HONG KONG MEDICAL JOURNAL 香港醫學雜誌

Supplementary material

Supplement to: ESK Ma, LS Ko, SK Mak, et al. New guidance notes to drive rational prescription of antimicrobials for community settings in Hong Kong. Hong Kong Med J 2026 Apr;32(2):Epub 14 Apr 2026. https://doi.org/10.12809/hkmj265190.

Supplementary Table 1. Recommended antibiotic treatment for acute bacterial rhinosinusitis in adults

Drug (route)	Dosage and Frequency (usual)	Duration (usual)	Remarks
First line			
Amoxicillin (oral)	500 or 1000 mg three times daily	7 days	High dose to cover *Streptococcus pneumoniae* with reduced penicillin susceptibility.[†] Consider amoxicillin-clavulanate if dental source of sinusitis is suspected.
Amoxicillin- clavulanate or other beta-lactam-beta-lactamase inhibitors (BLBLIs) combinations[*] (oral)	1 g (875 mg/125 mg) twice daily	7 days	
Second line			
Doxycycline (oral)	100 mg twice daily or 200 mg once daily	7 days	Avoid excessive sunlight exposure while taking doxycycline. For type I hypersensitivity to penicillin.[‡]
Clarithromycin (oral)	500 mg twice a day	7 days	For type I hypersensitivity to penicillin.[‡] High rate of resistance, follow up after initial course of antibiotic recommended.
Erythromycin (oral)	250-500 mg four times a day or 500-1000 mg twice a day	7 days	For type I hypersensitivity to penicillin.[‡] High rate of resistance, follow up after initial course of antibiotic recommended. Erythromycin is preferred if a macrolide is needed in pregnancy.
Azithromycin (oral)	500 mg once daily	3 days	For type I hypersensitivity to penicillin.[‡] High rate of resistance, follow up after initial course of antibiotic recommended.
Levofloxacin (oral)[§]	500 mg once daily	7 days	For type I hypersensitivity to penicillin.[‡]

[*] Beta-lactam-beta-lactamase inhibitor combinations, eg, ampicillin-sulbactam

[†] Risk factors for drug-resistant *Streptococcus pneumoniae* in adults include age >65 years, beta-lactam therapy within the past 3 months, alcoholism, multiple medical comorbidities, and exposure to a child in a day-care centre

[‡] Type I hypersensitivity: Reactions typically occur within 1 hour after drug exposure. Symptoms usually manifest as urticaria (hives and/or angioedema), bronchospasm, gastrointestinal symptoms (abdominal pain, diarrhoea), or anaphylactic shock. Non–type I hypersensitivity: Reactions usually occur more than 1 hour after exposure and may develop over days to weeks. Lesions may last from days to weeks. Cutaneous manifestations are non-urticarial in nature and include maculopapular or morbilliform rashes, erythema multiforme, fixed drug eruptions, and/or contact dermatitis.

[§] Fluoroquinolones should be reserved for use in outpatients who have no other treatment options because of the risk of severe adverse effects, including aortic dissection or rupture of an aortic aneurysm, significant decreases in blood sugar, and disabling side-effects involving the tendons, muscles, joints, nerves, central nervous system, and mental health

Supplementary Table 2. Recommended antibiotic treatment for acute bacterial rhinosinusitis in children

