

Antimicrobial Utilisation Surveillance in Australian Hospitals

Public and Private Acute Group B 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. Contributing hospitals can find their de-identifying code via the NAUSP Portal Maintain My Hospital drop-down menu.

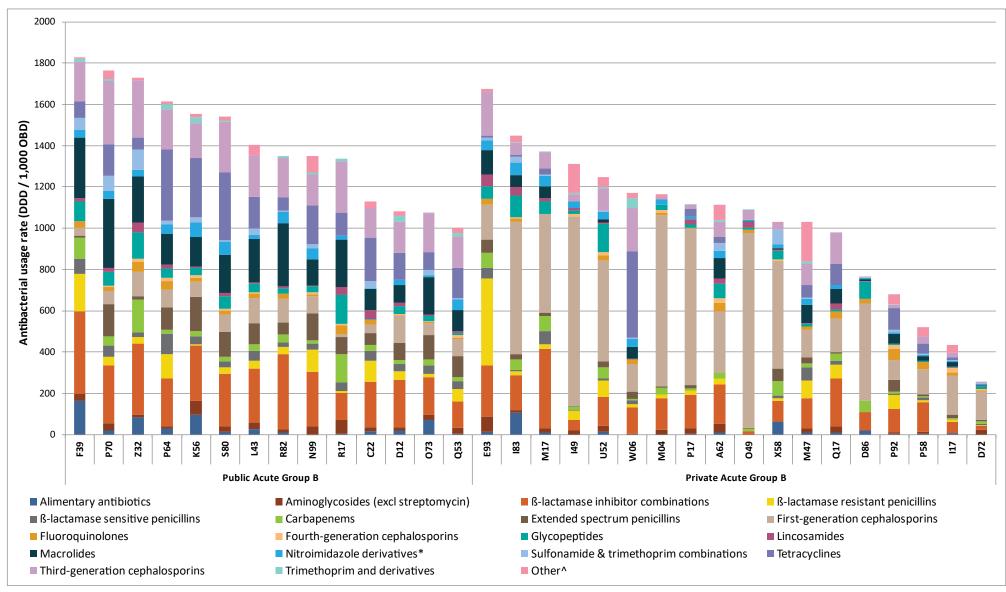
DDD values for each antimicrobial are assigned by the World Health Organization based on the "assumed average maintenance dose per day for the main indication in adults". DDDs are reviewed annually by the WHO as dosing recommendations change over time. For more information refer to: https://www.whocc.no/atc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

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.

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

Chart 1: Critical Care antibacterial usage rates (DDD/1000 OBD) in NAUSP Public and Private Acute Group B 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 32 Public and Private Acute Group B hospitals:

Albany Health Campus

Angliss Hospital

Armidale Hospital

Auburn Hospital

Bowral Hospital

Broken Hill Base Hospital

Buderim Private Hospital

Bunbury Regional Hospital Caboolture Hospital

Calvary John James Hospital

Calvary North Adelaide Hospital

Calvary Riverina Hospital

Canterbury Hospital

Flinders Private Hospital

Gosford Private Hospital

Goulburn Base Hospital

Lingard Private Hospital

Mater Hospital North Sydney

Mater Mackay

Mater Private Hospital Townsville - Pimlico

Mater Rockhampton

Memorial Hospital

Mount Hospital

Mt Isa Hospital

Nepean Private Hospital

Redland Hospital

Ryde Hospital

South East Regional Hospital

St Andrew's Hospital

St John Of God Subiaco

St Vincent's Private Fitzroy

St Vincent's Private Hospital Toowoomba

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)		dalbavancin
Alimentary antibiotics	fidaxomicin	Glycopeptides	oritavancin
	neomycin (oral)		teicoplanin
	nystatin (oral)		vancomycin
		Imidazole derivatives	metronidazole
	paromomycin		(parenteral)
	rifaximin	Intermediate acting sulfonamides Lincosamides	sulfadiazine
	vancomycin (oral)		clindamycin
Aminoglycosides (excl streptomycin)	amikacin	Lincosamides	lincomycin
	gentamicin	- Macrolides	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	Tetracyclines	doxycycline
	flucloxacillin		minocycline
Beta lactamase sensitive penicillins	benzathine benzylpenicillin		tetracycline
	benzylpenicillin		tigecycline
	phenoxymethylpenicillin	Third generation cephalosporins	cefotaxime
	procaine benzylpenicillin		ceftazidime
Carbapenems	doripenem		ceftazidime- tazobactam
	ertapenem		ceftriaxone
	imipenem-cilastatin	Trimethoprim and derivatives	trimethoprim
	meropenem		daptomycin
	meropenem-vaborbactam		fosfomycin
Extended spectrum penicillins	amoxicillin		linezolid
	ampicillin	Other antibacterials & combinations	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-avibactan

_ nitrofurantoin	faropenem
cefaclor	
cefoxitin	
cefuroxime	