

New South Wales and Australian Capital 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 charts below present 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. The same data are presented in both charts with outlier hospital(s) removed from Chart 1b.

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

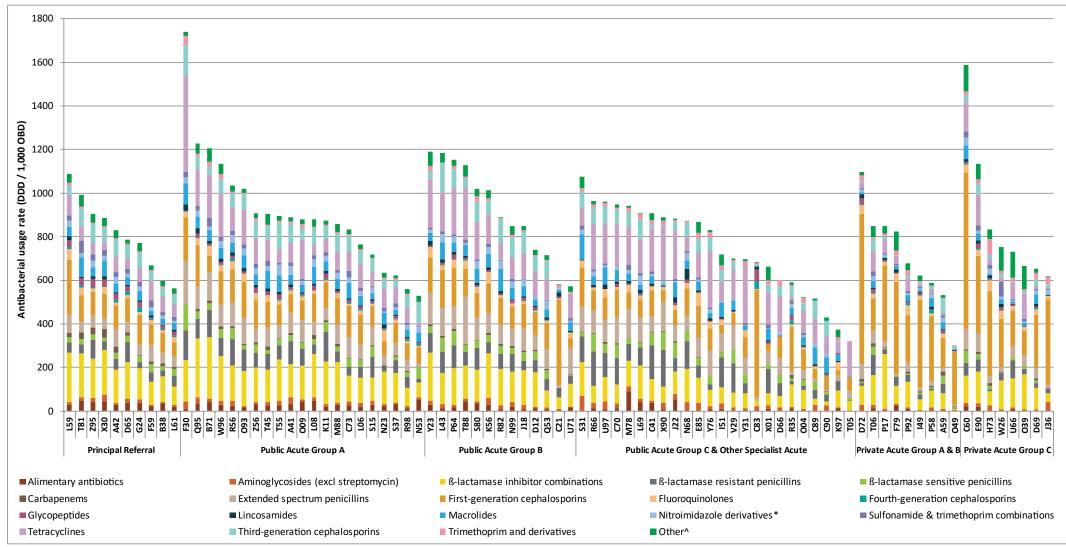
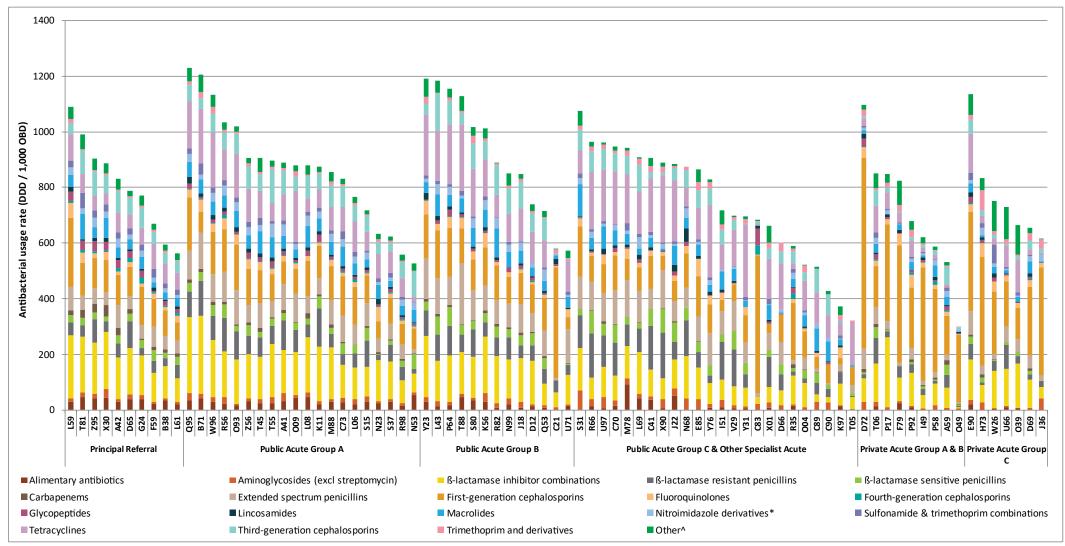


Chart 1a: Total acute hospital antibacterial usage rates (DDD/1000 OBD) in NAUSP contributor hospitals, by peer group, New South Wales and Australian Capital Territory, July-December 2024 (excludes Emergency Department and Operating Theatre)

Alimentary antibiotics = colistin (oral), fidaxomicin, neomycin (oral), nystatin (oral), paromomycin, rifaximin, vancomycin (oral). *Nitroimidazole derivatives = metronidazole, tinidazole

^AOther = 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: Total acute hospital antibacterial usage rates (DDD/1000 OBD) in NAUSP contributor hospitals, by peer group, New South Wales and Australian Capital 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.