Drug (route)	Dosage and Frequency (usual)	Duration (usual)	Remarks
First line			
Amoxicillin (oral)	45 mg/kg/day or 90 mg/kg/day (maximum: 3000 mg/day) in divided doses every 8 or 12 hours	7 days	High dose to cover *Streptococcus pneumoniae* with reduced penicillin susceptibility‡ Consider amoxicillin-clavulanate if dental source of sinusitis is suspected.
Amoxicillin-clavulanate or other beta-lactam-beta-lactamase inhibitors combinations* (oral)	Children <40 kg: 20 mg (amoxicillin)/5 mg (clavulanate)/kg/day to 60 mg (amoxicillin)/15 mg (clavulanate)/kg/day in divided doses every 8 hours¶	7 days	
Second line			
Cephalexin (oral)	Mild to moderate infection: 10 mg/kg/dose every 6 hours Severe infection: 20 mg/kg/dose every 6 hours (maximum: 4000 mg per day)	7 days	For non-type I hypersensitivity to penicillin† Certain *Streptococcus pneumoniae* isolates may not be reliably covered by oral cephalosporins in the local setting.
Cefpodoxime (oral)	Infants ≥2 months to children <12 years of age: 5 mg/kg/dose (maximum: 200 mg/dose) every 12 hours Children ≥12 years of age and adolescents: refer to adult dosing	7 days	For non-type I hypersensitivity to penicillin† Antacid may decrease the absorption of the drug. Dosage should be adjusted appropriately in patients with renal insufficiency.
Cefuroxime (oral)	Infants >3 months of age and Children: 15 mg/kg/dose (maximum: 250 mg/dose) every 12 hours	7 days	For non-type I hypersensitivity to penicillin†
Doxycycline (oral)	2 mg/kg/dose every 12 hours (maximum: 100 mg/dose)	7 days	Avoid excessive sunlight exposure while taking doxycycline. Doxycycline can be administered without regard to the patient's age or the duration of therapy.
Clarithromycin (oral)	Children 6 months to 12 years of age: 7.5 mg/kg every 12 hours (maximum: 500 mg/dose)	7 days	For type I hypersensitivity to penicillin.† High rate of resistance, follow up after initial course of antibiotic recommended.
Erythromycin (oral)	10 mg/kg/dose every 6 hours (maximum: 500 mg/dose)	7 days	For type I hypersensitivity to penicillin.† High rate of resistance, follow up after initial course of antibiotic recommended.
Azithromycin (oral)	10 mg/kg once daily	3 days	For type I hypersensitivity to penicillin.† High rate of resistance, follow up after initial course of antibiotic recommended.

* Beta-lactam-beta-lactamase inhibitor combinations, eg, ampicillin-sulbactam

† Type I hypersensitivity: Reactions typically occur within 1 hour after drug exposure. Symptoms usually manifest as urticaria (hives and/or angioedema), bronchospasm, gastrointestinal symptoms (abdominal pain, diarrhoea), or anaphylactic shock. Non–type I hypersensitivity: Reactions usually occur more than 1 hour after exposure and may develop over days to weeks. Lesions may last from days to weeks. Cutaneous manifestations are non-urticarial in nature and include maculopapular or morbilliform rashes, erythema multiforme, fixed drug eruptions, and/or contact dermatitis

‡ Risk factors for drug-resistant *Streptococcus pneumoniae* in children are: age <2 years, beta-lactam therapy within the past 3 months, day-care attendance, and lack of immunisation with the pneumococcal conjugate vaccine

¶ No clinical data are available on doses higher than 40 mg (amoxicillin)/10 mg (clavulanate) per kg per day in children under 2 years of age

Supplementary Table 3. Recommended antibiotic treatment for acute streptococcal pharyngitis in adults

Drug (route)	**Dosage and frequency (usual)**	**Duration (usual)**	**Remarks**
First line			
Amoxicillin (oral)	500 mg three times daily	10 days	
Penicillin V (oral)	500 mg four times daily	10 days	
Cephalexin (oral)	500 mg three to four times daily	10 days	Cephalosporins should be avoided in individuals with type I hypersensitivity to penicillin.*
Second line			
Azithromycin (oral)	500 mg once daily for 1 day, then 250 mg once daily for 4 days	5 days	For individuals with type I hypersensitivity to penicillin* Erythromycin resistant isolates are regarded as resistant to clarithromycin and azithromycin as well.
Clarithromycin (oral)	250 mg twice daily	10 days	For individuals with type I hypersensitivity to penicillin* Erythromycin resistant isolates are regarded as resistant to clarithromycin and azithromycin as well.

