		Type: Drug Guideline	Document reference: 2918	Manual Classification: Waikato DHB Drug Guidelines
Title: Flucloxacillin for Neonates			Effective date: 10 August 2020	
Facilitator <small>sign/date</small> <i>Kerrie Knox Pharmacist</i>	Authorised <small>sign/date</small> <i>Jutta van den Boom Clinical Director NICU</i>	Authorised <small>sign/date</small> <i>John Barnard Chair Medicines & Therapeutics</i>	Version: 2	Page: 1 of 2
			Document expiry date: 10 August 2023	

© Waikato DHB, August 2020

BRIEF ADMINISTRATION GUIDE

For detailed information refer to [The Australasian Neonatal Medicines Formulary flucloxacillin guideline](#)



Critical Note: there are minor variations between the ANMF and Waikato DHB best practice within this drug guideline – see **yellow shaded text**

- Indications:**
- Bacterial infections, where S. Aureus or susceptible coagulase-negative Staphylococci is suspected or confirmed, or other infection caused by susceptible organisms
 - Late sepsis (>2 days) empiric therapy (in combination with amikacin)

Route: Intravenous, or oral

- Injection (250 mg vial) supplied as flucloxacillin sodium monohydrate, equivalent to flucloxacillin 250 mg, powder for reconstitution
- Oral supplied as flucloxacillin 250 mg/5mL or 125 mg/5mL oral liquid
- pH of flucloxacillin 5-7

Dose: **IV:** 50 mg/kg/dose
Oral: 25 – **50** mg/kg/dose

Dosing interval for all routes of administration:

Postnatal age (days)	Dosing Interval (hours)
0 to 7	12
8 to 20	8
21+	6


Preparation and administration:

Intravenous

- Dilute **250 mg vial with 4.8 mL** of water for injection to make final concentration 50 mg/mL. Shake vial vigorously, as soon as diluent is added, to dissolve powder and check for absence of particulate matter before proceeding.
- Draw up the desired volume for the required dose. If desired the final dose may be diluted further with compatible diluent (glucose 5%, sodium chloride 0.9%).
- Infuse dose over 30 to 60 minutes using Guardrails profiled syringe driver
- Flush before and after the dose with sodium chloride 0.9%, glucose 5% or glucose 10%.
Note: while flucloxacillin has not been tested for compatibility with glucose 10% it is deemed acceptable to administer concurrently.
The flush should be administered at the same rate as the flucloxacillin.
- Note: flucloxacillin is incompatible with amino acid solutions and lipid emulsions

Oral

- If ordering from Pharmacy the suspension will already be reconstituted, but if not follow the below:
 - Shake the bottle to loosen the powder.
 - Check instructions on bottle for volume of water to make up to 100 ml, e.g. AFT brand: add 79 ml of water if using 250mg strength or 87 ml for the 125mg strength. Shake well.
 - When first reconstituted allow to stand for 5 minutes to ensure full dispersion.
- Shake suspension well then draw up appropriate volume for the dose in an oral syringe.
- If possible administer 30 to 60 minutes before feeds.

	Document reference: 2918	Effective date: 10 Aug 2020	Expiry date: 10 Aug 2023	Page: 2 of 2
	Title: Flucloxacillin for Neonates	Type: Drug Guideline	Version: 2	Authorising initials:

Monitoring

- Consider if specimen for culture and sensitivity testing is required before first dose
- Assess for signs of anaphylaxis and adverse reactions
- Observe infusion site for thrombophlebitis
- Monitor temperature and other parameters appropriate to the condition
- Observe for change in bowel frequency
- Monitor renal, hepatic and hematologic function periodically

Storage and Stability

- Reconstituted solution in the vial is stable for **up to 72 hours** when refrigerated below 5°C
- Diluted solutions are stable for 1 hour at room temperature and **up to 72 hours** when refrigerated below 5°C
- The reconstituted oral suspension is stable for 14 days when refrigerated (2-8°C)

Competency for Administration

This procedure is carried out by, or under, the direct supervision of a registered nurse/registered midwife who holds current Waikato DHB Generic Medicine Management and IV certification plus Guardrails competency (if administering IV) as well as Neonatal specific competency NCV/NAC (if administering via CVAD).

Guardrails Information

Flucloxacillin is Guardrail profiled on the CC pump for NICU. Following are the guardrail limits:

Guardrails Drug Name	Flucloxacillin*
Pump	CC
Concentration (mg/ml)	
Default	50
Minimum	12.5
Maximum	50
Dose rate (mg/kg/hour)	
Default	50
Soft minimum	25
Soft maximum	100
Hard max	102

References

- Australian Neonatal Medicines Formulary. Flucloxacillin Guideline, 2019. Available from: https://www.seslhd.health.nsw.gov.au/sites/default/files/groups/Royal_Hospital_for_Women/Neonatal/Neomed/neomed19flucloxacillinfullfinal.pdf
- Flucloxacillin® datasheet Available from <https://www.medsafe.govt.nz/profs/datasheet/f/Flucloxacillincapsyrinj.pdf>
- AFT Flucloxacillin powder for oral suspension datasheet. AFT Pharmaceuticals Ltd, August 2019. Available from <https://www.medsafe.govt.nz/profs/datasheet/f/FlucloxacillinAFTcapsoln.pdf>
- New Zealand Formulary for Children (NZFC). Flucloxacillin. Accessed 9.4.2020. Available from https://nzfchildren.org.nz/nzf_3012
- The Royal Children's Hospital Melbourne. Paediatric Injectable Guidelines. Accessed 9.4.2020. Available from <https://pig.rch.org.au>.
- Auckland DHB Newborn Services. Flucloxacillin Drug Protocol. January 2018. Available from <http://www.adhb.govt.nz/newborn/DrugProtocols/FlucloxacillinAdministration.htm>
- Canterbury DHB Neonatal Services. Flucloxacillin Drug Information Sheet. March 2016. Available from <https://cdhb.health.nz/wp-content/uploads/055d365e-flucloxacillin.pdf>

Note: Printed copies are only valid on the day of printing – they are not controlled and may not be the current version in use. Please refer to the online version.

Disclaimer: This document has been developed by Waikato District Health Board specifically for its own use. Use of this document and any reliance on the information contained therein by any third party is at their own risk and Waikato District Health Board assumes no responsibility whatsoever.