

Infusions – Ordering Vancomycin (Adult)



This Quick Reference Guide will explain how to:

- Order starting doses of IV vancomycin therapy via the **Initial Therapy** orderset
- Order subsequent IV vancomycin therapy via the **Ongoing Therapy** orderset
- Modify vancomycin doses

Infusions – Ordering Vancomycin (Adult)

Vancomycin can be ordered from one of several **ordersets**

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- ▼ vancomycin
- ▼ vancomycin 15 mg/kg, Intraperitoneal, Vial, ONCE only, Indication: Peritonitis, AMS Indica
- ▼ vancomycin 30 mg/kg, Intraperitoneal, Vial, ONCE only, Indication: Peritonitis, AMS Indica
- ▼ vancomycin 125 mg, Oral, Capsule, 6 hourly, Indication: Clostridium difficile, AMS Indicati
- ▼ vancomycin 125 mg, Oral, Liquid, 6 hourly, Indication: Clostridium difficile, AMS Indication
- Vancomycin IV Adult: Initial Therapy
- Vancomycin IV Adult: Ongoing Therapy (ID approval required)
- Vancomycin IV Adult: Surgical Prophylaxis
- ▼ vancomycin IV infusion xx q in Sodium Chloride 0.9%, 24 hourly (24 HOUR INFUSION)
- Vancomycin IV: Dialysis Patients
- Vancomycin IV: Paediatrics (< 16 years)
- Vancomycin Level Peak
- Vancomycin Level Post Dose
- Vancomycin Level Pre Dose
- Vancomycin Level Random
- Vancomycin Level Trough
- Vancomycin Resistant Enterococcus (VRE) Culture Faeces
- Vancomycin Resistant Enterococcus (VRE) Culture Swab
- Vancomycin Resistant Enterococcus (VRE) Infection Control Faeces
- Vancomycin Resistant Enterococcus (VRE) Infection Control Swab
- NEO Vancomycin IV

Vancomycin Adult: Initiation

1. Select the **Vancomycin IV Adult: Initial Therapy** order set
2. Click on the icon to launch the *Western Health Vancomycin Dosing Calculator* spreadsheet to calculate the patient's estimated loading dose and suggested initial maintenance dose / frequency



Vancomycin Dosing Calculator

<< Click on the link to open WH Vancomycin Dosing Calculator



3. Select the appropriate ONCE only **loading dose** order

LOADING DOSE		
<input type="checkbox"/>	vancomycin IV infusion xx g in Sodium Chloride 0.9% ONCE only (LOADING DOSE)	1 g, IV Infusion, ONCE only, Infuse over 90 min(s), Indication: Loading dose If it is necessary to slow the infusion, maximum infusion time = 150 min(s)
<input type="checkbox"/>	vancomycin IV infusion xx g in Sodium Chloride 0.9% ONCE only (LOADING DOSE)	1.25 g, IV Infusion, ONCE only, Infuse over 90 min(s), Indication: Loading dose If it is necessary to slow the infusion, maximum infusion time = 150 min(s)
<input type="checkbox"/>	vancomycin IV infusion xx g in Sodium Chloride 0.9% ONCE only (LOADING DOSE)	1.5 g, IV Infusion, ONCE only, Infuse over 90 min(s), Indication: Loading dose If it is necessary to slow the infusion, maximum infusion time = 150 min(s)
<input type="checkbox"/>	vancomycin IV infusion xx g in Sodium Chloride 0.9% ONCE only (LOADING DOSE)	1.75 g, IV Infusion, ONCE only, Infuse over 120 min(s), Indication: Loading dose If it is necessary to slow the infusion, maximum infusion time = 180 min(s)
<input type="checkbox"/>	vancomycin IV infusion xx g in Sodium Chloride 0.9% ONCE only (LOADING DOSE)	2 g, IV Infusion, ONCE only, Infuse over 120 min(s), Indication: Loading dose If it is necessary to slow the infusion, maximum infusion time = 180 min(s)
<input type="checkbox"/>	vancomycin IV infusion xx g in Sodium Chloride 0.9% ONCE only (LOADING DOSE)	2.25 g, IV Infusion, ONCE only, Infuse over 150 min(s), Indication: Loading dose If it is necessary to slow the infusion, maximum infusion time = 240 min(s)
<input type="checkbox"/>	vancomycin IV infusion xx g in Sodium Chloride 0.9% ONCE only (LOADING DOSE)	2.5 g, IV Infusion, ONCE only, Infuse over 150 min(s), Indication: Loading dose If it is necessary to slow the infusion, maximum infusion time = 240 min(s)



Important

- The **diluent volume** and **infuse over time** have been pre-defined for each dose to reduce the risk of infusion-related “red-man” syndrome (a histamine-mediated, non-allergic response to rapid vancomycin administration, characterised by rash, muscle spasms of chest & back, and sometimes hypotension).
- Prescribers should NOT change these fields unless advised to do so by the ward pharmacist or AMS.

The Indication has been pre-defined as “Loading dose”.

4. Select an order with the appropriate frequency for the **maintenance dose**, then refer to the table for dose, volume and infuse-over time.