* Type I hypersensitivity: Reactions typically occur within 1 hour after drug exposure. Symptoms usually manifest as urticaria (hives and/or angioedema), bronchospasm, gastrointestinal symptoms (abdominal pain, diarrhoea), or anaphylactic shock. Non–type I hypersensitivity: Reactions usually occur more than 1 hour after exposure and may develop over days to weeks. Lesions may last from days to weeks. Cutaneous manifestations are non-urticarial in nature and include maculopapular or morbilliform rashes, erythema multiforme, fixed drug eruptions, and/or contact dermatitis

Supplementary Table 4. Recommended antibiotic treatment for acute streptococcal pharyngitis in children

Drug (route)	Dosage and frequency (usual)	Duration (usual)	Remarks
First line			
Amoxicillin (oral)	50 mg/kg (maximum: 1000 mg) once daily or 25 mg/kg (maximum: 500 mg) three times daily	10 days	
Penicillin V (oral)	If ≤27 kg: 250 mg three times daily If >27 kg: 500 mg three times daily	10 days	
Cephalexin (oral)	20 mg/kg (maximum: 500 mg) three to four times daily	10 days	Cephalosporins should be avoided in individuals with type I hypersensitivity to penicillin.*
Second line			
Azithromycin (oral)	12 mg/kg once daily (maximum: 500 mg)	5 days	For individuals with type I hypersensitivity to penicillin* Erythromycin resistant isolates are regarded as resistant to clarithromycin and azithromycin as well.
Clarithromycin (oral)	7.5 mg/kg (maximum: 250 mg) twice daily	10 days	For individuals with type I hypersensitivity to penicillin* Erythromycin resistant isolates are regarded as resistant to clarithromycin and azithromycin as well.

* Type I hypersensitivity: Reactions typically occur within 1 hour after drug exposure. Symptoms usually manifest as urticaria (hives and/or angioedema), bronchospasm, gastrointestinal symptoms (abdominal pain, diarrhoea), or anaphylactic shock. Non–type I hypersensitivity: Reactions usually occur more than 1 hour after exposure and may develop over days to weeks. Lesions may last from days to weeks. Cutaneous manifestations are non-urticarial in nature and include maculopapular or morbilliform rashes, erythema multiforme, fixed drug eruptions, and/or contact dermatitis

Supplementary Table 5. Recommended antibiotic treatment for acute otitis media in children and young people under 18 years

Drug (route)	Dosage and frequency (usual)	Duration
First line		
Amoxicillin (oral)	90 mg/kg/day, in 3 divided doses (maximum: 3000 mg per day)	7 days
Alternative first choice oral antibiotic for penicillin allergy or intolerance*		
Clarithromycin (oral)	1 month to 11 years: Under 8 kg: 7.5 mg/kg twice a day 8 to 11 kg: 62.5 mg twice a day 12 to 19 kg: 125 mg twice a day 20 to 29 kg: 187.5 mg twice a day 30 to 40 kg: 250 mg twice a day 12 to 17 years: 250 mg to 500 mg twice a day	7 days
Second line (worsening symptoms on first choice taken for at least 2 to 3 days)		
Amoxicillin-clavulanate (oral)	Containing amoxicillin 90 mg/kg/day in 3 divided doses (Maximum dose of amoxicillin: 3000 mg per day)	7 days
Alternative second choice oral antibiotic for penicillin allergy or intolerance		
Refer to specialist or hospital for further management		

* Erythromycin is preferred during pregnancy: 250-500 mg four times daily or 500-1000 mg twice daily for 7 days

Supplementary Table 6. Recommended antibiotic treatment for community-acquired pneumonia in adults

Drug (route)	Dosage and frequency (usual)	Duration (usual)	Remarks
First line			
Amoxicillin-clavulanate or other beta-lactam-beta-lactamase inhibitors (BLBLIs) combinations* (oral)	1 g (875 mg/125 mg) twice daily	5 days	For aspiration pneumonia, amoxicillin-clavulanate (or other BLBLI combinations) is recommended for anaerobic coverage. Doxycycline can be added if macrolide-resistant *Mycoplasma pneumoniae* (MRMP) infection is suspected. Macrolide can be added if the patient has co-morbidities or is at risk of *Legionella* pneumonia.
Doxycycline (oral)	100 mg twice daily	7 days	Avoid excessive sunlight exposure while taking doxycycline. As a combination treatment with beta-lactams for atypical or severe pneumonia As an initial empirical therapy that covers MRMP
Second line			
Cefpodoxime (oral)	200 mg twice daily	5 days	For non-type I hypersensitivity to penicillin† Antacid may decrease the absorption of the drug. Dosage should be adjusted appropriately in patients with renal insufficiency.
Ceftriaxone (intramuscular)	1-2 g once daily	5 days	For non-type I hypersensitivity to penicillin†
Levofloxacin (oral)‡	500 mg once daily	5 days	For type I hypersensitivity to the first-line agent, or have documented infection by *Streptococcus pneumoniae* resistant to penicillin† If levofloxacin is used for the management of aspiration pneumonia (eg, hypersensitivity to penicillin), metronidazole or clindamycin should be added. Consider safety issues.

