

Displacement values and reconstitution guidelines for common antibiotics

Used on the Neonatal Intensive Care Unit Children's' reference: CH PH N 47 V2

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Version / Amendment History	Version	Date	Author	Reason
	1	November 2017 2010	Harriet Hughes, Pharmacist, Paediatrics	Original Guideline
	2	April 2022	Hester Davies, Susi Dumbleton and Harriet Hughes, Paediatric Pharmacists	Due update
Intended Recipients: Medical and nursing staff on NICU				
Training and Dissemination: Cascaded through Paediatric Guideline Manual Holders Published on Intranet, Article in directorate newsletter Email to Consultants, Senior Matrons and Departmental Matrons Email to PICU matron				
Distribution and Location of Guideline: Within the manual entitled "Directorate of Children's Services Clinical and Operational Policies and Guidelines." Located in all areas within the Children's Hospital Pharmacy				
Changes made from CH PH N 47 V1: Cefuroxime removed as not listed as stock on the neonatal unit Average displacement values used for Cefotaxime Review of 'extra information' for each drug, with information added for reconstitution				

Antibiotic	Reconstitution	Concentration of reconstituted solution	Extra information
Amoxicillin	250mg – 2.3 ml WFI	250mg in 2.5ml (100mg/ml)	<p>Reconstitute in water for injections</p> <p>Doses <30mg/kg to be given slowly over at least 3 minutes</p> <p>Doses over 30mg/kg must be infused over 30 minutes. May be diluted further with sodium chloride 0.9% or glucose 5% with any convenient volume.</p> <p>Shake vigorously. A transient pink colour may develop during reconstitution but the product may still be used. Use reconstituted solution immediately.</p>
Benzylpenicillin	600mg - 5.6ml WFI	600mg in 6ml (100mg/ml)	<p>Reconstitute in water for injections.</p> <p>Doses <50mg/kg to be given slowly as an injection over 3-4 minutes. Can be given as 100mg/mL injection or diluted further, where the maximum final concentration is 60mg/ml.</p> <p>Doses of ≥50mg/kg will be made by pharmacy with overage as they must be infused.</p>
Cefotaxime	500mg – 4.8ml WFI	500mg in 5ml (100mg/ml)	<p>Reconstitute in water for injections</p> <p>IV Injection over at least 3 minutes</p> <p>Cefotaxime has a high osmolarity. When administering cefotaxime to neonates, dilute with glucose 5% or sodium chloride 0.9% to a concentration of 50mg in 1mL to reduce the risk of adverse effects.</p>

Flucloxacillin	250mg - 4.8ml WFI	250mg in 5ml (50mg/ml)	Reconstitute in water for injections IV bolus – give doses <1000mg over at least 3 minutes. The reconstituted dose may be given without further dilution, but preferably dilute with a further 5-10mL with sodium chloride 0.9%, glucose 5% or glucose 10% to aid slow administration and increase osmolarity of injection.
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If an antibiotic is not listed please contact pharmacy for advice

Documentation Control

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