INITIAL MAINTENANCE DOSE			
	Vancomycin Dose	IV Fluid Bag Volume	Suggested Infusion Time
	500 mg	100 mL	30 minutes
	750 mg - 1 g	100 mL	60 minutes
	1.25 g - 1.5 g	250 mL	90 minutes
	1.75 g - 2 g	250 mL	120 minutes

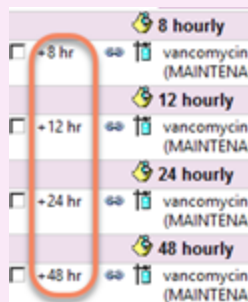
Select an order with the appropriate **frequency** then refer to the table above for dose, volume and infuse-over time

8 hourly			
<input type="checkbox"/>	+8 hr	vancomycin IV infusion xx g in Sodium Chloride 0.9% (MAINTENANCE)	g, IV Infusion, 8 hourly, min(s)
12 hourly			
<input type="checkbox"/>	+12 hr	vancomycin IV infusion xx g in Sodium Chloride 0.9% (MAINTENANCE)	g, IV Infusion, 12 hourly, min(s)
24 hourly			
<input type="checkbox"/>	+24 hr	vancomycin IV infusion xx g in Sodium Chloride 0.9% (MAINTENANCE)	g, IV Infusion, 24 hourly, min(s)
48 hourly			
<input type="checkbox"/>	+48 hr	vancomycin IV infusion xx g in Sodium Chloride 0.9% (MAINTENANCE)	g, IV Infusion, 48 hourly, min(s)



Important

- Offset times (i.e. +8 hr, +12 hr) have been included in the maintenance dose to assist with ensuring the initial maintenance dose is given separately to the loading dose.
- Offset times will not work if loading dose and initial maintenance dose are ordered separately (i.e. not in the same orderset) AND/OR the **First Dose Date/Time** of either order has been modified.
- Regardless of situation, the **First Dose Date/Time** must be reviewed for all orders



5. Right click and **Modify** the maintenance dose order. Select a dose, volume and infuse over time

Details for vancomycin (additive) + Sodium Chloride 0.9% infusion mL

Ingredients	Dose	Rate	Infuse Over	Frequency	Duration
vancomycin (additive)	g		min(s)	12 hourly	
Sodium Chloride 0.9% infusion	mL				
Total Volume		mL			

6. Navigate to the **Details** tab to enter the mandatory **Indication**.

7. Review the **First Dose Date/Time** of the maintenance dose.

Details for vancomycin (additive) + Sodium Chloride 0.9% infusion mL

Details
 Ingredient Details
 Order Comments
 Offset Details
 Diagnoses

*AMS Indication: Special Instructions:

Infectious Diseases Medical Officer Consulted: Priority: Routine

Approval Number: Stop type:

First Dose Date / Time: AEST

Patient's Own Meds: Yes No

8. The appropriate vancomycin level pathology order will be automatically selected base on the frequency being prescribed; review and amend date or time only if required

PATHOLOGY	
Date and Time Collection of the pathology order has been automatically selected based on the frequency bring prescribed. Review and amend date and or time only if required	
<input type="checkbox"/> +23.5 hr	Vancomycin Level Pre Dose Timed Collection, Spec Type: Blood, Drug Dose Frequency: 8 hourly, Special Instructions: Level to be taken pre FOURTH vancomycin dose (including the loading dose)
<input checked="" type="checkbox"/> +35.5 hr	Vancomycin Level Pre Dose Timed Collection, Spec Type: Blood, Drug Dose Frequency: 12 hourly, Special Instructions: Level to be taken pre FOURTH vancomycin dose (including the loading dose)
<input type="checkbox"/> +47.5 hr	Vancomycin Level Pre Dose Timed Collection, Spec Type: Blood, Drug Dose Frequency: 24 hourly, Special Instructions: Level to be taken pre THIRD vancomycin dose (including the loading dose)
<input type="checkbox"/> +47.5 hr	Vancomycin Level Pre Dose Timed Collection, Spec Type: Blood, Drug Dose Frequency: 48 hourly, Special Instructions: Level to be taken 48 hours after the first vancomycin dose (including the loading dose)

9. Click **Orders for Signature**, review orders and **Sign**.

10. Review the Scheduled section of **MAR / MAR Summary**

vancomycin (additive) Sodium Chloride 0.9% infusion 100 mL 1 g, IV Infusion, ONCE only, Infuse over 60 min(s), Indication: Loading dose, First dose 08/12/2020 16:00:00, Stop date 08/12/2020 16:00:00 If it is necessary to slow the infusion, maximum infusion time = 90 min(s) vancomycin Sodium Chloride 0.9%				1 g Not given within 5 days.
vancomycin (additive) Sodium Chloride 0.9% infusion 100 mL 500 mg, IV Infusion, 12 hourly, Infuse over 30 min(s), Indication: testing, First dose 09/12/2020 04:00:00 If it is necessary to slow the infusion, maximum infusion time = 60 min(s) vancomycin Sodium Chloride 0.9%		500 mg Not given within 5 days.		

Vancomycin Adult: Ongoing Therapy (ID approval required) → For therapy beyond 48 hours

This order set **Vancomycin IV Adult: Ongoing Therapy (ID approval required)** has the same functionality as the **Vancomycin Adult: Initiation** order set. The following fields must be completed on the **Details** tab as well as the **Indication**

- Infectious Diseases Medical Officer Consulted
- ID Approval Expiry (7:30am)
- Approval Number



Important – Modifying Vancomycin Infusions

- If a change is required to the Dose, the prescriber must place a **NEW** order via the Vancomycin Orderset and **Cancel/DC** the existing order.
- This is because the **diluent volume** and **infuse over time** have been pre-defined for each dose to reduce the risk of infusion-related “red-man” syndrome.