

# ampicillin

## 500mg, 1g injection

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### Dose and Indication

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.

#### 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.

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### Preparation and Administration

#### Intravenous

Vial Strength (mg)	Volume of Water for Injection to add (mL)	Final Concentration of ampicillin (mg/mL)
500mg	4.7mL	100mg/mL
1000mg	9.3mL	100mg/mL

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 for meningitis, the dose must be administered over at least 10 minutes.

Discard remaining solution

#### Intramuscular

Vial Strength (mg)	Volume of Water for Injection to add (mL)	Final Concentration of ampicillin (mg/mL)
500mg	2.2mL	200mg/mL
1000mg	4.3mL	200mg/mL

Dose	50mg	100mg	150mg	200mg	250mg	300mg
Volume	0.25mL	0.5mL	0.75mL	1mL	1.25mL	1.5mL

Discard remaining solution

### 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

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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, crystalluria (high IV doses)

Anaphylactic shock is not commonly seen in the neonates.

### Practice Points

- > The stability of ampicillin is greatly reduced in glucose solution. However ampicillin can be injected into the side arm of a glucose infusion as the contact time with the solution is insufficient to cause significant drug degradation.
- > Rapid administration of large doses may result in CNS excitation or seizure activity.
- > For mild infections use oral amoxycillin.

### Version control and change history

**PDS reference:** OCE use only

Version	Date from	Date to	Amendment
1.0	November 2012	current	Original version