

Patient Name: .....

Date of birth: .....

CHI no.: .....

*Affix patient label*

Actual body weight	Vancomycin loading dose
< 40 kg	750 mg in 250 mL NaCl 0.9% over 1.5 hours
40 - 59 kg	1000 mg in 250 mL NaCl 0.9% over 2 hours
60 - 90 kg	1500 mg in 500 mL NaCl 0.9% over 3 hours
>90 kg	2000 mg in 500 mL NaCl 0.9% over 4 hours

**See back page for vancomycin prescribing/monitoring guidance**

**STEP 1** Prescribe vancomycin 'as charted' on the kardex. **DO NOT** specify a dose/dose times.

**STEP 2** Calculate the initial vancomycin dose and record the details below;

Sex: M / F    Age: .....    Weight: .....    Height: .....    Creatinine (Cr): ..... on ..... / ..... / .....

Initial dose source: Online calculator (preferred)  Manual calculation (see Handbook)  Cr awaited, loading dose only (see above)

Initial dose\* calculated as: ..... mg **as a one-off loading dose** then ..... mg every ..... hours

\*this is not a prescription and may change. Doses must be prescribed in the prescribing boxes below/overleaf

**STEP 3** Prescribe & record administration of the **ONE-OFF LOADING DOSE** in Box 1 below;

BOX 1   Vancomycin Loading Dose Prescription				Administration Record			
Date to be given	Time to be given	Vancomycin Dose (mg)	Prescriber's signature, PRINTED name and STATUS	Date given	*Infuse at no greater than 500 mg/hr* Time started	Given by	
						Sig 1:	Sig 2:

PROMPT ADMINISTRATION within 1 hour of recognising sepsis reduces mortality. Inform nursing staff that the loading dose is due and prescribe the initial maintenance dose below as soon as the patient's creatinine result is available.

**STEP 4** Prescribe & record administration of the **INITIAL MAINTENANCE DOSE** in Box 2 below;

BOX 2   Maintenance Dose Prescription				Administration Record			
Drug: <b>VANCOMYCIN</b>				***Infuse at rate no greater than 500 mg/hr***			
Dose (mg)	Dose interval	Route IV infusion	Date	SPECIFY dose time(s) ↓ Enter time between 00:00 – 06:00 below: :	Date: Exact time: Sig 1:    Sig 2:	Date: Exact time: Sig 1:    Sig 2:	Date: Exact time: Sig 1:    Sig 2:
Prescriber (Print and sign)		<b>See box 3 <input type="checkbox"/></b> <b>Stopped* <input type="checkbox"/></b> <small>*Also discontinue on kardex</small> Date: Initials:		Enter time between 06:01 – 12:00 below: :	Exact time: Sig 1:    Sig 2:	Exact time: Sig 1:    Sig 2:	Exact time: Sig 1:    Sig 2:
Target vancomycin concentration: Standard: 10-20 mg/L <input type="checkbox"/> Deep-seated/severe infection: 15-20 mg/L <input type="checkbox"/>				Enter time between 12:01 – 18:00 below: :	Exact time: Sig 1:    Sig 2:	Exact time: Sig 1:    Sig 2:	Exact time: Sig 1:    Sig 2:
Comments				Enter time between 18:01 – 23:59 below: :	Exact time: Sig 1:    Sig 2:	Exact time: Sig 1:    Sig 2:	Exact time: Sig 1:    Sig 2:

**STEP 5** Record CREATININE (µmol/L) here **DAILY** →

<b>STEP 6</b> Record details of VANCOMYCIN MONITORING** here → **Sample trough (pre-dose) between 24-48 HOURS OF COMMENCING THERAPY then every 2-3 days (OR sample daily if unstable renal function)	Date sample TAKEN		
	Time sample TAKEN		
	Vancomycin result (mg/L)		
	Action/ Comments (please initial)		

**STEP 7** continue or amend using box 3 OVERLEAF if required →

See the back page for guidance on prescribing/monitoring vancomycin & for guidance on how to use this chart.

BOX 3		Maintenance Dose Prescription			Administration Record					
Drug: VANCOMYCIN		SPECIFY dose time(s) ↓			Date:		Date:		Date:	
Dose (mg)	Dose interval	Route IV infusion	Date	Enter time between 00:00 – 06:00 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	continue or amend using box 4 BELOW if required →
Prescriber (Print and sign)		See box 4 <input type="checkbox"/> Stopped* <input type="checkbox"/> <i>*Also discontinue on kardex</i> Date: Initials:		Enter time between 06:01 – 12:00 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	
Target vancomycin concentration: Standard: 10-20 mg/L <input type="checkbox"/> Deep-seated/severe infection: 15-20 mg/L <input type="checkbox"/>				Enter time between 12:01 – 18:00 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	
Comments				Enter time between 18:01 – 23:59 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	
<b>Record CREATININE (µmol/L) here DAILY →</b>										
<b>Record details of VANCOMYCIN MONITORING** here →</b>  <b>**Sample trough (pre-dose) every 2-3 days (OR sample daily if unstable renal function)</b>				Date sample TAKEN						
				Time sample TAKEN						
				Vancomycin result (mg/L)						
				Action/ Comments (please initial)						

