

Queensland and Northern Territory Statewide benchmarking report – Emergency Department July 2024 – 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 Emergency Department presentations.

Contributing hospitals are assigned according to Australian Institute for health and Welfare (AIHW) defined peer groups.¹ Deidentified contributor codes can be located via the 'Maintain My Hospital' drop-down menu in the NAUSP Portal.

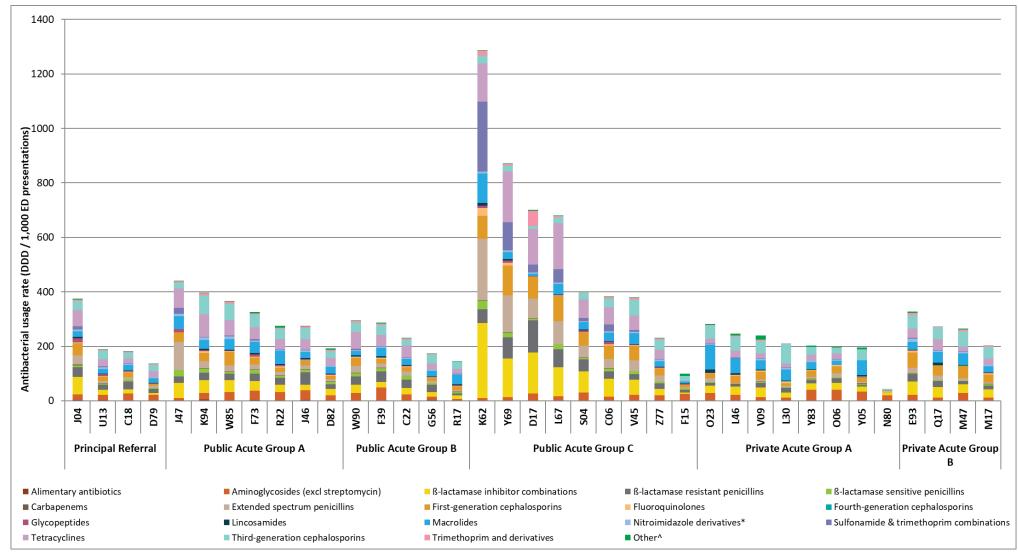
DDD values for each antimicrobial are assigned by the World Health Organization based on the "assumed average maintenance dose per day for the main indication in adults". DDDs are reviewed annually by the WHO as dosing recommendations change over time. For more information refer to: <u>https://www.whocc.no/atc_ddd_methodology/purpose_of_the_atc_ddd_system/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

The charts below present aggregated antibacterial usage data in the Emergency Department for the respective contributing hospitals over the six-month period from 1 July 2024 to 31 December 2024. The same data are presented in both charts with outlier hospital(s) removed from Chart 1b.

[Note: Not all NAUSP contributors are able to provide stratified data for the Emergency Department].

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>

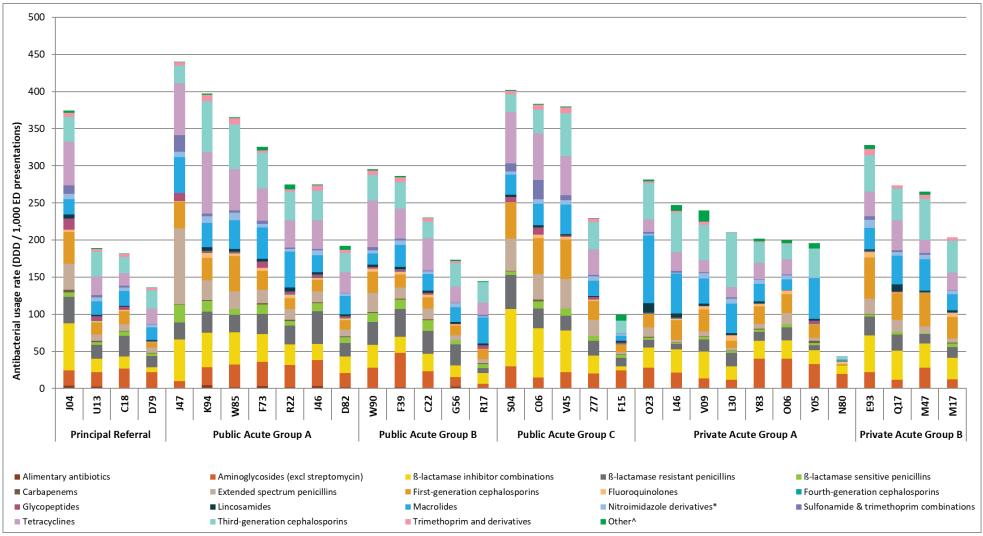
Chart 1a: Emergency Department antibacterial usage rates (DDD/1000 emergency presentations) in NAUSP contributor hospitals, by peer group, Queensland and Northern Territory, July-December 2024



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.