* Beta-lactam-beta-lactamase inhibitor combinations, eg, ampicillin-sulbactam

† Type I hypersensitivity: Reactions typically occur within 1 hour after drug exposure. Symptoms usually manifest as urticaria (hives and/or angioedema), bronchospasm, gastrointestinal symptoms (abdominal pain, diarrhoea), or anaphylactic shock. Non–type I hypersensitivity: Reactions usually occur more than 1 hour after exposure and may develop over days to weeks. Lesions may last from days to weeks. Cutaneous manifestations are non-urticarial in nature and include maculopapular or morbilliform rashes, erythema multiforme, fixed drug eruptions, and/or contact dermatitis

‡ Respiratory fluoroquinolones (eg, levofloxacin), but not ciprofloxacin or ofloxacin, should be used to treat pneumococcal pneumonia. Use of levofloxacin in suboptimal dose and in divided doses should be avoided as these have been showed to be associated with the emergence of fluoroquinolone-resistant *Streptococcus pneumoniae*.

Supplementary Table 7. Recommended antibiotic treatment for community-acquired pneumonia in children

Drug (route)	Dosage and frequency (usual)*	Duration (usual)	Remarks
First line			
Amoxicillin-clavulanate or other beta-lactam-beta-lactamase inhibitors combinations† (oral)	45 mg/kg/day or 90 mg/kg/day of the amoxicillin component (maximum: 3000 mg per day) in divided doses every 12 hours	5 days	In outpatients without risk factors for drug-resistant *Streptococcus pneumoniae* (DRSP), amoxicillin dosing of 45 mg/kg/day may be used. In outpatients with risk factors for DRSP, amoxicillin dosing of 90 mg/kg/day is required. Risk factors for DRSP: recent antibiotic use, attendance at childcare centre, immunosuppression Choose the preparation that could provide the required amoxicillin dose with the least amount of clavulanate to reduce side-effects eg, diarrhoea. Doxycycline can be added if *Mycoplasma pneumoniae* infection is suspected. Macrolide can be added if the patient is at risk of *Legionella* pneumonia.
Doxycycline (oral)	2 mg/kg/dose twice daily (maximum: 100 mg/dose)	7 days	Avoid excessive sunlight exposure while taking doxycycline. Doxycycline can be administered without regard to the patient's age or the duration of therapy.
Second line			
Cefpodoxime (oral)	Infants >3 months of age and children <12 years of age: 5 mg/kg/dose (maximum: 200 mg per dose) every 12 hours Children ≥12 years of age and adolescents: refer to adult dosing	5 days	For non-type I hypersensitivity to penicillin‡ Antacid may decrease the absorption of the drug. Dosage should be adjusted appropriately in patients with renal insufficiency.
Ceftriaxone (intramuscular)	50-100 mg/kg once daily (or in equally divided doses twice a day) [maximum: 4000 mg per day]	5 days	For non-type I hypersensitivity to penicillin‡ Daily doses greater than 2 g are divided into 2 doses.
Clindamycin¶ (oral)	30-40 mg/kg/day in divided doses every 6 to 8 hours	5 days	For empirical treatment of suspected pneumococcal pneumonia with type I hypersensitivity to penicillin.‡ However, high resistance rate is expected.