BOX 4		Maintenance Dose Prescription			Administration Record					
Drug: VANCOMYCIN		SPECIFY dose time(s) ↓			Date:		Date:		Date:	
Dose (mg)	Dose interval	Route IV infusion	Date	Enter time between 00:00 – 06:00 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	continue or amend using box 5 OPPOSITE if required →
Prescriber (Print and sign)		See box 5 <input type="checkbox"/> Stopped* <input type="checkbox"/> <i>*Also discontinue on kardex</i> Date: Initials:		Enter time between 06:01 – 12:00 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	
Target vancomycin concentration: Standard: 10-20 mg/L <input type="checkbox"/> Deep-seated/severe infection: 15-20 mg/L <input type="checkbox"/>				Enter time between 12:01 – 18:00 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	
Comments				Enter time between 18:01 – 23:59 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	
<b>Record CREATININE (µmol/L) here DAILY →</b>										
<b>Record details of VANCOMYCIN MONITORING** here →</b>  <b>**Sample trough (pre-dose) every 2-3 days (OR sample daily if unstable renal function)</b>				Date sample TAKEN						
				Time sample TAKEN						
				Vancomycin result (mg/L)						
				Action/ Comments (please initial)						

See the back page for guidance on prescribing/monitoring vancomycin & for guidance on how to use this chart.

BOX 5		Maintenance Dose Prescription			Administration Record					
Drug: VANCOMYCIN		SPECIFY dose time(s) ↓			Date:		Date:		Date:	
Dose (mg)	Dose interval	Route IV infusion	Date	Enter time between 00:00 – 06:00 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	continue or amend using box 6 BELOW if required →
Prescriber (Print and sign)		See box 6 <input type="checkbox"/> Stopped* <input type="checkbox"/> <i>*Also discontinue on kardex</i>		Enter time between 06:01 – 12:00 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	
Target vancomycin concentration:		Date: Initials:		Enter time between 12:01 – 18:00 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	
Standard: 10-20 mg/L <input type="checkbox"/> Deep-seated/severe infection: 15-20 mg/L <input type="checkbox"/>				Enter time between 18:01 – 23:59 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	
Comments										
<b>Record CREATININE (µmol/L) here DAILY →</b>										
<b>Record details of VANCOMYCIN MONITORING** here →</b>				Date sample TAKEN						
				Time sample TAKEN						
				Vancomycin result (mg/L)						
				Action/Comments (please initial)						
**Sample trough (pre-dose) every 2-3 days (OR sample daily if unstable renal function)										

BOX 6		Maintenance Dose Prescription			Administration Record					
Drug: VANCOMYCIN		SPECIFY dose time(s) ↓			Date:		Date:		Date:	
Dose (mg)	Dose interval	Route IV infusion	Date	Enter time between 00:00 – 06:00 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	continue or amend using a NEW CHART if required
Prescriber (Print and sign)		See new chart <input type="checkbox"/> Stopped* <input type="checkbox"/> <i>*Also discontinue on kardex</i>		Enter time between 06:01 – 12:00 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	
Target vancomycin concentration:		Date: Initials:		Enter time between 12:01 – 18:00 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	
Standard: 10-20 mg/L <input type="checkbox"/> Deep-seated/severe infection: 15-20 mg/L <input type="checkbox"/>				Enter time between 18:01 – 23:59 below: :	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	Exact time: Sig 1: Sig 2:	
Comments										
<b>Record CREATININE (µmol/L) here DAILY →</b>										
<b>Record details of VANCOMYCIN MONITORING** here →</b>				Date sample TAKEN						
				Time sample TAKEN						
				Vancomycin result (mg/L)						
				Action/Comments (please initial)						
**Sample trough (pre-dose) every 2-3 days (OR sample daily if unstable renal function)										

