

**CEFAZOLIN**

<b>Trade Name</b>	Cefazolin-AFT										
<b>Class</b>	Antibiotic - first generation cephalosporin										
<b>Mechanism of Action</b>	Inhibition of bacterial cell wall synthesis through binding to essential proteins.										
<b>Indications</b>	Cardiac, upper GI, biliary, and neurological surgical antibiotic prophylaxis Likely pathogens: anaerobic bacteria, streptococci, gram-negative bacilli, enterococcus faecalis, staphylococcus aureus, coagulase negative staphylococcus										
<b>Contraindications</b>	Known hypersensitivity to cefazolin or other cephalosporins. Caution in patients with a known penicillin allergy.										
<b>Supplied As</b>	1g vial										
<b>Dilution</b>	<table border="1"> <thead> <tr> <th>Drug</th> <th>Water Added</th> <th>Final Volume</th> <th>Concentration</th> </tr> </thead> <tbody> <tr> <td>1g</td> <td>2.5mL</td> <td>3.0mL</td> <td><b>330mg/mL</b></td> </tr> </tbody> </table> <p>This is the maximum allowed concentration</p>			Drug	Water Added	Final Volume	Concentration	1g	2.5mL	3.0mL	<b>330mg/mL</b>
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1g	2.5mL	3.0mL	<b>330mg/mL</b>								
<b>Dosage</b>	<b>Prophylaxis:</b> 50mg/kg at induction of anaesthetic <b>Extended prophylaxis:</b> 15mg/kg/dose <b>Mild infection:</b> 15mg/kg/dose <b>Severe infection:</b> 50mg/kg/dose										
<b>Interval</b>	<table border="1"> <thead> <tr> <th>Postnatal Age (days)</th> <th>Interval (hourly)</th> </tr> </thead> <tbody> <tr> <td>0-14</td> <td>12</td> </tr> <tr> <td>&gt;14</td> <td>8</td> </tr> </tbody> </table>			Postnatal Age (days)	Interval (hourly)	0-14	12	>14	8		
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<b>Administration</b>	IV slow push over 3-5 minutes										
<b>Compatible With</b>	<b>In solution:</b> sodium chloride 0.9% dextrose 5% and 10% dextrose saline, ringers solution, lactated ringers. <b>Y-site Compatibility</b> Acyclovir, alprostadil, amikacin, aztreonam, calcium gluconate, clindamycin, enalaprilat, esmolol, famotidine, fluconazole, heparin, insulin, lidocaine, linezolid, lipid, magnesium sulfate, midazolam, milrinone, morphine, metronidazole, multivitamins, nicardipine, pancuronium bromide, potassium chloride, propofol, prostaglandin E <sub>1</sub> , ranitidine, remifentanyl, TPN, and vecuronium.										
<b>Incompatible With</b>	Amiodarone, caspofungin, cimetidine, and vancomycin.										
<b>Monitoring</b>	Renal function, hepatic function and FBC										

<b>Stability</b>	Discard remaining solution in vial after reconstitution Use a new vial for each dose Vials are not designed for multidosing
<b>Storage</b>	Room temperature for powder vials. Protect from light.
<b>Adverse Reactions</b>	Thrombophlebitis may occur following IV injection. Hypersensitivity: rashes, pruritis and fever. Gastrointestinal: diarrhoea, nausea and vomiting. Eosinophilia Transient elevation of liver enzymes
<b>Metabolism</b>	90% renally excreted as unchanged drug Half life in neonates approx 3 – 5 hours.
<b>Comments</b>	Modify dose in patients with severe renal impairment. Sodium content = 48.3mg (2.1mmol) per gram False positive direct and indirect Coombs' test results have occurred in neonates exposed to cephazolin. ( Both neonatal antibiotic treatment and exposure via maternal treatment with cephalosporins have been implicated.)
<b>References</b>	<ol style="list-style-type: none"> <li>1. Shann F., Drug Doses, 11<sup>th</sup> edition. 2001.</li> <li>2. Neofax 2005</li> <li>3. Paediatric Dosage Handbook, 8<sup>th</sup> edition. 2001-2002.</li> <li>4. NZHPA Notes on Injectable Drugs, 5<sup>th</sup> edition.</li> <li>5. Trissel LA, Handbook on Injectable Drugs, 12<sup>th</sup> Ed, 2003</li> <li>6. Cefazolin-AFT Data Sheet AFT Pharmaceuticals 2011</li> <li>7. CDHB Antibiotic Guidelines ("Pink Book") 11<sup>th</sup> Ed, 2007</li> <li>8. <a href="http://www.seslhd.health.nsw.gov.au">www.seslhd.health.nsw.gov.au</a></li> </ol>
<b>Updated By</b>	<p>A Lynn, Barbara Robertshawe June 2007  A Lynn, B Robertshawe, F Robertson May 2009 (new pumps)\  A Lynn, B Robertshawe Nov 2012 (re-order profile, discard vial)  M Wallenstein, B Robertshawe, A Lynn, September 2020 (update)</p>