* Dosages listed are not appropriate for neonates

† Beta-lactam-beta-lactamase inhibitor combinations, eg, ampicillin-sulbactam

‡ Type I hypersensitivity: Reactions typically occur within 1 hour after drug exposure. Symptoms usually manifest as urticaria (hives and/or angioedema), bronchospasm, gastrointestinal symptoms (abdominal pain, diarrhoea), or anaphylactic shock. Non–type I hypersensitivity: Reactions usually occur more than 1 hour after exposure and may develop over days to weeks. Lesions may last from days to weeks. Cutaneous manifestations are non-urticarial in nature and include maculopapular or morbilliform rashes, erythema multiforme, fixed drug eruptions, and/or contact dermatitis

¶ Only the capsule formulation (not the syrup) is available locally. Each capsule contains 150 mg

Supplementary Table 8. Recommended antibiotic treatment for acute exacerbation of chronic obstructive pulmonary disease

Drug (route)	Dosage and frequency (usual)	Duration (usual)	Remarks
First line			
Amoxicillin-clavulanate or other beta-lactam-beta-lactamase inhibitors combinations* (oral)	1 g (875 mg/125 mg) twice daily or 625 mg (500 mg/125 mg) three times daily	5 days	Amoxicillin-clavulanate is active against beta-lactamase-producing organisms (eg, *Haemophilus influenzae, Moraxella catarrhalis* and methicillin-sensitive *Staphylococcus aureus*).
Second line			
Cefpodoxime (oral)	200 mg twice daily	5 days	For non-type I hypersensitivity to penicillin† Antacid may decrease the absorption of the drug. Dosage should be adjusted appropriately in patients with renal insufficiency.
Cefuroxime (oral)	500 mg twice daily	5 days	For non-type I hypersensitivity to penicillin†
Ceftriaxone (intramuscular)	1 g once daily	5 days	For non-type I hypersensitivity to penicillin†
Levofloxacin (oral)	500 mg once daily	5 days	For outpatients who have: • Type I and non-type I hypersensitivity to the first line agent†, or; • Documented infection by *Streptococcus pneumoniae* resistant to penicillin Consider levofloxacin if *Pseudomonas aeruginosa* infection is suspected.
Moxifloxacin (oral)	400 mg once daily	5 days	

* Beta-lactam-beta-lactamase inhibitor combinations, eg, ampicillin-sulbactam

† Type I hypersensitivity: Reactions typically occur within 1 hour after drug exposure. Symptoms usually manifest as urticaria (hives and/or angioedema), bronchospasm, gastrointestinal symptoms (abdominal pain, diarrhoea), or anaphylactic shock. Non–type I hypersensitivity: Reactions usually occur more than 1 hour after exposure and may develop over days to weeks. Lesions may last from days to weeks. Cutaneous manifestations are non-urticarial in nature and include maculopapular or morbilliform rashes, erythema multiforme, fixed drug eruptions, and/or contact dermatitis

Supplementary Table 9. Recommended antibiotic treatment for acute uncomplicated cystitis in women

Drug (route)	**Dosage and frequency (usual)**	**Duration (usual)**	**Remarks**
First line			
Nitrofurantoin (oral)	50 mg four times daily	5 days	Nitrofurantoin is an appropriate choice for therapy due to low local resistance rate and is less likely to select drug-resistant organisms. Avoid in patients with creatinine clearance <30 mL/min.
Amoxicillin-clavulanate (oral)	375 mg (250 mg/125 mg) three times daily or 1 g (875 mg/125 mg) twice daily	5-7 days	Beta-lactam agents are appropriate choices for therapy even if there is intermediate susceptibility because they are physiologically concentrated in urine.
Second line			
Cefpodoxime (oral)	100 mg twice daily	7 days	Beta-lactam agents are appropriate choices even if there is intermediate susceptibility because they are physiologically concentrated in urine. Local resistance rates of *Escherichia coli* and *Klebsiella pneumoniae* are 20% and 12%, respectively. Antacid may decrease the absorption of the drug. Dosage should be adjusted appropriately in patients with renal insufficiency.
Cefuroxime (oral)	500 mg twice daily	5-7 days	Local resistance rates of *Escherichia coli* and *Klebsiella pneumoniae* are 39% and 35%, respectively.
Fosfomycin trometamol (oral)	3 g once daily	Single dose	

Supplementary Table 10. Recommended antibiotic treatment for simple skin and soft tissue infections in adults

