



NEONATAL MEDICATION GUIDELINE	
Y-Site IV Compatibility in Neonates	
Scope (Staff):	Nursing, Medical and Pharmacy Staff
Scope (Area):	KEMH NICU, PCH NICU, NETS WA
This document should be read in conjunction with the Disclaimer.	

Aim

The purpose of this guideline is to assist nursing and medical staff in the safe administration of intravenous (IV) medication to neonates.

Key points

The table provides a guide to medication compatibility via Y-site within the NICU.

Medication compatibilities are concentration, temperature and light dependent.

Do NOT use solutions where there is a visible change in colouration.

For further information, please contact the KEMH pharmacy department.

Risk

Non-compliance with this guideline will:

Breach legislative requirements	<input type="checkbox"/>	Impact on Patient Quality of Care	<input checked="" type="checkbox"/>
Breach National/State/Mandatory Policy	<input type="checkbox"/>	Impact on Patient Safety	<input checked="" type="checkbox"/>
Breach professional standards	<input type="checkbox"/>	Impact financial operations	<input type="checkbox"/>
Damage NMHS reputation	<input type="checkbox"/>	Impact on Staff Safety	<input type="checkbox"/>
Other	<input type="checkbox"/>		

Y-Site Compatibility Chart for Neonatal IV Infusions at WNHS

	Aciclovir	Adrenaline	Alprostadil	Benzylpenicillin	Caffeine	Calcium Gluconate	Cefotaxime	Ciprofloxacin	Clonidine	Dexmedetomidine	Dobutamine	Dopamine	Flucloxacillin	Furosemide	Gentamicin	Glucose 5%	Glucose 10%	Glucose 25%	Heparin	Indometacin	Meropenem	Metronidazole	Midazolam	Milrinone	Morphine Sulphate	Noradrenaline	Parenteral Nutrition (TPN)	Pentoxifylline	Piperacillin Tazobactam	Sildenafil	Sodium Bicarbonate	Sodium Chloride 0.9%	Vancomycin		
Aciclovir																																			
Adrenaline	X																																		
Alprostadil	X	C																																	
Benzylpenicillin	C	C																																	
Caffeine	M	C	C																																
Calcium Gluconate	C	C	C	C	C																														
Cefotaxime	C	C	C	C	C																														
Ciprofloxacin	X						X	C																											
Clonidine		C																																	
Dexmedetomidine	C	C	X	C	C	C	C	C	C																										
Dobutamine	X	C	C	X	M	C	X	C	C	C																									
Dopamine	X	C	C	C	C	C	C	C	C	C																									
Flucloxacillin							X		X				X																						
Furosemide	C	C	C	C	X	C	C	X	C	C	X	M																							
Gentamicin	M	C	C	C	C	C	X	C		C	C	C	X	X																					
Glucose 5%	C	M	M	C	C	C	C	C		C	C	C	C	M	C																				
Glucose 10%		C	C																																
Glucose 25%																																			
Heparin	C	C	C	C	C	C	C	X	C	C	M	C		C	M	C	C																		
Indometacin				C		X					X	X		C	X	C	X																		
Meropenem	M				M	M		X	C	C	C	C		C	C	M	C																		
Metronidazole	C	C			C	C	C	C		C	C	C	C	C	C	C	C																		
Midazolam	X	C	C	C	X	C	M	C	M	C	M	C	X	X	C	C																			
Milrinone	C	C	C		C	C	C	C		C	C	C		X	C	C																			
Morphine Sulphate	M	C	C	C	C	C	C	C		C	C	C	X	M	C	C	C																		
Noradrenaline		C	X	C	C	C	C	C	C	C	M	C		C	C	M	C																		
Parenteral Nutrition (TPN)	X		C	C	C	M	C	C			C	C	C	C	C	C	C																		
Pentoxifylline	C	C	C	C	C	X	C	C	C	C	C	C	C	C	C	C	C																		
Piperacillin Tazobactam	X				C	C		X		C	X	C		C	C	C																			
Sildenafil																																			
Sodium Bicarbonate	C	X		M	C	X	X	M		C	X	X		C	C	C																			
Sodium Chloride 0.9%	C	C	M	C		C	C	C	C	C	C	C	C	C	C	C	C																		
Vancomycin	C	C	C		M	C	M	M		C	C	C	X	X	C	C	C																		

C Compatible at Y-site
M Mixed reports, contact Pharmacy
X Incompatible
Blank No data available

Aim: The purpose of this guideline is to guide nursing staff in the administration of IV medication in neonates

- The table provides a guide to medication compatibility via Y-site within the NCCU.
- Medication compatibilities are concentration, temperature and light dependent.
- Do NOT use solutions where there is a visible change in colouration.
- For further information, please contact the Pharmacy Department.

* This table refers to concentrations used in the WNHS neonatal medication guidelines ONLY and should not be used for any other clinical area

References and resources

Society of Hospital Pharmacists of Australia. Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2021 [cited 2021 July, 5]. Available from: <http://aidh.hcn.com.au>

King Guide to Parenteral Admixtures. [Internet]. King Guide Publications, Inc; 2020 [cited 2021 July, 5]. Available from: <http://www.kingguide.com.kelibresources.health.wa.gov.au/kgpa2/x1.asp>

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Campbell AL, Petrovski M, Senarathna SG, Mukadam N, Strunk T, Batty KT. Compatibility of pentoxifylline and parenteral medications. Arch Dis Child. 2020 Apr;105(4):395-397. doi: 10.1136/archdischild-2019-317912. Epub 2019 Dec 23. PMID: 31871042.

Useful resources (including related forms)

https://kemh.libguides.com/library/elibrary/nccu_neonatal_hub

<https://cahslibrary.health.wa.gov.au/home/medications>

Y-Site IV Compatibility in Neonates

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