



Patient name:

Date of birth:

CHI no.:
Affix patient label

Age: Sex: M / F

Weight: Height:

Creatinine: on: / /

Initial Gentamicin Dose*: ***this is not a prescription and may change. Doses must be prescribed individually below.**

Source of first dose: Online calculator (preferred method) Manual calculation Weight based, creatinine not known

Step 1: Calculate and prescribe the first dose of gentamicin (see overleaf for more details)

- If creatinine is known - use the online gentamicin dose calculator, print the result and attach to this chart.
- If creatinine is not known - give 5 mg/kg gentamicin (maximum 400 mg) or, if CKD 5, give 2.5 mg/kg (maximum 180 mg) on advice of senior medical staff.
- Prescribe gentamicin 'as per paper chart' on HEPMA with a 24-hourly dosage interval.
- Prescribe individual doses in the prescription record section below, specifying the date and time the dose should be given.

Step 2: Monitor creatinine and gentamicin concentration and reassess the dosage regimen

- Check gentamicin concentration after the first dose and then at least every 2 days (see overleaf for more details).
- Monitor creatinine daily. Seek advice if renal function is unstable (e.g. a change in creatinine of >15-20%).

Step 3: Assess daily: the ongoing need for gentamicin; signs of toxicity

- Consider an alternative agent if creatinine is increasing or the patient becomes oliguric.
- If gentamicin continues for >3 days, suggest referral to audiology for assessment.
- Refer to guidelines or clinical pharmacist for further advice on prescribing, monitoring and administration.

PROMPT ADMINISTRATION
 within 1 hour of recognition of sepsis reduces mortality

SIGNS OF GENTAMICIN TOXICITY
RENAL: ↓ urine output/oliguria or ↑ creatinine

OTO/ VESTIBULAR: NEW tinnitus, dizziness, poor balance, hearing loss, oscillating vision