Drug (route)	**Dosage and frequency (usual)**	**Duration (usual)**	**Remarks**
First line			
Fusidic acid (topical)	Three times daily	5 days	For mild and localised lesions of impetigo.
Mupirocin (topical)	Three times daily	5 days	Alternative topical antibiotic if fusidic acid resistance is suspected or confirmed.
Cloxacillin (oral)	500 mg four times daily	5-7 days*	Good activity against methicillin sensitive *Staphylococcus aureus* and some activity against beta-haemolytic streptococci.
Amoxicillin-clavulanate (oral)	375 mg (250 mg/125 mg) three times daily or 1 g (875 mg /125 mg) twice daily	5-7 days*	Good activity against methicillin sensitive *Staphylococcus aureus*, beta-haemolytic streptococci, some aerobic gram-negative bacilli and some anaerobes.
Second line			
Cephalexin (oral)	500 mg four times daily	5-7 days*	Good activity against methicillin sensitive *Staphylococcus aureus* and beta-haemolytic streptococci. For patients with hypersensitivity to penicillin, except those with type I hypersensitivity‡
Co-trimoxazole (oral)	960 mg two times daily	5-7 days*	If community-associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA) is suspected.
Doxycycline (oral)	100 mg two times daily	5-7 days*	Avoid excessive sunlight exposure while taking doxycycline. If CA-MRSA is suspected.

* Can be extended to 10 days

‡ Type I hypersensitivity: Reactions typically occur within 1 hour after drug exposure. Symptoms usually manifest as urticaria (hives and/or angioedema), bronchospasm, gastrointestinal symptoms (abdominal pain, diarrhoea), or anaphylactic shock. Non–type I hypersensitivity: Reactions usually occur more than 1 hour after exposure and may develop over days to weeks. Lesions may last from days to weeks. Cutaneous manifestations are non-urticarial in nature and include maculopapular or morbilliform rashes, erythema multiforme, fixed drug eruptions, and/or contact dermatitis

Supplementary Table 11. Recommended antibiotic treatment for simple skin and soft tissue infections in children

Drug (route)	**Dosage and frequency[*] (usual)**	**Duration (usual)**	**Remarks**
First line			
Fusidic acid (topical)	Three times daily	5 days	For mild and localised lesions of impetigo
Mupirocin (topical)	Three times daily	5 days	Alternative topical antibiotic if fusidic acid resistance is suspected or confirmed.
Amoxicillin-clavulanate (oral)	25 mg/kg/day of the amoxicillin component (maximum: 1750 mg per day) in 2 divided doses	5-7 days[†]	Good activity against methicillin sensitive *Staphylococcus aureus*, beta-haemolytic streptococci, some aerobic gram-negative bacilli and some anaerobes.
Second line			
Cephalexin (oral)	25-50 mg/kg/day (maximum: 2000 mg/day) in 4 divided doses	5-7 days[†]	Good activity against methicillin sensitive *Staphylococcus aureus* and beta-haemolytic streptococci. For patients with hypersensitivity to penicillin, except those with type I hypersensitivity[‡]
Co-trimoxazole (oral)	8-12 mg/kg/day orally in 2 divided doses (maximum: 640 mg per day)	5-7 days[†]	If community-associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA) is suspected.
Doxycycline (oral)	2 mg/kg/dose twice daily (maximum: 100 mg per dose)	5-7 days[†]	Avoid excessive sunlight exposure while taking doxycycline. If CA-MRSA is suspected. Doxycycline can be administered without regard to the patient's age or the duration of therapy.

[*] Dosages listed are not appropriate for neonates

[†] Can be extended to 10 days

[‡] Type I hypersensitivity: Reactions typically occur within 1 hour after drug exposure. Symptoms usually manifest as urticaria (hives and/or angioedema), bronchospasm, gastrointestinal symptoms (abdominal pain, diarrhoea), or anaphylactic shock. Non–type I hypersensitivity: Reactions usually occur more than 1 hour after exposure and may develop over days to weeks. Lesions may last from days to weeks. Cutaneous manifestations are non-urticarial in nature and include maculopapular or morbilliform rashes, erythema multiforme, fixed drug eruptions, and/or contact dermatitis