



## Gentamicin for Paediatrics

<b>Available strengths</b>	10mg/mL & 40mg/mL
<b>Recommended infusion Fluid</b>	Sodium chloride 0.9% or glucose 5%
<b>Stability</b>	Use immediately when prepared on the ward
<b>Administration</b>	Intravenous infusion via syringe driver over 30-60 minutes  Slow intravenous injection over 2 - 3 minutes <b>for neonates only</b>

### Indication & doses

#### **Septicaemia, biliary-tract infection, acute pyelonephritis and pneumonia**

##### **Neonate less than 7 days after birth (irrespective of gestation)**

Initially 5mg/kg every 36 hours, then adjusted according to serum-gentamicin concentration (prescribe on the once off section of the TPAR to reduce the risk of prescribing / administration errors associated with 36 hourly dosing).

##### **Neonate 7 days or more after birth**

Initially 5mg/kg every 24 hours, then adjusted according to serum-gentamicin concentration.

##### **Child 1 month–18 years**

Initially 7mg/kg every 24 hours, then adjusted according to serum-gentamicin concentration.

### Monitoring

**Gentamicin trough levels should be taken pre-second dose.** The 2<sup>nd</sup> dose should usually be given without waiting for the level unless there is evidence of renal impairment

Target pre-dose trough level for **neonates** = **<2mg/litre**

Target pre-dose trough level for **children** = **<1mg/litre**

Levels should be re-checked once a week for patients who are on treatment for longer than this.

**Additional information** To avoid excessive dosage in obese children, use ideal weight for height to calculate parenteral dose and monitor serum-gentamicin concentration closely.

**The once daily regimen described above is not suitable for use in endocarditis, meningitis and other CNS infections, cystic fibrosis or children with creatinine clearance of less than 20mg/minute/1.73m<sup>2</sup> – see BNFC for further guidance.**

**Use with caution in renal impairment. Monitor renal function in all patients.**

Where a child was born pre-term, **gestational age** should be used to determine whether to use 5mg/kg or 7mg/kg dosing (i.e. a child should only receive 7mg/kg if their gestational age is 42 weeks or greater).

See BNFC for information on the multiple daily dose regimen.

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