Toxicities may occur irrespective of gentamicin concentration

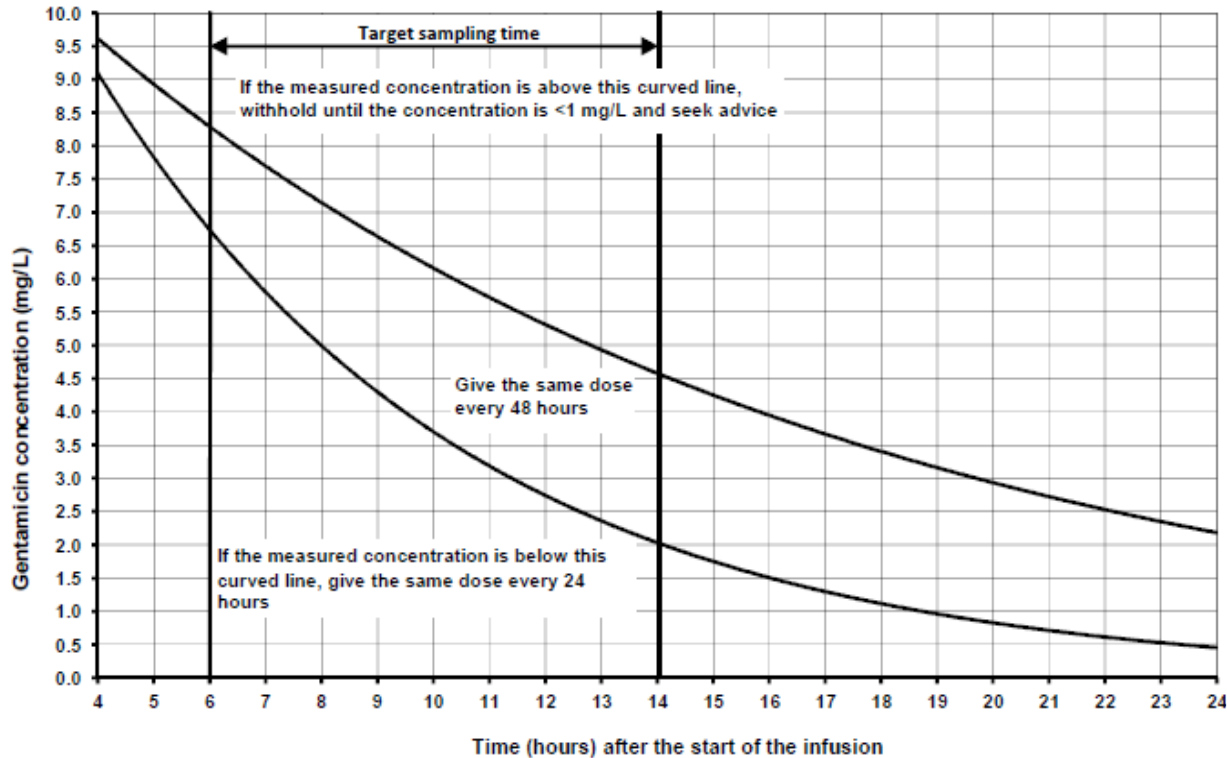
GENTAMICIN IS CONTRAINDICATED IN MYASTHENIA GRAVIS

ADULT PARENTERAL GENTAMICIN (GGC): PRESCRIBING, ADMINISTRATION & MONITORING CHART

TOXICITY Before prescribing each dose check: Renal & Oto-vestibular function	Gentamicin Prescription Record				Administration Record			Monitoring Record			
	Complete each time a dose is to be given (ensuring gentamicin is prescribed 'as per paper chart' on HEPMA)				Complete each time gentamicin is administered (in addition to HEPMA)			Record ALL sample dates/times accurately below. See overleaf for monitoring advice.			
	Date to be given	Time to be given 24 h clock	Gentamicin Dose (mg)	Prescriber's signature, PRINTED name and STATUS	*Infuse over 30 mins*		Given by	Date of sample	Time of sample 24 h clock	Gent level (mg/L)	Action/ Comments (please initial action to be taken)
				Date given	Time started 24 h clock						
Cr = micromol /L											24 hourly <input type="checkbox"/> 48 hourly <input type="checkbox"/> Withhold <input type="checkbox"/> Stop <input type="checkbox"/> Details/other :
Cr = micromol /L											24 hourly <input type="checkbox"/> 48 hourly <input type="checkbox"/> Withhold <input type="checkbox"/> Stop <input type="checkbox"/> Details/other :
*Discuss with an infection specialist or microbiology and document in the notes if treatment continues beyond 3 to 4 days * Risks of prolonged treatment must be considered and treatment options discussed with microbiology or infection specialist											
Cr = micromol /L											24 hourly <input type="checkbox"/> 48 hourly <input type="checkbox"/> Withhold <input type="checkbox"/> Stop <input type="checkbox"/> Details/other :
Cr = micromol /L											24 hourly <input type="checkbox"/> 48 hourly <input type="checkbox"/> Withhold <input type="checkbox"/> Stop <input type="checkbox"/> Details/other :

Discuss with an infection specialist before continuing onto a second sheet

Prescribing, monitoring, interpreting and re-prescribing advice



If the measured concentration is unexpectedly HIGH or LOW

- Were dose and sample times recorded accurately?
- Was the correct dose administered?
- Was the sample taken from the line used to administer the drug?
- Was the sample taken during drug administration?
- Has renal function declined or improved?
- Does the patient have oedema or ascites?

If in doubt, take another sample before re-prescribing and/or contact pharmacy for advice.

Calculating the first dose of gentamicin

- If creatinine is known - use the online gentamicin dose calculator.
- If creatinine is not known - give 5 mg/kg gentamicin (maximum 400 mg) or, if CKD 5, give 2.5 mg/kg (maximum 180 mg) on advice of senior medical staff.
- Calculate the dosage regimen once creatinine is available.
- If the online calculator is not available, manually calculate the dose referring to guidelines on HIPPO or contact pharmacist.

Checking the patient's gentamicin concentration

- Take a blood sample **6-14 hours** after the start of the first gentamicin infusion (or after **24 hours** if CrCl <21 ml/min).
- Thereafter, sample at least every 2 days.
- Record the exact time of all gentamicin samples overleaf AND on the sample request form.

Interpreting gentamicin results and re-prescribing

- Record the measured concentration overleaf.
- If creatinine clearance is ≥ 21 ml/min and therapy is to continue, plot the gentamicin concentration on the graph opposite & reassess the dose/dosing interval as indicated.
- If creatinine clearance is <21 ml/min and therapy is to continue, give a further dose once the measured concentration is <1 mg/L.
- Document the action taken in the medical notes and overleaf. Prescribe the next dose overleaf as appropriate.
- Contact pharmacist for further advice as necessary (e.g. if renal function is changing, gentamicin concentration is unexpectedly high or low or the concentration is on the line between dosage intervals).
- Check microbiology sensitivities and refer to IV to Oral switch policy.