

Public and Private Acute Group C, Other Specialist Acute, and Specialist Women's Critical Care benchmarking report July – December 2024

Antibacterial utilisation rates provided in this report are calculated using the number of defined daily doses (DDDs) of the antibacterial class consumed each month per 1,000 occupied bed days.

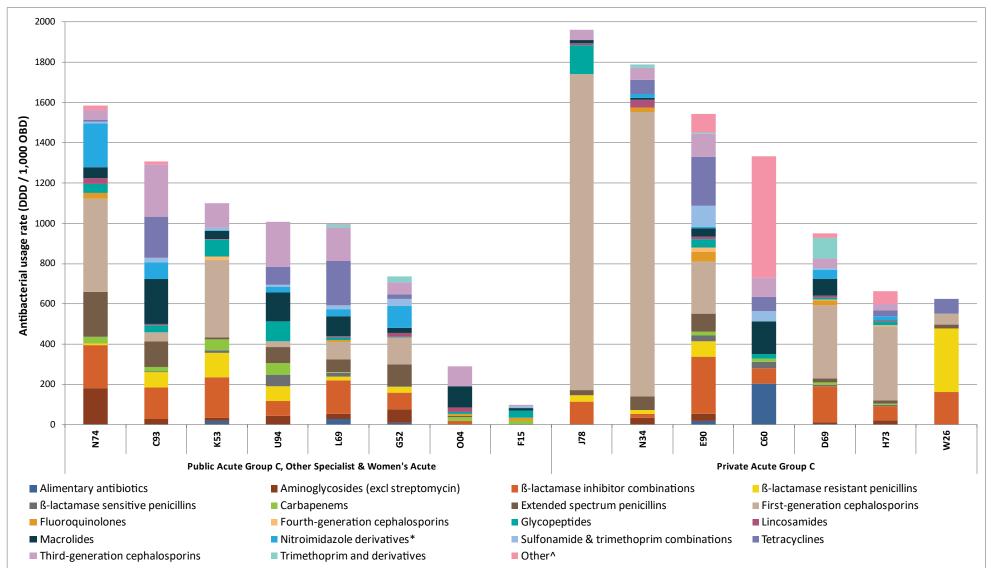
Contributing hospitals are assigned to Australian Institute for Health and Welfare (AIHW) defined peer groups.¹ Contributing hospitals can find their de-identifying code via the NAUSP Portal 'Maintain My Hospital' drop-down menu.

DDD values for each antimicrobial are assigned by the World Health Organization based on the "assumed average maintenance dose per day for the main indication in adults". DDDs are reviewed annually by the WHO as dosing recommendations change over time. For more information refer to: <u>https://www.whocc.no/atc_ddd_methodology/purpose_of_the_atc_ddd_system/</u>

The chart below presents aggregate antibacterial usage data in the Critical Care for the respective contributing hospitals over the six-month period from 1 July 2024 to 31 December 2024.

¹ AIHW. *Hospital resources 2017-18: Australian hospital statistics*. Available from <u>https://www.aihw.gov.au/reports/hospitals/hospital-resources-2017-18-ahs/data</u>

Chart 1: Critical Care antibacterial usage rates (DDD/1000 OBD) in NAUSP Public and Private Acute Group C, Other Specialist Acute, and Specialist Women's contributor hospitals, July-December 2024



Alimentary antibiotics = colistin (oral), fidaxomicin, neomycin (oral), nystatin (oral), paromomycin, rifaximin, vancomycin (oral).

*Nitroimidazole derivatives = metronidazole, tinidazole

[^]Other = amphenicols, antimycotic antibiotics, combinations for eradication of *Helicobacter pylori*, monobactams, nitrofurans, linezolid, daptomycin, other cephalosporins, polymyxins, rifamycins, second-generation cephalosporins, steroids, streptogramins and streptomycin.

This report includes data from 15 Public and Private Acute Group C, Other Specialist Acute and Specialist Women's hospitals:

Atherton Hospital Brisbane Private Hospital Broome Hospital Calvary Bruce Private Hospital Calvary St. Vincent's Launceston Grampians Health - Horsham Hurstville Private Hospital Kareena Private Hospital King Edward Memorial Hospital Lithgow Hospital Maitland Private Hospital Mercy Women's Hospital Moruya Hospital St Vincent's Private Hospital Lismore Victorian Heart Hospital

Disclaimer: Data presented in this report were correct at the time of publication. As additional hospitals join NAUSP, retrospective data are included. Data may change when quality assurance processes identify the need for data updates.

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	colistin (oral)	Glycopeptides	dalbavancin
Alimentary antibiotics	fidaxomicin		oritavancin
	neomycin (oral)		teicoplanin
	nystatin (oral)		vancomycin
	paromomycin	Imidazole derivatives	metronidazole
		Intermediate acting	(parenteral)
	rifaximin	sulfonamides	sulfadiazine
	vancomycin (oral)	Lincosamides	clindamycin
Aminoglycosides (excl streptomycin)	amikacin	- Macrolides	lincomycin
	gentamicin		azithromycin
	neomycin		clarithromycin
	tobramycin		erythromycin
Beta lactamase inhibitor combinations	amoxicillin-clavulanate		roxithromycin
	ampicillin-sulbactam	Nitroimidazole derivatives	metronidazole (oral, rectal)
	piperacillin-tazobactam		tinidazole (oral, rectal
	ticarcillin-clavulanate	Sulfonamide & trimethoprim combinations	trimethoprim- sulfamethoxazole
Beta lactamase resistant penicillins	dicloxacillin	-	doxycycline
	flucloxacillin		minocycline
	benzathine benzylpenicillin	 Tetracyclines 	tetracycline
Beta lactamase sensitive penicillins	benzylpenicillin		tigecycline
	phenoxymethylpenicillin	Third generation cephalosporins	cefotaxime
	procaine benzylpenicillin		ceftazidime
Carbapenems	doripenem		ceftazidime-avibactar
	ertapenem		ceftriaxone
	imipenem-cilastatin	Trimethoprim and derivatives	trimethoprim
	meropenem	Other antibacterials & combinations	daptomycin
	meropenem-vaborbactam		fosfomycin
Extended spectrum penicillins	amoxicillin		linezolid
	ampicillin		methenamine hippurate
	piperacillin		tedizolid
	pivmecillinam		esomeprazole, amoxicillin and clarithromycin
	temocillin		chloramphenicol
First generation cephalosporins	cefalexin		streptomycin
	cefazolin		colistin
Fluoroquinolones	ciprofloxacin		polymyxin B
	levofloxacin		sodium fusidate
	moxifloxacin		cycloserine
	norfloxacin		rifabutin
	ofloxacin		rifampicin
Fourth generation cephalosporins	cefepime		rifapentine
Other antibacterials & combinations	pristinamycin	Other cephalosporins and penems	cefiderocol
	quinupristin/dalfopristin		ceftaroline
	aztreonam		ceftolozane- tazobactam

nitrofurantoin	faropenem
cefaclor	
cefoxitin	
cefuroxime	