Chart 1b: Emergency Department antibacterial usage rates (DDD/1000 emergency presentations) in NAUSP contributor hospitals, by peer group, Queensland and Northern Territory, 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.

NOTE: Outlier hospitals K62, Y69, D17 and L67 removed

This report includes data from the following 37 hospitals in Qld and NT:

Alice Springs Hospital Atherton Hospital **Buderim Private Hospital Bundaberg Hospital** Caboolture Hospital **Gladstone Hospital** Gold Coast Private Hospital Gove District Hospital **Greenslopes Hospital** Hervey Bay Hospital John Flynn Private Hospital Katherine District Hospital Kilcoy Hospital **Kingaroy Hospital** Mareeba Hospital Maryborough Hospital Mater Hospital Brisbane Mater Private Hospital Brisbane Mater Private Hospital Townsville - Pimlico

Mater Rockhampton Mt Isa Hospital Palmerston Regional Hospital **Pindara Private Hospital** Queen Elizabeth 2 Jubilee Hospital **Redcliffe Hospital Redland Hospital** Royal Brisbane And Women's Hospital **Royal Darwin Hospital** St Andrew's War Memorial Hospital St Vincent's Private Hospital Northside St Vincent's Private Hospital Toowoomba **Tennant Creek Hospital** The Prince Charles Hospital **Toowoomba Hospital Townsville Hospital** Warwick Hospital Wesley 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.

The National Antimicrobial Utilisation Surveillance Program (NAUSP) is funded by the Commonwealth Department of Health and Aged Care (DOHAC). NAUSP is administered by the Communicable Disease Control Branch, Department for Health and Wellbeing, Government of South Australia. All individual hospital data contributed to this program will remain de-identified unless otherwise agreed in writing. Aggregated data may be provided to all contributors, the ACSQHC and DOHAC.

	SES		
	colistin (oral)	_	dalbavancin
	fidaxomicin	Glycopeptides	oritavancin
Alimentary antibiotics	neomycin (oral)		teicoplanin
	nystatin (oral)		vancomycin
	paromomycin	Imidazole derivatives	metronidazole (parenteral)
-	rifaximin	Intermediate acting sulfonamides	sulfadiazine
	vancomycin (oral)	- Lincosamides	clindamycin
Aminoglycosides (excl streptomycin)	amikacin	- Macrolides	lincomycin
	gentamicin		azithromycin
	neomycin		clarithromycin
	tobramycin		erythromycin
Beta lactamase	amoxicillin-clavulanate	1	roxithromycin
	ampicillin-sulbactam	Nitroimidazole	metronidazole (oral, rectal)
inhibitor combinations	piperacillin-tazobactam	derivatives	tinidazole (oral, rectal
combinations	ticarcillin-clavulanate	Sulfonamide & trimethoprim combinations	trimethoprim- sulfamethoxazole
Beta lactamase	dicloxacillin		doxycycline
resistant penicillins	flucloxacillin	Totrogyolings	minocycline
Beta lactamase sensitive penicillins	benzathine benzylpenicillin	Tetracyclines	tetracycline
	benzylpenicillin		tigecycline
	phenoxymethylpenicillin		cefotaxime
	procaine benzylpenicillin		ceftazidime
	doripenem		ceftazidime- tazobactam
	ertapenem	Trimethoprim and derivatives	ceftriaxone
Carbapenems	imipenem-cilastatin		trimethoprim
	meropenem		daptomycin
	meropenem-vaborbactam	_	fosfomycin
	amoxicillin	_	linezolid
	ampicillin		methenamine hippurate
Extended spectrum	piperacillin	Other antibacterials & combinations	tedizolid
penicillins	pivmecillinam		esomeprazole, amoxicillin and clarithromycin
	temocillin		chloramphenicol
First generation cephalosporins	cefalexin		streptomycin
	cefazolin		colistin
	ciprofloxacin		polymyxin B
	levofloxacin	7	sodium fusidate
Fluoroquinolones	moxifloxacin	7	cycloserine
	norfloxacin	-	rifabutin
	ofloxacin		rifampicin
Fourth generation cephalosporins	cefepime	1	rifapentine
Other antibacterials & combinations	pristinamycin	Other cephalosporins and penems	cefiderocol

	quinupristin/dalfopristin	ceftaroline
	aztreonam	ceftolozane-avibactam
	nitrofurantoin	faropenem
	cefaclor	
	cefoxitin	
	cefuroxime	