotics are indicated</b>	amoxicillin 500 mg orally, 8-hourly for 5 days OR doxycycline 100 mg orally, daily for 5 days	Antibiotic treatment has <b>little benefit</b> for patients managed in the community with less severe COPD: for every 100 patients treated with antibiotics, only 8 patients will be better by 4 weeks because they took antibiotics. Consider a delayed prescription for antibiotic therapy. See <a href="#">Therapeutic Guidelines</a> for more information and resources to support discussion with the patient or carer.
<b>community-acquired pneumonia in children 2 months or older: low-severity (mild)</b>	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 treatment alone is recommended. See <a href="#">Therapeutic Guidelines</a> for <a href="#">risk factors for infection caused by Chlamydia trachomatis</a> and <a href="#">adjustment of empirical therapy</a> . If the patient is not improving after 48 to 72 hours, or symptoms worsen at any time, reassess the diagnosis—see <a href="#">Therapeutic Guidelines</a> .
<b>community-acquired pneumonia in adults: low-severity (mild)</b>	amoxicillin 1 g orally, 8-hourly; see Notes column for duration of therapy	Assess the patient's pneumonia severity, comorbidities and social circumstances to decide whether to admit the patient to hospital—see <a href="#">Therapeutic Guidelines</a> . See <a href="#">Therapeutic Guidelines</a> for <a href="#">risk factors for infection caused by atypical bacteria</a> and <a href="#">adjustment of empirical therapy</a> . <b>Patient review</b> within 48 hours is essential. If the patient has significantly improved after 2 to 3 days, treat for 5 days. If the clinical response is slow, treat for 7 days. If the patient is not improving after 48 hours of monotherapy, see <a href="#">Therapeutic Guidelines</a> . If patient follow-up within 48 hours may not occur, consider using initial combination therapy with amoxicillin plus doxycycline instead—see <a href="#">Therapeutic Guidelines</a> .
<b>community-acquired pneumonia in residents of aged-care facilities: oral therapy</b>	amoxicillin 1 g orally, 8-hourly; see Notes column for duration of therapy	Consider whether a viral infection could be the cause of symptoms. See <a href="#">Therapeutic Guidelines</a> for indications for parenteral therapy. If infection caused by atypical bacteria (eg <i>Legionella</i> species) is suspected, see <a href="#">Therapeutic Guidelines</a> . <b>Patient review</b> within 48 hours is essential. If the patient has significantly improved after 2 to 3 days, treat for 5 days. If the clinical response is slow, treat for 7 days. See <a href="#">Therapeutic Guidelines</a> if the patient is not improving.
<b>localised odontogenic infection</b>	dental treatment	Prescribe analgesia and <b>refer</b> the patient to the dentist. Explain that antibiotic treatment without dental intervention will not be effective. If dental treatment will be delayed or the infection is spreading, see <a href="#">Therapeutic Guidelines</a> .
<b>acute cystitis in nonpregnant women</b>	trimethoprim 300 mg orally, daily for 3 days	Half of cases in nonpregnant women younger than 65 years resolve within 7 days without antibiotic treatment. See <a href="#">Therapeutic Guidelines</a> for indications for taking a urine sample for culture and susceptibility testing. Do <b>not</b> use ciprofloxacin, norfloxacin or fosfomycin unless susceptibility testing rules out all alternative antibiotics—see <a href="#">Therapeutic Guidelines</a> .
<b>acute cystitis in pregnancy</b>	nitrofurantoin 100 mg orally, 6-hourly for 5 days	Take a urine sample for culture and susceptibility testing before starting treatment, and repeat 1 to 2 weeks after treatment is completed. Avoid using nitrofurantoin close to delivery—see <a href="#">Therapeutic Guidelines</a> .

Indication	First-line treatment	Notes
<b>infected bites and other wounds caused by teeth (including human, cat, dog)</b>	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 treatment may <b>not</b> be required if the wound is not infected—see <a href="#">Therapeutic Guidelines</a> . Initial intravenous therapy is needed for bite or clenched-fist injury infection associated with systemic features or involving deeper tissues (such as bones, joints, or tendons)—see <a href="#">Therapeutic Guidelines</a> .
<b>erysipelas without systemic symptoms</b>	phenoxymethylpenicillin 500 mg (child: 12.5 mg/kg up to 500 mg) orally, 6-hourly for 5 days	Initial intravenous therapy is needed if the patient has <b>2 or more</b> systemic symptoms—see <a href="#">Therapeutic Guidelines</a> .
<b>cellulitis without systemic symptoms</b>	<b>if <i>Streptococcus pyogenes</i> is suspected based on clinical presentation:</b> phenoxymethylpenicillin 500 mg (child: 12.5 mg/kg up to 500 mg) orally, 6-hourly for 5 days <b>if <i>Staphylococcus aureus</i> is suspected based on clinical presentation:</b> dicloxacillin 500 mg (child: 12.5 mg/kg up to 500 mg) orally, 6-hourly for 5 days OR flucloxacillin 500 mg (child: 12.5 mg/kg up to 500 mg) orally, 6-hourly for 5 days	<i>Streptococcus</i> species are the most common cause of nonpurulent, recurrent cellulitis and spontaneous, rapidly spreading cellulitis. <i>Staphylococcus aureus</i> is often associated with penetrating trauma or ulceration. Purulent cellulitis (eg associated abscess, furuncle) is typically caused by <i>S. aureus</i> . See <a href="#">Therapeutic Guidelines</a> for management if the <a href="#">wound was exposed to fresh or salt water</a> or there is a <a href="#">risk of MRSA</a> . Initial intravenous therapy is needed if the patient has <b>2 or more</b> systemic symptoms—see <a href="#">Therapeutic Guidelines</a> . See <a href="#">Therapeutic Guidelines</a> for the management of <a href="#">periorbital, orbital</a> and <a href="#">peritonsillar cellulitis</a> .
<b>impetigo: localised sores (nonendemic settings)</b>	mupirocin 2% ointment or cream topically to crusted areas, 8-hourly for 5 days	Use soap and water topically three times a day to soften crusts. For management of impetigo in endemic settings, see <a href="#">Therapeutic Guidelines</a> .
<b>impetigo: multiple or recurrent sores (nonendemic settings)</b>	dicloxacillin 500 mg (child: 12.5 mg/kg up to 500 mg) orally, 6-hourly for 7 days OR flucloxacillin 500 mg (child: 12.5 mg/kg up to 500 mg) orally, 6-hourly for 7 days	Stop therapy earlier if the infection has resolved. If treatment is unsuccessful, see <a href="#">Therapeutic Guidelines</a> . Eradication of staphylococcal carriage may be indicated; see <a href="#">Therapeutic Guidelines</a> . For management of impetigo in endemic settings, see <a href="#">Therapeutic Guidelines</a> .
<b>acute mild diabetic foot infection</b>	dicloxacillin 500 mg orally, 6-hourly OR flucloxacillin 500 mg orally, 6-hourly	Typically 1 to 2 weeks of therapy is sufficient. See <a href="#">Therapeutic Guidelines</a> if the patient has systemic symptoms, chronic diabetic foot infection, has recently received antibiotics, or has risk factors for MRSA infection.
<b>lactational mastitis</b>	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 <b>without</b> systemic symptoms, increased breastfeeding and gentle expression of milk from the affected breast for 24 to 48 hours may resolve symptoms without antibiotic treatment. If this fails to resolve symptoms, and in all patients with systemic symptoms, antibiotic treatment 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; MRSA = methicillin-resistant *Staphylococcus aureus*; NAAT = nucleic acid amplification testing; PCR = polymerase chain reaction