



NEONATAL Medication Monograph

# AMOXICILLIN (AMOXYCILLIN)

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

**Unrestricted:** Any prescriber may initiate treatment

<b>Presentation</b>	Vial: 1g Oral Suspension: 250mg/5mL (PCH) 100mg/mL (KEMH)																								
<b>Description</b>	Moderate spectrum penicillin antibiotic.																								
<b>Indications</b>	Directed treatment of infections caused by susceptible gram positive (including Streptococcus species, Enterococcus faecalis and Listeria monocytogenes) and susceptible gram negative bacteria.																								
<b>Contraindication</b>	Known hypersensitivity to penicillins																								
<b>Precaution</b>	In renal impairment, the excretion of amoxicillin will be delayed. In infants with severe renal impairment, it may be necessary to reduce the total daily dose. Contact Microbiology.																								
<b>Dosage</b>	<p><b><u>Infections due to susceptible organisms</u></b></p> <p><b>IV/IM/PO:</b></p> <table border="1"> <thead> <tr> <th><u>Corrected gestational age</u></th> <th><u>Postnatal age</u></th> <th><u>Dose</u></th> <th><u>Frequency</u></th> </tr> </thead> <tbody> <tr> <td rowspan="2">All ages</td> <td>&lt;7 days</td> <td>50mg/kg/dose</td> <td>Every 12 hours</td> </tr> <tr> <td>≥7 days</td> <td>50mg/kg/dose</td> <td>Every 8 hours</td> </tr> </tbody> </table> <p><b><u>Meningitis</u></b></p> <p><b>IV/IM:</b></p> <table border="1"> <thead> <tr> <th><u>Corrected gestational age</u></th> <th><u>Postnatal age</u></th> <th><u>Dose</u></th> <th><u>Frequency</u></th> </tr> </thead> <tbody> <tr> <td rowspan="2">All ages</td> <td>&lt;7 days</td> <td>100mg/kg/dose</td> <td>Every 12 hours</td> </tr> <tr> <td>≥7 days</td> <td>100mg/kg/dose</td> <td>Every 8 hours</td> </tr> </tbody> </table>			<u>Corrected gestational age</u>	<u>Postnatal age</u>	<u>Dose</u>	<u>Frequency</u>	All ages	<7 days	50mg/kg/dose	Every 12 hours	≥7 days	50mg/kg/dose	Every 8 hours	<u>Corrected gestational age</u>	<u>Postnatal age</u>	<u>Dose</u>	<u>Frequency</u>	All ages	<7 days	100mg/kg/dose	Every 12 hours	≥7 days	100mg/kg/dose	Every 8 hours
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<b>Dosage Adjustment</b>	In infants with severe renal impairment, it may be necessary to reduce the total daily dose. Contact Microbiology.
<b>Adverse Reactions</b>	<b>Common:</b> Vomiting, diarrhoea, rash, hypersensitivity , angioedema
	<b>Serious:</b> neurotoxicity (too rapid injection rate), urticaria, purpurae, anaemia, thrombocytopenia, phlebitis, hypernatraemia (from sodium content)
<b>Interactions</b>	IV aminoglycoside antibiotics, including gentamicin, are inactivated by IV cephalosporins, penicillins and teicoplanin. Ensure lines are adequately flushed between antibiotics.
<b>Compatible Fluids</b>	Sodium chloride 0.9%, Sterile water for injection
<b>Preparation</b>	<p><b><u>IV:</u></b> Add 9.2mL of water for injections to a 1g vial Concentration is 1000mg/10mL</p> <p>Take 5mL (500mg) of the above solution and add to 5mL of water for injections Concentration is now 500mg/10mL = <u>50mg/mL</u></p> <p><b><u>IM:</u></b> Add 3.2mL of water for injections to a 1g vial Concentration is 1000mg/4mL = <u>250mg/mL</u></p> <p><b><u>Oral (100 mg/mL drops)</u></b> Add 18mL of water for Irrigation to the amoxicillin powder for suspension. Shake well Expires 14 days after reconstitution. Store at room temperature.</p> <p><b><u>Oral (250 mg/5mL suspension)</u></b> Add 92mL of Water for Irrigation to the amoxicillin powder for suspension. Expires 14 days after reconstitution. Refrigerate- do not freeze</p>
<b>Administration</b>	<p><b><u>IV:</u></b> Infuse over at least 30 minutes.</p> <p><b><u>Oral:</u></b> May be given at any time with regard to feeds.</p>

<b>Monitoring</b>	Monitoring is not usually required. Follow infectious disease/microbiology advice in case of poor therapeutic response
<b>Storage</b>	<p><b>IV:</b> Store at room temperature, below 25°C</p> <p><b>PO:</b> <b>100mg/mL solution</b> - Store at room temperature, below 25°C . Stable for 14 days</p> <p><b>250mg/mL solution</b> – Refrigerate – do not freeze, stable for 14 days</p>
<b>Notes</b>	Clearance is primarily by the renal route. Clearance increases with increasing gestational age and postmenstrual age. Serum half-life is longer in premature infants and infants younger than 7 days
<b>Related clinical guidelines</b>	WNHS Policy: <a href="#">Antimicrobial Stewardship</a>
<b>Other clinical guidelines</b>	<a href="#">NETS WA Seizures</a> <a href="#">NETS WA Sepsis</a>
<b>References</b>	<p>Takemoto CK, Hodding JH, Kraus DM. Pediatric &amp; neonatal dosage handbook with international trade names index: a universal resource for clinicians treating pediatric and neonatal patients. 23rd ed. Hudson (Ohio): Lexicomp; 2401. 2, P.128</p> <p>Truven Health Analytics. Title Amoxicillin. In: NeoFax [Internet]. Greenwood Village (CO): Truven Health Analytics; 2019 [cited 2019 Apr 15]. Available from: <a href="https://neofax.micromedexsolutions.com/">https://neofax.micromedexsolutions.com/</a></p> <p>Truven Health Analytics. Amoxicillin. In: NeoFax [Internet]. Greenwood Village (CO): Truven Health Analytics; 2019 [cited 2019 Apr 15]. Available from: <a href="https://neofax.micromedexsolutions.com/">https://neofax.micromedexsolutions.com/</a></p>

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