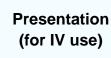


CEFOTAXIME

Read in conjunction with **Disclaimer**

Formulary: Restricted Requires Microbiologist review within 24 hours of initiation.							
Presentation	Vial: 1 g = 1000 mg						
Classification	Cephalosporin						
Indication	 Infections due to susceptible gram negative organisms (excluding Pseudomonas sp.) including: Sepsis Meningitis Antibiotic Prophylaxis: Ventriculoperitoneal (VP) Shunt. 						
Special Considerations	 Use with caution in patients with a history of penicillin allergy, especially IgE-mediated reactions. Life threatening arrhythmias have occurred with rapid IV injection (when administered over 1 minute). Ensure IV injections are given over 3 to 5 minutes. 						
Monitoring	Monitor renal and hepatic function if long term therapy.						
Compatibility Fluids: Water for injection, sodium chloride 0.9%, glucose 5% glucose 10%. Refer to KEMH Neonatal Medication Guideline: Y-Site IV Comin Neonates.							
Incompatibility	Intravenous aminoglycoside antibiotics, including gentamicin, are inactivated by intravenous cephalosporins. Ensure lines are adequately flushed between antibiotics.						
Interactions	Cephalosporins can cause renal impairment; administration with other medications that also have this effect, particularly aminoglycosides, may increase risk of nephrotoxicity.						
	Common: Diarrhoea, nausea, abdominal pain, vomiting, pain and inflammation at injection site, rash, headache, dizziness, allergy, <i>Clostrioides difficile</i> -associated disease.						
	Infrequent: Anaphylaxis, angioedema						
Adverse Effects	Rare: Life-threatening arrhythmias with rapid IV administration, neurotoxicity (e.g. confusion, seizures, encephalopathy) especially with high doses and/or renal impairment, blood dyscrasias (e.g. neutropenia), thrombocytopenia, bleeding, renal impairment, immunologic reactions.						
	Third generation cephalosporins started by day 3 of life in extremely low birth weight infants (less than 1000 g) have been associated with a significantly increased risk of candidiasis compared with other antibiotics.						
Storage & Stability	Vial: Store at room temperature, below 25°C. Protect from light.						



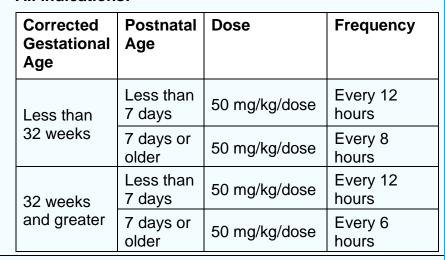
Vial: 1 g = 1000 mg

Available from CIVAS (KEMH): 100 mg/mL (IV push), 40

mg/mL (IV infusion)

Available from PCS (PCH): 100 mg/mL

All indications:



Dose Adjustment

Dosage

Renal impairment: Dose reduction may be needed in renal impairment. Renal impairment increases the risk ofneurotoxicity (seizures or coma) with high doses. Risk of neutropenia may be increased.

IV push – 100 mg/mL:

 Add 9.6 mL of compatible diluent to the cefotaxime 1 g vial.

Concentration = 1000 mg/10 mL = 100 mg/mL.

IV infusion – 40 mg/mL:

Step 1 Reconstitution:

Preparation

- Add 9.6 mL of compatible diluent to the cefotaxime 1 g vial.
- Concentration is 1000 mg/10 mL = 100 mg/mL.

Step 2 Dilution:

• Draw up 2 mL (200 mg) and make up to 5 mL total volume with compatible diluent.

Concentration = 200 mg/5 mL = 40 mg/mL.

IV push:

IV injection over 3 to 5 minutes.

Administration

 Note: Life threatening arrhythmias have occurred with rapid IV injection (when administered over 1 minute).
 Ensure IV injections are given over 3 to 5 minutes.

IV infusion:

Infuse via syringe driver pump over 15 to 30 minutes.



	Vial: 1g = 1000 mg Presentation Available from CIVAS (KEMH Only): 250 mg/ mL (IM injection)							
Z	Dosage	Infection due to susceptible gram negative organisms:						
NTRAMUSCULAR INJECTION		Corrected Gestational Age	Postnatal Age	Dose	Frequency			
		Less than 32 weeks	Less than 7 days	50 mg/kg/dose	Every 12 hours			
			7 days or older	50 mg/kg/dose	Every 8 hours			
		32 weeks and greater	Less than 7 days	50 mg/kg/dose	Every 12 hours			
			7 days or older	50 mg/kg/dose	Every 6 hours			
Σ		IM injection – 250 mg/mL:						
INTRA	Preparation	 Add 3.6 mL of water for injection to the cefotaxime 1g vial. 						
		Concentration = 1000 mg/4 mL = 250 mg/mL.						
	Administration	 Only use IM if IV not possible, IM can be painful. Draw up the prescribed dose. Inject as per the <u>Medication Administration Guideline.</u> 						

Related Policies, Procedures, and Guidelines

Clinical Practice Guidelines:

PCH ChAMP - Surgical Prophylaxis - Vascular, Cardiovascular, Neurosurgery

Pharmaceutical and Medicines Management Guidelines:

CAHS Neonatology – Medication Administration Guideline

References

AusDI. DBL Cefotaxime Sodium for Injection. In: AusDI By Medical Director [Internet]. Australia: AusDI by Medical Director; 2025 [cited 2025 Oct 03]. Available from: https://www.ausdi.com/

Australian Medicines Handbook. Cefotaxime. In: Australian Medicines Handbook [Internet]. Adelaide (South Australia): Australian Medicines Handbook; 2025 [cited 2025 Oct 03]. Available from: https://amhonline.amh.net.au/

Truven Health Analytics. Cefotaxime. In: NeoFax [Internet]. Greenwood Village (CO): Truven Health Analytics; 2025 [cited 2025 Oct 03]. Available from: https://neofax.micromedexsolutions.com/

UpToDate Lexidrug. Cefotaxime (United States: Limited availability): Pediatric drug information. In: UpToDate Lexidrug [Internet]. Wolters Kluwer; 2025. [cited 2025 Oct 03]. Available from: https://www.uptodate.com/

Leroux S, Roué J-M, Gouyon J-B, Biran V, Zheng H, Zhao W, Jacqz-Aigrain E. 2016. A population and developmental pharmacokinetic analysis to evaluate and optimize cefotaxime dosing regimen in neonates and young infants. Antimicrob Agents Chemother 60:6626 –6634. doi:10.1128/AAC.01045-16

Document history

Keywords	Cefotaxime, cephalosporins, third generation, sepsis, meningitis, VP shunt, prophylaxis								
Abbreviations	IV: intravenous, IM: intramuscular, CIVAS: Centralised Intravenous Additive Service, PCS: Pharmacy Compounding Service								
Document Owner:	Chief Pharmacist								
Author/ Reviewer	KEMH & PCH Pharmacy/Neonatology Directorate								
Version Info:	V4.0 – Full review								
Date First Issued:	03/2008	Last Reviewed:	01/10/2025		Review Date:	01/10/2030			
Endorsed by:	Neonatal Directora	te Management Gro		Date:	28/10/2025				
NSQHS Standards Applicable:	Std 1: Clinical Governance				Std 4: Medication Safety				
Printed or personally saved electronic copies of this document are considered uncontrolled. Access the current version from WNHS HealthPoint.									

This document can be made available in alternative formats on request for a person with a disability.

© North Metropolitan Health Service 2025