Flucloxacillin

500 mg and 1000 mg injection, oral mixture

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Note:
This guideline provides advice of a general nature. This statewide guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. The guideline is based on a review of published evidence and expert opinion.

Information in this statewide guideline is current at the time of publication.

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Health practitioners in the South Australian public health sector are expected to review specific details of each patient and professionally assess the applicability of the relevant guideline to that clinical situation.

If for good clinical reasons, a decision is made to depart from the guideline, the responsible clinician must document in the patient's medical record, the decision made, by whom, and detailed reasons for the departure from the guideline.

This statewide guideline does not address all the elements of clinical practice and assumes that the individual clinicians are responsible for discussing care with consumers in an environment that is culturally appropriate and which enables respectful confidential discussion. This includes:

- The use of interpreter services where necessary,
- Advising consumers of their choice and ensuring informed consent is obtained,
- Providing care within scope of practice, meeting all legislative requirements and maintaining standards of professional conduct, and
- Documenting all care in accordance with mandatory and local requirements

Synonyms

Floxacillin

Dose and Indications

Infection Due To Susceptible Gram-Positive Organisms

- **Intravenous, Intramuscular:**
  - 50 mg/kg/dose
  - 100 mg/kg/dose in *staphylococcal* osteomyelitis, meningitis or a cerebral abscess
- **Oral**
  - 25 mg/kg/dose

Corrected Age (weeks) [Gestational Age PLUS Postnatal Age]	Postnatal age (days)	Frequency (hours)
All (up to 44 weeks)	< 7	every 12 hours
	7 to 20	every 8 hours
	≥ 21	every 6 hours

Infectious Disease (ID) advice should be sought for proven sepsis to guide duration of therapy.

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Preparation and Administration

Intravenous

> There are **TWO STEPS** to this process.

STEP ONE: Reconstitute the flucloxacillin vial according to the table:

Vial strength (mg)	Volume of water for injection to add (mL)	Final concentration of flucloxacillin (mg/mL)
500 mg	4.6 mL	100 mg/mL
1000 mg	9.3 mL	100 mg/mL

STEP TWO: Further dilute 5 mL of the 100 mg/mL flucloxacillin solution with 5 mL of compatible fluid (to a total volume of 10 mL). The resulting solution contains 50 mg/mL flucloxacillin.

Flucloxacillin 50 mg/mL (intravenous)

Dose	25 mg	50 mg	75 mg	100 mg	125 mg	150 mg
Volume	0.5 mL	1 mL	1.5 mL	2 mL	2.5 mL	3 mL

> Infuse over 30 minutes or administer as a bolus over 3 to 5 minutes.

> Flucloxacillin is an irritant therefore infusion is the preferred method of administration.

> Discard remaining solution

Oral

> Oral doses should be given on an empty stomach, where possible.

Intramuscular

Vial strength (mg)	Volume of water for injection to add (mL)	Final concentration of flucloxacillin (mg/mL)
500 mg	1.6 mL	250 mg/mL
1000 mg	3.3 mL	250 mg/mL

Flucloxacillin 250 mg/mL (intramuscular)

Dose	25 mg	50 mg	75 mg	100 mg	125 mg	150 mg
Volume	0.1 mL	0.2 mL	0.3 mL	0.4 mL	0.5 mL	0.6 mL

> Discard remaining solution

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Compatible Fluids

Glucose 5%, sodium chloride 0.9%

Adverse Effects

- Diarrhoea, pain and inflammation at injection site, transient increases in liver enzymes and bilirubin
- Vomiting, *Clostridioides difficile* infection (CDI)
- Electrolyte disturbances, neurotoxicity, bleeding, blood dyscrasias, hepatic reactions, including severe cholestatic hepatitis (especially in treatment >2 weeks).
- Anaphylactic shock is extremely uncommon in neonates

Monitoring

- Observe intravenous site for extravasations
- Periodic liver function tests on long term therapy (>14 days).

Practice Points

- There have been reports of severe, delayed cholestatic jaundice in adults particularly after treatment for more than 2 weeks. While this has not been recognised with neonatal use, caution would be recommended in this population.
- Penicillins and cephalosporins can inactivate IV aminoglycoside antibiotics (e.g. gentamicin). Flush the line well with sodium chloride 0.9% before and after giving each medication.
- Use with caution in jaundiced or preterm infants as flucloxacillin can displace bilirubin from albumin.
- Consider the sodium content of flucloxacillin, particularly in patients with renal dysfunction. Flucloxacillin contains 0.22 mmol sodium per 100 mg of drug.

References

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12/08/2014	V3	SA Health Safety and Quality Strategic Governance Committee	Minor amendment
17/06/2014	V2	SA Health Safety and Quality Strategic Governance Committee	Formally reviewed in line with 3 year scheduled timeline for review
01/11/2012	V1	SA Health Safety and Quality Strategic Governance Committee	Original SA Health Safety and Quality Strategic Governance Committee

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