

Queensland and Northern Territory

Statewide antimicrobial benchmarking report for acute inpatient aggregate usage rates

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 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.

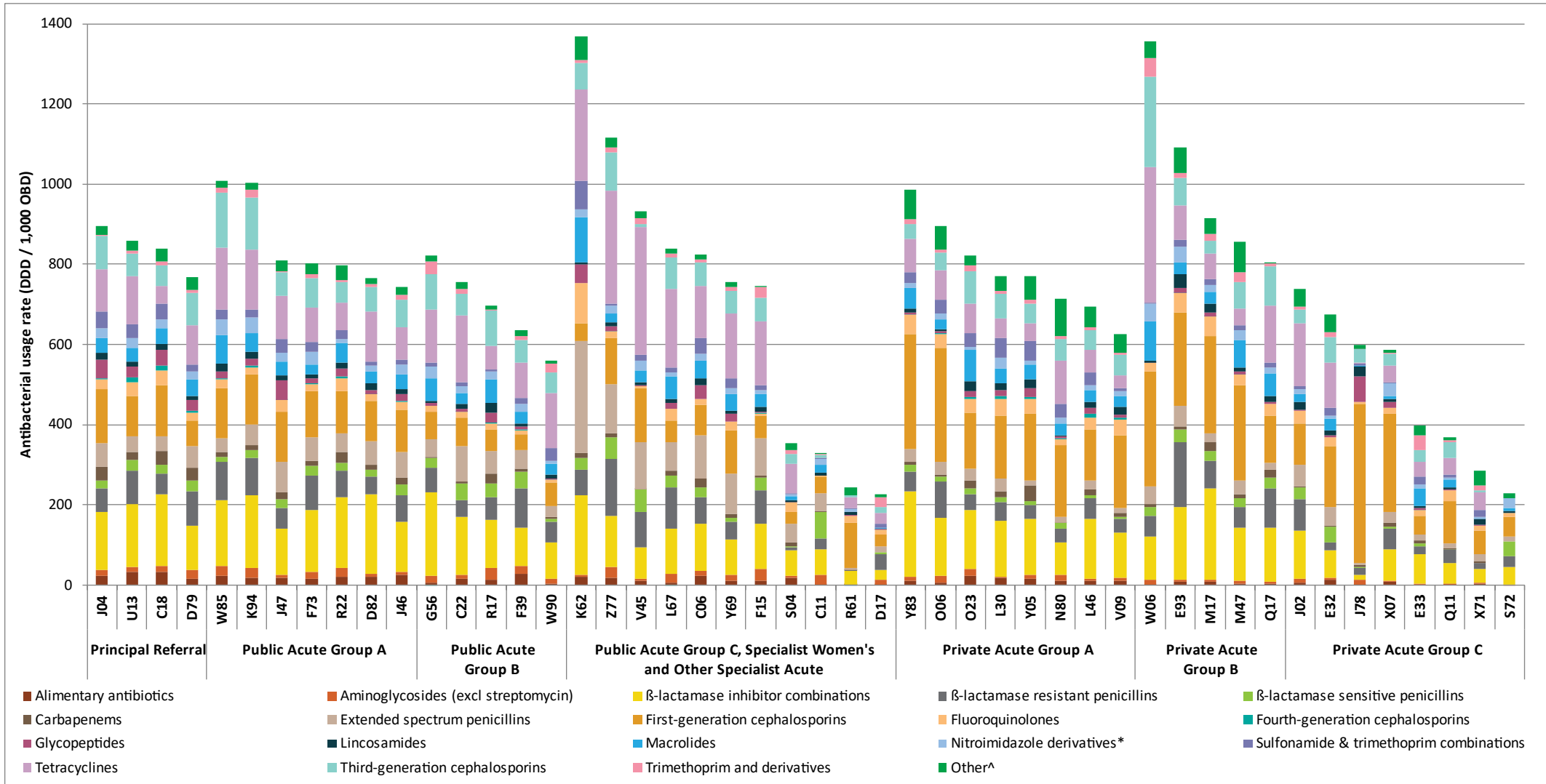
DDD values for each antimicrobial are assigned by the World Health Organization based on the "assumed average maintenance dose per day for the main indication in adults". DDDs are reviewed annually by the WHO as dosing recommendations change over time. For more information refer to:

https://www.whocc.no/atc_ddd_methodology/purpose_of_the_atc_ddd_system/.

The chart below presents the acute aggregated antibacterial usage rates for the respective contributing hospitals over the six-month period from 1 July 2024 to 31 December 2024. Unless otherwise specified, the aggregate rates include all acute care areas of the hospital, excluding usage in the emergency department and the operating theatre.

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: Total acute hospital antibacterial usage rates (DDD/1000 OBD) in NAUSP contributor hospitals, by peer group, Queensland and Northern Territory, July-December 2024 (excludes Emergency Department and Operating Theatre)



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 the following 48 hospitals in Qld and NT:

Alice Springs Hospital	Mater Private Hospital Townsville - Pimlico
Atherton Hospital	Mater Redland Private
Brisbane Private Hospital	Mater Rockhampton
Buderim Private Hospital	Mt Isa Hospital
Bundaberg Hospital	Palmerston Regional Hospital
Caboolture Hospital	Pindara Private Hospital
Darwin Private Hospital	Queen Elizabeth 2 Jubilee Hospital
Gladstone Hospital	Redcliffe Hospital
Gold Coast Private Hospital	Redland Hospital
Gove District Hospital	Royal Brisbane and Women's Hospital
Greenslopes Hospital	Royal Darwin Hospital
Hervey Bay Hospital	St Andrew's War Memorial Hospital
John Flynn Private Hospital	St Stephen's Hospital Hervey Bay
Katherine District Hospital	St Vincent's Private Hospital Brisbane
Kilcoy Hospital	St Vincent's Private Hospital Northside
Kingaroy Hospital	St Vincent's Private Hospital Toowoomba
Mareeba Hospital	Stars - Surgical Treatment and Rehabilitation Services
Maryborough Hospital	Tennant Creek Hospital
Mater Bundaberg	The Prince Charles Hospital
Mater Hospital Brisbane	Toowoomba Hospital
Mater Mackay	Townsville Hospital
Mater Mothers' Hospital	Warwick Hospital
Mater Private Hospital Brisbane	Wesley Hospital
Mater Private Hospital Springfield	
Mater Private Hospital Townsville - Hyde Park	

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. 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 the Commonwealth.

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

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aztreonam	Other cephalosporins and penems	ceftolozane-avibactam
nitrofurantoin		faropenem
cefaclor		
cefoxitin		
cefuroxime		