



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

### 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

Drug	Aciclovir	Adrenaline	Alprostadil	Amoxicillin	Benzylpenicillin	Caffeine	Calcium Gluconate	Cefotaxime	Ciprofloxacin	Clonidine	Dexmedetomidine	Dobutamine	Dopamine	Flucloxacillin	Furosemide	Gentamicin	Glucose 5%	Glucose 10%	Glucose 25%	Heparin	Indometacin	Lipid with Vitamins 17%	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																																					
Amoxicillin																																							
Benzylpenicillin	C	C																																					
Caffeine	M	C	C																																				
Calcium Gluconate	C	C	C				C	C																															
Cefotaxime	C	C	C																																				
Ciprofloxacin	X								X																														
Clonidine		C																																					
Dexmedetomidine	C	C	X				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																									
Furosemide	C	C	C				C	X	C	C	X	C	C	X	C																								
Gentamicin	M	C	C	X			C	C	C	X	C	C	C	C	X	C																							
Glucose 5%	C	M	M	M			C	C	C	C	C	C	C																										
Glucose 10%		C	C																																				
Glucose 25%																																							
Heparin	C	C	C	C	C	C	C	C	C	X																													
Indometacin							C																																
Lipid with Vitamins 17%																																							
Meropenem	M																																						
Metronidazole	C	C					C	C	C	C	C	C	C	C	C	C	C	C	C																				
Midazolam	X	C	C	X			C	X	C	M	C	M	C	M	C	X	X	C	C																				
Milrinone	C	C	C				C	C	C	C																													
Morphine Sulphate	M	C	C				C	C	C	C	C																												
Noradrenaline		C	X				C	C	C	C	C	C	C																										
Parenteral Nutrition (TPN)	X			C	X		C	C	M	C	C																												
Pentoxifylline	C	C	C	X			C	C	X	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C		
Piperacillin Tazobactam	X								C	C																													
Sildenafil																																							
Sodium Bicarbonate	C	X			X	M	C	X	X	M																													
Sodium Chloride 0.9%	C	C	M		C	C																																	
Vancomycin	C	C	C	X			M	C	M	M																													

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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Senarathna SMDKG, Strunk T, Petrovski M, Woodland S, Batty KT. Physicochemical compatibility of pentoxifylline injection with high-concentration parenteral medications. Pediatr Investig. 2023;00:1-5. <https://doi.org/10.1002/ped4.12393>









Senarathna SMDKG, Strunk T, Petrovski M, et al. Eur J Hosp Pharm Epub ahead of print: 30 Oct 2023. doi:10.1136/ ejhpharm-2023-003870

## Useful resources (including related forms)

[https://kemh.libguides.com/library/elibrary/nccu\\_neonatal\\_hub](https://kemh.libguides.com/library/elibrary/nccu_neonatal_hub)

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

## Y-Site IV Compatibility in Neonates

Keywords	IV compatibility, intravenous compatibility, Y-site, fluid, CIVAS				
Document Owner:	Head of Department - Neonatology				
Author/ Reviewer	KEMH Pharmacy Department				
Version Info:	Reviewed October 2020 (V2.0) January 2020 (V3.0), December 2020 (V3.1), Reviewed July 2021 to align with update to King Guide (V4.0), Additional data added 2023 (V5.0)				
Date First Issued:	30/04/2018	Last Reviewed:	05/07/2021	Review Date:	05/07/2024
Endorsed by:	Neonatal Directorate Management Group			Date:	05/07/2021
NSQHS Standards Applicable:	<input type="checkbox"/>  Std 1: Clinical Governance <input type="checkbox"/>  Std 2: Partnering with Consumers <input type="checkbox"/>  Std 3: Preventing and Controlling Healthcare Associated Infection <input checked="" type="checkbox"/>  Std 4: Medication Safety		<input type="checkbox"/>  Std 5: Comprehensive Care <input type="checkbox"/>  Std 6: Communicating for Safety <input type="checkbox"/>  Std 7: Blood Management <input type="checkbox"/>  Std 8: Recognising and Responding to Acute Deterioration		
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The health impact upon Aboriginal people has been considered, and where relevant incorporated and appropriately addressed in the development of this document (insert ISD Number). (Please refer to the Aboriginal Health Impact Statement and Declaration for Department of Health and Health Service Provider Guidelines – please delete once you have completed this).

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