



NEONATAL

BENZYL PENICILLIN




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

Unrestricted: Any prescriber may initiate treatment as per guideline

Presentation	Vial: 600mg, 1.2g vial																						
Classification	Penicillin antibacterial – also known as Penicillin G																						
Indication	Treatment of infections caused by susceptible organisms including group B streptococcus (GBS), non beta-lactamase producing congenital syphilis																						
Dose	<p><u>IV/IM:</u></p> <p>Sepsis</p> <table border="1"> <thead> <tr> <th>Current Age</th> <th>Dose</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>< 7 days</td> <td>60mg/kg/dose</td> <td>Every 12 hours</td> </tr> <tr> <td>≥ 7 days</td> <td>60mg/kg/dose</td> <td>Every 8 hours</td> </tr> </tbody> </table> <p>Meningitis</p> <table border="1"> <thead> <tr> <th>Current Age</th> <th>Dose</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>All ages</td> <td>90mg/kg/dose</td> <td>Every 8 hours</td> </tr> </tbody> </table> <p>Congenital Syphilis</p> <p>Discuss with Microbiology for appropriateness and duration of treatment</p> <table border="1"> <thead> <tr> <th>Current Age</th> <th>Dose</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>All ages</td> <td>50mg/kg/dose</td> <td>Every 12 hours</td> </tr> </tbody> </table>		Current Age	Dose	Frequency	< 7 days	60mg/kg/dose	Every 12 hours	≥ 7 days	60mg/kg/dose	Every 8 hours	Current Age	Dose	Frequency	All ages	90mg/kg/dose	Every 8 hours	Current Age	Dose	Frequency	All ages	50mg/kg/dose	Every 12 hours
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Monitoring	Monitor infection rate, monitor electrolytes specifically sodium and renal function with high doses and long term treatment																						
Guidelines & Resources	Sepsis: Infection of the Neonate																						

Compatible Fluids	Water for Injections, Sodium Chloride 0.9%, Glucose 5%
Preparation	<p>Use solution prepared in Pharmacy where available</p> <p>IV Injection/Infusion: <i>Final Concentration is 60mg/mL</i></p> <p><u>Step 1</u> Add 5mL of appropriate diluent to 600mg vial</p> <p><u>Step 2</u> Withdraw the entire contents of the above solution (≈5mL) and make up to 10mL with appropriate diluent Concentration = 600mg/10mL = <u>60mg/mL</u></p> <p>If 600mg vials are not available follow the dilution for 1.2g vials below</p> <p>IV Injection/Infusion: <i>Final Concentration is 60mg/mL</i></p> <p><u>Step 1</u> Add 10mL of appropriate diluent to 1.2g vial</p> <p><u>Step 2</u> Withdraw the entire contents of the above solution (≈10mL) and make up to 20mL with appropriate diluent Concentration = 1200mg/20mL = <u>60mg/mL</u></p> <p>IM: Add 1.6mL of appropriate diluent to 600mg vial Concentration = 600mg/2mL = <u>300mg/mL</u></p> <p><u>OR</u> Add 3.2mL of appropriate diluent to 1.2g vial Concentration = 1200mg/4mL = <u>300mg/mL</u></p>
Administration	<p>IV Injection: Injection volume less than 5mL Inject slowly over 5-10 minutes</p> <p><u>NB:</u> Injection volume greater than 5mL – administer as an IV Infusion</p> <p>IV Infusion: Infuse over 30 minutes. Maximum concentration of <u>60mg/mL</u></p> <p>IM: as per Neonatal Protocol</p>

Adverse Reactions	Hypersensitivity, rash, diarrhoea Seizures with high doses Haemolytic anaemia
Storage	Vial: Store at room temperature CIVAS : Refrigerate – do not freeze
Notes	IV aminoglycoside antibiotics, including gentamicin, are inactivated by IV cephalosporins, penicillins and teicoplanin. Ensure lines are adequately flushed between antibiotics.
References	<p>Takemoto CK, Hodding JH, Kraus DM. Pediatric & neonatal dosage handbook with international trade names index : a universal resource for clinicians treating pediatric and neonatal patients. 24th ed. Hudson (Ohio): Lexicomp; 2401. 2,</p> <p>Truven Health Analytics. Benzylpenicillin. In: NeoFax [Internet]. Greenwood Village (CO): Truven Health Analytics; 2017 [cited 2019 June 21]. Available from: https://neofax.micromedexsolutions.com/</p> <p>Society of Hospital Pharmacists of Australia. Benzylpenicillin. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2019 [cited 2020 Jan 21]. Available from: http://aidh.hcn.com.au</p> <p>Therapeutic Guidelines. GBS Meningitis In: eTG complete [Internet]. West Melbourne (Victoria): Therapeutic Guidelines; 2019 [cited 2019 Aug 21]. Available from: https://tgldcdp-tg-org-au.kelibresources.health.wa.gov.au/etgAccess</p>

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