## Guidance on how to use this chart

### For PRESCRIBERS

- STEP 1** • Prescribe “as charted” on the kardex. **DO NOT** add a dose/administration time; this causes confusion as these may vary.
- STEP 2** • Calculate the initial vancomycin dose (see Page 1 for options) and record the details of the dose calculation on Page 1.
- STEP 3** • Prescribe the loading dose in box 1 (inform nursing staff the dose is due to ensure prompt administration). To avoid delayed maintenance doses it is important to also complete step 4 at this point (unless a creatinine result is awaited).
- STEP 4** • Prescribe the initial maintenance dose in box 2 of the chart (see the online calculator/Handbook for when this is due).  
 • Avoid prescribing doses for midnight as this can lead to confusion over administration dates. Refer to the Therapeutics Handbook for how to avoid dosing between midnight and 6am. Prescribe in chronological order i.e. 2 AM before 2 PM.  
 • Endorse kardex code ‘9’ in the relevant administration box on the chart and the kardex if a dose has to be withheld.
- STEP 5** • Check creatinine daily. Record the results on the chart to ensure any changes impacting on dosing are recognised easily.  
 • Review therapy & seek advice if renal function is unstable (e.g. Cr change of >15-20 %).
- STEP 6** • Initiate vancomycin monitoring (see below) and record the results on the chart (including the EXACT sample time).
- STEP 7** • Re-prescribe the maintenance dose every 3 days (or sooner if the dose or dose times change).  
 • For a new maintenance prescription: discontinue the current maintenance prescription box by ticking ‘see box x’ (adding a signature and date) and scoring through. There is no need to alter the kardex, which should state “as charted”.  
 • To stop therapy on the chart: tick the ‘stopped’ box (adding a signature and date) and score through all pages of the chart with the word ‘STOP’. Remember to discontinue vancomycin on the prescription chart **AND** on the kardex.

### For NURSING STAFF

- Before administering CHECK the kardex to ensure vancomycin hasn’t been discontinued there. Check that creatinine & vancomycin levels are being monitored (these are recorded underneath the administration record; discuss with the prescriber promptly if you are unsure if this monitoring is being done).
- Record the date and **exact time** of administration **on BOTH the chart and the kardex** with two nurse’s signatures.
- Doses due after a vancomycin sample has been taken should usually be given. **DO NOT wait for the vancomycin result before dosing, unless advised to by medical staff or if renal function is deteriorating (check with a prescriber/pharmacist if unsure).**

## Guidance on monitoring intermittent infusion vancomycin therapy

### Checking the patient’s vancomycin concentration

- Take the initial vancomycin trough (pre-dose) sample between 24- 48 hours of commencing therapy. Thereafter, sample every 2-3 days; sample daily if renal function is unstable. Monitor creatinine daily and record the result on this chart. Seek advice from pharmacy if creatinine is unstable (e.g. a change of > 15-20%).
- Record the EXACT TIME of all vancomycin samples in the monitoring section of the relevant prescribing box.

### Interpreting vancomycin results and re-prescribing

- Always check for errors and that the dosing & sampling time histories are correct before making any adjustments (see below<sup>#</sup>).
- Refer to the dose adjustment table below and contact pharmacy for further advice as necessary (e.g. changing renal function).
- Document the vancomycin concentration on this chart with the action taken. Prescribe the new dosage regimen if necessary.

#### <sup>#</sup>*If the measured concentration is unexpectedly HIGH or LOW*

- |   |  |
|---|--|
| ▪ Was the sample too early in therapy (pre-steady state)?         | ▪ Was the sample at the correct time (i.e. a true trough sample)?          |
| ▪ Were dose & sample times recorded accurately?                   | ▪ Was the correct dose administered/did the patient receive the full dose? |
| ▪ 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 or an extreme body weight?       |

Vancomycin trough conc.	Suggested dose change <span style="float: right;">*contact pharmacy for advice if daily doses &gt; 4 grams are required</span>
<10 mg/L	↑ the dose amount by half (e.g. increase a 500 mg dose to 750 mg) & consider reducing the dosage interval. Seek advice if you are unsure or if the current dose is > 2500 mg daily.*
10-15 mg/L	If the patient is responding, maintain the current dose regimen. If the patient is seriously ill, consider ↑ the dose amount or ↓ the dosage interval to achieve a trough level of 15-20 mg/L.
15-20 mg/L	Maintain the present dosage regimen.
>20 mg/L	Withhold and seek advice from pharmacy BEFORE the next dose is due.

## Guidance on how to manage UNINTENDED delays in intermittent vancomycin dosing

**NOTE:** this guidance **DOES NOT** apply where the dose has been **DELIBERATELY** withheld. Contact pharmacy if necessary.

If a patient has stable renal function (if you are unsure about this contact a prescriber/pharmacy) & a vancomycin dose has been delayed UNINTENTIONALLY (e.g. lost intravenous access) please refer to the tables below for guidance on how to proceed.

Prescribed dose interval	Dose delay	Action	Prescribed dose interval	Dose delay	Action
12 hourly	≤ 6 hours	Give delayed dose immediately and record the <b>date</b> and <b>exact time</b> of administration on the chart and kardex with TWO nurse’s signatures.  <b>Give the next vancomycin dose at the ORIGINALLY PRESCRIBED TIME.</b>	12 hourly	> 6 hours	Give the delayed dose as soon as possible and record the <b>date</b> and <b>exact time</b> of administration on the chart and kardex with TWO nurse’s signatures.  <b>Seek advice from pharmacy for further dosing.</b>
24 hourly	≤ 12 hours		24 hourly	> 12 hours	
48 hourly	≤ 24 hours		48 hourly	> 24 hours	