

FLUCLOXACILLIN

Indication	<ul style="list-style-type: none"> Treatment of infections due to susceptible gram-positive organisms (typically pneumonia, osteomyelitis, skin and soft tissue infections, infected burns, and cellulitis¹)
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ORAL	Presentation	<ul style="list-style-type: none"> Powder for oral solution 125 mg in 5 mL 250 mg in 5 mL 									
	Dosage	<ul style="list-style-type: none"> 25 mg/kg (frequency according to day of life)^{2,3} <table border="1"> <thead> <tr> <th>Day of life (days)</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>0–7</td> <td>every 12 hours</td> </tr> <tr> <td>8–21</td> <td>every 8 hours</td> </tr> <tr> <td>22 or more</td> <td>every 6 hours</td> </tr> </tbody> </table>		Day of life (days)	Frequency	0–7	every 12 hours	8–21	every 8 hours	22 or more	every 6 hours
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	0–7	every 12 hours									
	8–21	every 8 hours									
22 or more	every 6 hours										
Preparation	<ul style="list-style-type: none"> Add water for injection to dry powder according to label instructions Shake vigorously¹ 										
Administration	<ul style="list-style-type: none"> Draw up the prescribed dose in oral/enteral syringe Oral/OGT/NGT before feeds 										

INTRAVENOUS	Presentation	<ul style="list-style-type: none"> Vials: 500 mg 1 g 									
	Dosage	<ul style="list-style-type: none"> 25 mg/kg (frequency according to day of life)^{2,4} <table border="1"> <thead> <tr> <th>Day of life (days)</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>0–7</td> <td>every 12 hours</td> </tr> <tr> <td>8–20</td> <td>every 8 hours</td> </tr> <tr> <td>21 or more</td> <td>every 6 hours</td> </tr> </tbody> </table>		Day of life (days)	Frequency	0–7	every 12 hours	8–20	every 8 hours	21 or more	every 6 hours
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Meningitis dosage	<ul style="list-style-type: none"> Staphylococcal meningitis: 50–100 mg/kg (frequency according to day of life)^{2,4} <table border="1"> <thead> <tr> <th>Day of life (days)</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>0–7</td> <td>every 12 hours</td> </tr> <tr> <td>8–20</td> <td>every 8 hours</td> </tr> <tr> <td>21 or more</td> <td>every 6 hours</td> </tr> </tbody> </table>	Day of life (days)	Frequency	0–7	every 12 hours	8–20	every 8 hours	21 or more	every 6 hours		
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Preparation	<ul style="list-style-type: none"> 500 mg vial <ul style="list-style-type: none"> Add 4.6 mL of water for injection Draw up solution and make up to 10 mL total volume with water for injection Concentration now equal to 50 mg/mL⁵ 1 g vial <ul style="list-style-type: none"> Add 9.3 mL of water for injection Draw up solution and make up to 20 mL total volume with water for injection Concentration now equal to 50 mg/mL⁵ 										
Administration	<ul style="list-style-type: none"> IV infusion via syringe driver pump over 30–60 minutes⁵ <ul style="list-style-type: none"> Prime the infusion line and reduce total syringe volume to prescribed dose On completion, disconnect syringe and infusion line Flush access port at same rate as infusion 										

IM	Presentation	<ul style="list-style-type: none"> Vial 500 mg 	
	Dosage ²	<ul style="list-style-type: none"> 25 mg/kg once. Then use alternate route 	
	Preparation	<ul style="list-style-type: none"> Add 1.6 mL water for injection <ul style="list-style-type: none"> Concentration⁵ now equal to 250 mg/mL 	
	Administration	<ul style="list-style-type: none"> Draw up the prescribed dose Intramuscular injection into thickest part of the vastus lateralis in the anterolateral thigh (maximum 0.5 mL per site)⁶ 	

Special considerations	<ul style="list-style-type: none"> • Caution <ul style="list-style-type: none"> ◦ Jaundiced neonates¹ • IM route only if IV not possible (IM painful) • UAC route: consult with neonatologist/paediatrician prior to use and refer to Queensland Clinical Guideline: <i>Neonatal medicines</i>⁷ • If co-prescribed with aminoglycoside, give the antibiotic with shortest duration of administration first (so antibiotic cover commences asap) <ul style="list-style-type: none"> ◦ Do not mix in the same injection or infusion solution; flush before and after
Monitoring	<ul style="list-style-type: none"> • Liver function if using high dose/long course
Compatibility	<ul style="list-style-type: none"> • Fluids⁵ <ul style="list-style-type: none"> ◦ 5% glucose, 0.9% sodium chloride • Y-site⁵ <ul style="list-style-type: none"> ◦ No information
Incompatibility	<ul style="list-style-type: none"> • Fluids⁵ <ul style="list-style-type: none"> ◦ Blood products or other proteinaceous fluids • Drugs <ul style="list-style-type: none"> ◦ Aminoglycosides⁵, amiodarone⁵, calcium gluconate⁵, ciprofloxacin⁵, dobutamine⁵, erythromycin⁵, midazolam⁵, morphine⁵, verapamil⁵, vancomycin⁸
Interactions	<ul style="list-style-type: none"> • IV aminoglycosides are inactivated by IV cephalosporins, penicillins and teicoplanin⁹
Stability	<ul style="list-style-type: none"> • Oral solution <ul style="list-style-type: none"> ◦ Stable at 2–8 °C after reconstitution for maximum of 14 days¹
Side effects	<ul style="list-style-type: none"> • Hypersensitivity reactions: rare in neonates. May present as erythema and rash (maculopapular rash, red purple plaques or urticarial type plaques¹⁰⁻¹³) • Blood pathology: anaemia, thrombocytopaenia and leucopenia¹ • Digestive: severe hepatitis and cholestatic jaundice, which may be protracted¹ vomiting, diarrhoea • Integumentary: irritative effects: phlebitis and venous irritation⁵
Actions	<ul style="list-style-type: none"> • Narrow-spectrum penicillin antibiotic • Active against beta-lactamase producing Staph aureus, Strep pyrogens and Strep pneumonia¹
Abbreviations	IM: intramuscular; IV: intravenous; NGT: nasogastric tube, OGT: orogastric tube, UAC: umbilical arterial catheter
Keywords	flucloxacillin, gram-positive cocci, antibiotic, infection

The Queensland Clinical Guideline *Neonatal Medicines* is integral to and should be read in conjunction with this monograph. Refer to the disclaimer. Destroy all printed copies of this monograph after use.

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Document history

ID number	Effective	Review	Summary of updates
NMedQ19.014-V1-R24	29/07/2019	29/07/2024	Endorsed by Queensland Neonatal Services Advisory Group (QNSAG)
NMedQ19.014-V2-R24	22/05/2020	29/07/2024	<ul style="list-style-type: none"> • IM dosage: <ul style="list-style-type: none"> ○ Added use alternate route after initial dose • IM preparation <ul style="list-style-type: none"> ○ Amended <i>from</i> Add 2 mL of WFI to Add 1.6 mL WFI • IV dosage <ul style="list-style-type: none"> ○ Amended: meningitis dosage moved to separate dosage line (no change to dose) ○ Deleted: term 'standard infection' • Stability <ul style="list-style-type: none"> ○ Deleted information for IV solution
NMedQ19.014-V3-R24	13/08/2021	29/07/2024	<ul style="list-style-type: none"> • Removed UAC icon and amended instructions for administration via UAC • Amended instructions for co-prescription with aminoglycosides to clarify order of administration • Added QR code

QR code

