# Urinary Tract Infections – Paediatric Empiric Guidelines

**Scope (Staff):** Clinical Staff – Medical, Nursing, Pharmacy  
**Scope (Area):** PCH

This document should be read in conjunction with this [DISCLAIMER](#).

<table>
<thead>
<tr>
<th>CLINICAL SCENARIO</th>
<th>Usual duration</th>
<th>DRUGS/DOSES</th>
<th>Known or Suspected MRSA</th>
<th>Penicillin allergy</th>
<th>Penicillin allergy Immediate</th>
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<tr>
<td>Urinary Tract Infection &lt; 1 month</td>
<td></td>
<td>IV amoxicillin AND IV gentamicin (doses as per <a href="#">neonatal guidelines</a>).</td>
<td>As per standard protocol</td>
<td>cefotaxime</td>
<td>Discuss with ID or Microbiology service</td>
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In children who have previously isolated resistant gram negative bacteria (e.g. *Pseudomonas aeruginosa*, ESBL containing Gram negative bacteria), contact infectious diseases/clinical microbiology for therapeutic advice.

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<td>Urinary Tract Infection (≥ 3 months old and systemically well)</td>
<td>5 days</td>
<td>Oral <strong>cefalexin</strong> 12.5mg/kg/dose (to a maximum of 500mg) 6 hourly. OR Oral <strong>cotrimoxazole</strong> 4mg/kg (to a maximum of 160mg trimethoprim component) 12 hourly. OR Oral <strong>amoxicillin/clavulanic acid</strong> 25mg/kg/dose (to a maximum 875mg amoxycillin component) 12 hourly.</td>
<td>As per standard protocol.</td>
<td>cefalexin</td>
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<tr>
<td>Urinary Tract Infection i) All children ≥1 month and &lt; 3 months, OR ii) Children ≥ 3 months and systemically unwell</td>
<td>10 days (IV and oral)</td>
<td>IV <strong>amoxicillin</strong> 50mg/kg/dose (to a maximum of 1 gram) 6 hourly. AND IV <strong>gentamicin</strong> 7.5mg/kg/dose (to a maximum of 320mg) once daily.</td>
<td>As per standard protocol.</td>
<td>ceftriaxone</td>
<td>Discuss with ID or Microbiology service.</td>
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Antibiotic prophylaxis is not routinely recommended for children following their first episode of a urinary tract infection, but may be considered for children with severe or recurrent UTI’s. In children who have previously isolated resistant gram negative bacteria (e.g. *Pseudomonas aeruginosa*, ESBL containing Gram negative bacteria), contact infectious diseases/clinical microbiology for advice on prophylaxis.

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<tr>
<td>Urinary Tract Infection prophylaxis children ≥ 1 month</td>
<td>N/A</td>
<td>Oral <strong>cotrimoxazole</strong> 2mg/kg (to a maximum of 80mg trimethoprim component) 24 hourly at night. OR Oral <strong>cefalexin</strong> 12.5mg/kg (to a maximum of 250mg) at night.</td>
<td>As per standard protocol.</td>
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### Urinary Tract Infections - Paediatric

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<tr>
<td>Epididymo-orchitis (mild to moderate)</td>
<td>5 days</td>
<td><strong>Standard Protocol</strong>&lt;br&gt;Treat as for Urinary Tract Infection ≥ 3 months old and systemically well.</td>
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<tr>
<td>Epididymo-orchitis (severe)</td>
<td>10 days (IV and oral)</td>
<td><strong>Standard Protocol</strong>&lt;br&gt;Treat as for Urinary Tract Infection in children ≥ 3 months and systemically unwell.&lt;br&gt;For adolescent patients, consider sexually acquired infection and alter therapy accordingly.</td>
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</tbody>
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**a.** Children known or suspected to be colonised with MRSA may need to have their therapy/prophylaxis modified. Children suspected of having MRSA include:

(i) household contacts of MRSA colonised individuals; and

(ii) children with recurrent skin infections or those unresponsive to beta-lactam therapy. For further advice, discuss with Microbiology or ID service.

**b.** An immediate (IgE mediated) reaction is characterised by the development of urticaria, angioedema, bronchospasm or anaphylaxis within 1 to 2 hours of drug administration. Delayed reactions including maculopapular or morbilliform rashes, drug fever and cytopenias and are more in keeping with other forms of immunological reactivity. Isolated diarrhoea is not usually immune-mediated and does NOT contraindicate the future use of an antibiotic.

**c.** Use doses as per neonatal guidelines for patients less than 1 month of age.

**d.** Oral cephalaxin 12.5mg/kg/dose (to a maximum of 500mg) 6 hourly.

**e.** Oral cotrimoxazole 4mg/kg/dose (equivalent to 0.5mL/kg of mixture), trimethoprim component, to a maximum of 160mg, 12 hourly.

**f.** IV ceftriaxone 50mg/kg/dose to a maximum of 2g, once daily.

**g.** Oral cephalaxin 12.5mg/kg/dose (to a maximum of 250mg) given at once daily at night.

**h.** Oral cotrimoxazole 2mg/kg/dose (equivalent to 0.25mL/kg of mixture), trimethoprim component, to a maximum of 160mg, given once daily at night.

**Related internal policies, procedures and guidelines**

Antimicrobial Stewardship Policy  
ChAMP Empiric Guidelines  
KEMH Neonatal Medication Protocols

**References**

Urinary Tract Infections - Paediatric

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