NOTE: Outlier hospitals F30 and C60 removed

This report includes data from the following 85 hospitals in NSW and ACT:

Armidale Hospital Auburn Hospital **Bankstown Hospital Batemans Bay District** Hospital **Bathurst Base Hospital Bellinger River District** Hospital **Belmont Hospital** Blacktown Hospital **Bowral Hospital Brisbane Waters Private** Hospital Broken Hill Base Hospital **Calvary Bruce Private** Hospital Calvary John James Hospital Calvary Riverina Hospital **Campbelltown Hospital Campbelltown Private** Hospital **Canterbury Hospital** Cessnock District Hospital Chris O'Brien Lifehouse Coffs Harbour Hospital Concord Hospital Cooma Hospital Cowra Health Service **Dubbo Base Hospital** Fairfield Hospital Forbes District Hospital Forster Private Hospital

Glen Innes District Hospital Gloucester Soldiers' Memorial Hospital Gosford Hospital **Gosford Private Hospital** Goulburn Base Hospital Grafton Base Hospital Griffith Base Hospital Gunnedah Hospital Hornsby Ku-Ring-Gai Hospital Hurstville Private Hospital Institute Of Rheumatology and Orthopaedics Inverell District Hospital John Hunter Hospital Kareena Private Hospital Kempsev District Hospital Kurri Kurri Hospital Lingard Private Hospital Lithgow Hospital Liverpool Hospital Macksville District Hospital Maitland Hospital Maitland Private Hospital Manning Base Hospital Mater Hospital North Sydney Mayo Private Hospital Milton-Ulladulla Hospital Moree Hospital Moruya Hospital Mt Druitt Hospital

Mudgee District Hospital Muswellbrook Hospital Narrabri Hospital Nepean Private Hospital Newcastle Mater Northern Beaches Hospital **Orange Health Service** Parkes Hospital Port Macquarie Base Hospital Prince Of Wales Hospital Queanbeyan Hospital Royal North Shore Hospital **Royal Prince Alfred Hospital** Ryde Hospital Scott Memorial Hospital Shellharbour Hospital Shoalhaven Hospital Singleton District Hospital South East Regional Hospital St George Hospital St Vincent's Hospital Sydney St Vincent's Private Hospital Lismore Sutherland Hospital Sydney Adventist Hospital Tamworth Hospital Wagga Wagga Base Hospital Westmead Hospital Wollongong Hospital Wyong 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. 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 CLAS	SES		
Alimentary antibiotics	colistin (oral)		dalbavancin
	fidaxomicin	Glycopeptides	oritavancin
	neomycin (oral)	- Glycopeptides	teicoplanin
	nystatin (oral)		vancomycin
	paromomycin	Imidazole derivatives	metronidazole (parenteral)
	rifaximin	Intermediate acting sulfonamides	sulfadiazine
	vancomycin (oral)	Lincosamides	clindamycin
Aminoglycosides (excl streptomycin)	amikacin		lincomycin
	gentamicin	Macrolides	azithromycin
	neomycin		clarithromycin
	tobramycin		erythromycin
Beta lactamase inhibitor combinations	amoxicillin-clavulanate		roxithromycin
	ampicillin-sulbactam	Nitroimidazole	metronidazole (oral, rectal)
	piperacillin-tazobactam	derivatives	tinidazole (oral, rectal)
	ticarcillin-clavulanate	Sulfonamide & trimethoprim combinations	trimethoprim- sulfamethoxazole
Beta lactamase resistant penicillins Beta lactamase sensitive penicillins	dicloxacillin		doxycycline
	flucloxacillin	Totropyolingo	minocycline
	benzathine benzylpenicillin	- Tetracyclines	tetracycline
	benzylpenicillin		tigecycline
	phenoxymethylpenicillin		cefotaxime
	procaine benzylpenicillin	Third generation cephalosporins	ceftazidime
Carbapenems	doripenem		ceftazidime- tazobactam
	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		cefiderocol
	quinupristin/dalfopristin		ceftaroline

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