South Australian Neonatal Medication Guidelines

Amoxicillin

1gram injection, oral mixture

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

Amoxycillin

Dose and Indications

1gram = 1000mg

Infection due to susceptible organisms

Intravenous, Intramuscular

50mg/kg/dose

Corrected Age (weeks) [Gestational Age PLUS Postnatal Age]	Postnatal age (days)	Frequency (hours)
< 30	≤ 28	every 12 hours
	>28	every 8 hours
30 to 36	≤ 14	every 12 hours
	>14	every 8 hours
37 to 44	≤ 7	every 12 hours
	>7	every 8 hours

Length of treatment should be guided by pathology and clinical picture; however in proven sepsis treatment should continue for a minimum of 7 days.

Oral

25mg/kg/dose

Corrected Age (weeks) [Gestational Age PLUS Postnatal Age]	Postnatal age (days)	Frequency (hours)
37 to 44	≤7	every 12 hours
37 to 44	>7	every 8 hours

Meningitis and Osteomyelitis

Intravenous

100mg/kg/dose

Corrected Age (weeks) [Gestational Age PLUS Postnatal Age]	Postnatal age (days)	Frequency (hours)
<30	≤ 28	every 12 hours
	>28	every 8 hours
30 to 36	≤ 14	every 12 hours
	>14	every 8 hours
37 to 44	≤ 7	every 12 hours
	>7	every 8 hours

Length of treatment should be guided by pathology, clinical picture and infectious disease consultant advice.

Preparation and Administration

Intravenous

There are **TWO STEPS** to this process

STEP ONE: Add 4.2mL of water for injection to the amoxicillin 1000mg vial and shake gently to dissolve (total volume of 5mL). The resulting solution contains 200mg/mL amoxicillin.

STEP TWO: Further dilute 5mL of the 200mg/mL amoxicillin solution with 5mL of compatible fluid (total volume of 10mL). The resulting solution contains 100mg/mL amoxicillin.

Dose	50mg	100mg	150mg	200mg	250mg	300mg
Volume	0.5mL	1mL	1.5mL	2mL	2.5mL	3mL

Push over at least 5 minutes. For patients being treated with 100mg/kg/dose, the dose must be given by IV infusion over at least 30 minutes.

Reconstituted solution must be used within 1 hour of mixing. Discard remaining solution.

Amoxicillin

1gram injection, oral mixture

Intramuscular

Vial Strength (mg)	Volume of Water for Injection to add (mL)	Final Concentration of amoxicillin (mg/mL)
1000mg	3.2mL	250mg/mL

Dose	50mg	100mg	150mg	200mg	250mg	300mg
Volume	0.2mL	0.4mL	0.6mL	0.8mL	1mL	1.2mL

Reconstituted solution must be used within 1 hour of mixing. Discard remaining solution.

Oral

There are various strengths available, refer to local guidelines for the specific strength available at your institution or unit and product information for reconstitution volume.

The reconstituted solution is usually stable for 14 days stored under refrigeration; however this may change according to brand available. Please consult product information.

Amoxicillin may be given without regard to food.

Compatible Fluids

Sodium chloride 0.9%

Adverse Effects

Common

Diarrhoea, pain and inflammation at injection site, secondary infection especially during prolonged treatment with broad-spectrum beta-lactam antibiotics

Infrequent

Vomiting, Clostridium difficile-associated disease

Rare

Rash, black tongue, electrolyte disturbances (hypernatraemia or hypokalaemia due to sodium content of high parenteral doses), neurotoxicity, bleeding, blood dyscrasias, crytalluria (high IV doses)

Anaphylactic shock is not commonly seen in the neonates.

Practice Points

- Rapid administration of large intravenous doses may result in CNS excitation or seizure activity.
- IV penicillins and cephalosporins can inactivate IV aminoglycoside antibiotics (eg. gentamicin). Preferably separate doses by 1 hour. If it is not possible to separate doses, flush the line well with sodium chloride 0.9%, before and after giving each medication.

Document Ownership & History

Developed by: SA Maternal, Neonatal & Gynaecology Community of Practice
Contact: Health.NeoMed@sa.gov.au
Endorsed by: Commissioning and Performance, SA Health
Next review due: 02/03/2023
ISBN number: 978-1-74243-920-4
CGSQ reference: NMG001
Policy history: Is this a new policy (V1)? **N**
Does this policy amend or update and existing policy? **Y**
If so, which version? V4
Does this policy replace another policy with a different title? **N**
If so, which policy (title)?

Approval Date	Version	Who approved New/Revised Version	Reason for Change
26/07/2021	V4.1	Domain Custodian, Clinical Governance, Safety and Quality	Change in administration/preparation due to brand change of amoxicillin 1g vial
2/03/2018	V4	SA Health Safety & Quality Strategic Governance Committee	Formally reviewed in line with 5 year scheduled timeline for review.
25/07/2014	V3	SA Health Safety & Quality Strategic Governance Committee	Minor update
17/06/2014	V2	SA Maternal, Neonatal & Gynaecology Community of Practice	Formally reviewed in line with 3 year scheduled timeline for review.
06/11/2012	V1	SA Maternal, Neonatal & Gynaecology Community of Practice	Original SA Maternal, Neonatal & Gynaecology Community of Practice approved version.