

Principal Referral hospitals Critical Care benchmarking report July 2023 – December 2023

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.

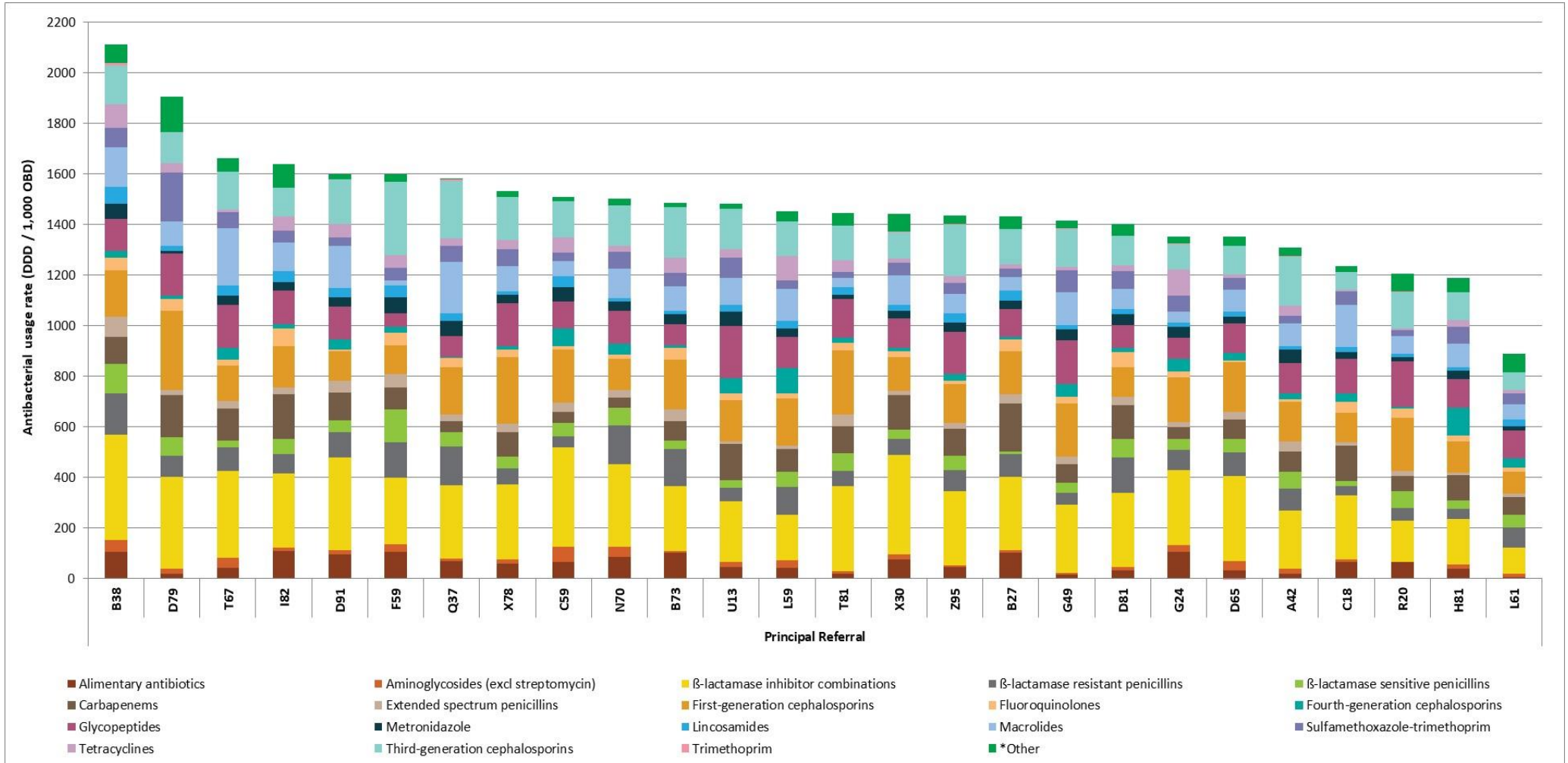
Contributing hospitals are assigned to Australian Institute for Health and Welfare (AIHW) defined peer groups.¹ Contributing hospitals can find their de-identifying code via the NAUSP Portal 'Maintain My Hospital' drop-down menu.

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: https://www.whooc.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 2023 to 31 December 2023.

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 Principal Referral contributor hospitals, July – December 2023



Alimentary antibiotics = rifaximin, fidaxomicin, paromomycin. Other = amphenicols, antimycotics, 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 26 Principal Referral hospitals:

Alfred Hospital
Austin Hospital
Concord Hospital
Fiona Stanley Hospital
Flinders Medical Centre
Geelong Hospital
John Hunter Hospital
Liverpool Hospital
Nepean Hospital
Prince Of Wales Hospital
Royal Adelaide Hospital
Royal Brisbane and Women's Hospital
Royal Hobart Hospital
Royal Melbourne Hospital
Royal North Shore Hospital
Royal Perth Hospital
Royal Prince Alfred Hospital
Sir Charles Gairdner Hospital
St George Hospital
St Vincent's Hospital Melbourne
St Vincent's Hospital Sydney
Sunshine Coast University Hospital
The Prince Charles Hospital
Townsville Hospital
Westmead Hospital
Wollongong 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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ANTIBACTERIAL CLASSES			
Alimentary antibiotics	fidaxomicin	Lincosamides	clindamycin
	paromomycin rifaximin		lincomycin
Aminoglycosides	amikacin	Macrolides	azithromycin
	gentamycin		clarithromycin
	neomycin		erythromycin
	tobramycin		roxithromycin spiramycin
β-lactamase inhibitor combinations	amoxicillin - clavulanate	Monobactams	aztreonam
	piperacillin - tazobactam	Nitrofurans derivatives	nitrofurantoin
β-lactamase resistant penicillins	dicloxacillin flucloxacillin	Polymyxins	colistin polymyxin B
β-lactamase sensitive penicillins	benzathine benzylpenicillin	Second-generation cephalosporins	cefaclor
	benzylpenicillin		cefamandole
phenoxymethylpenicillin	cefotetan		
procaine benzylpenicillin	cefoxitin		
Carbapenems	doripenem	Steroid antibacterials	cefuroxime
	ertapenem		fusidic acid
	imipenem - cilastatin	Streptogramins	pristinamycin
	meropenem	Streptomycins	streptomycin
	meropenem - vaborbactam	Sulfonamide-trimethoprim combinations	sulfamethoxazole - trimethoprim
Extended-spectrum penicillins	amoxicillin	Tetracyclines	doxycycline
	ampicillin		minocycline
	pivmecillinam		tetracycline
	temocillin		tigecycline
First-generation cephalosporins	cefalexin	Third-generation cephalosporins	cefixime
	cefalotin		cefotaxime
	cefazolin		ceftazidime
Fluoroquinolones	ciprofloxacin		ceftazidime - avibactam
	levofloxacin		ceftriaxone
	moxifloxacin	Trimethoprim	trimethoprim
	norfloxacin	Other (including other cephalosporins and penems)	ceftaroline fosamil
Fourth-generation cephalosporins	cefepime		ceftolozane - tazobactam
	ceftiofime		daptomycin
Glycopeptides	dalbavancin		faropenem
	oritavancin		fosfomicin
	teicoplanin	linezolid	
	vancomycin	rifampicin	
Imidazole derivatives	metronidazole	tedizolid	
Intermediate-acting sulfonamides	sulfadiazine		