



Antimicrobial Utilisation Surveillance in Australian Hospitals

New South Wales and Australian Capital Territory – Statewide antimicrobial benchmarking report for acute inpatient aggregate usage rates

January 2023 – June 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.

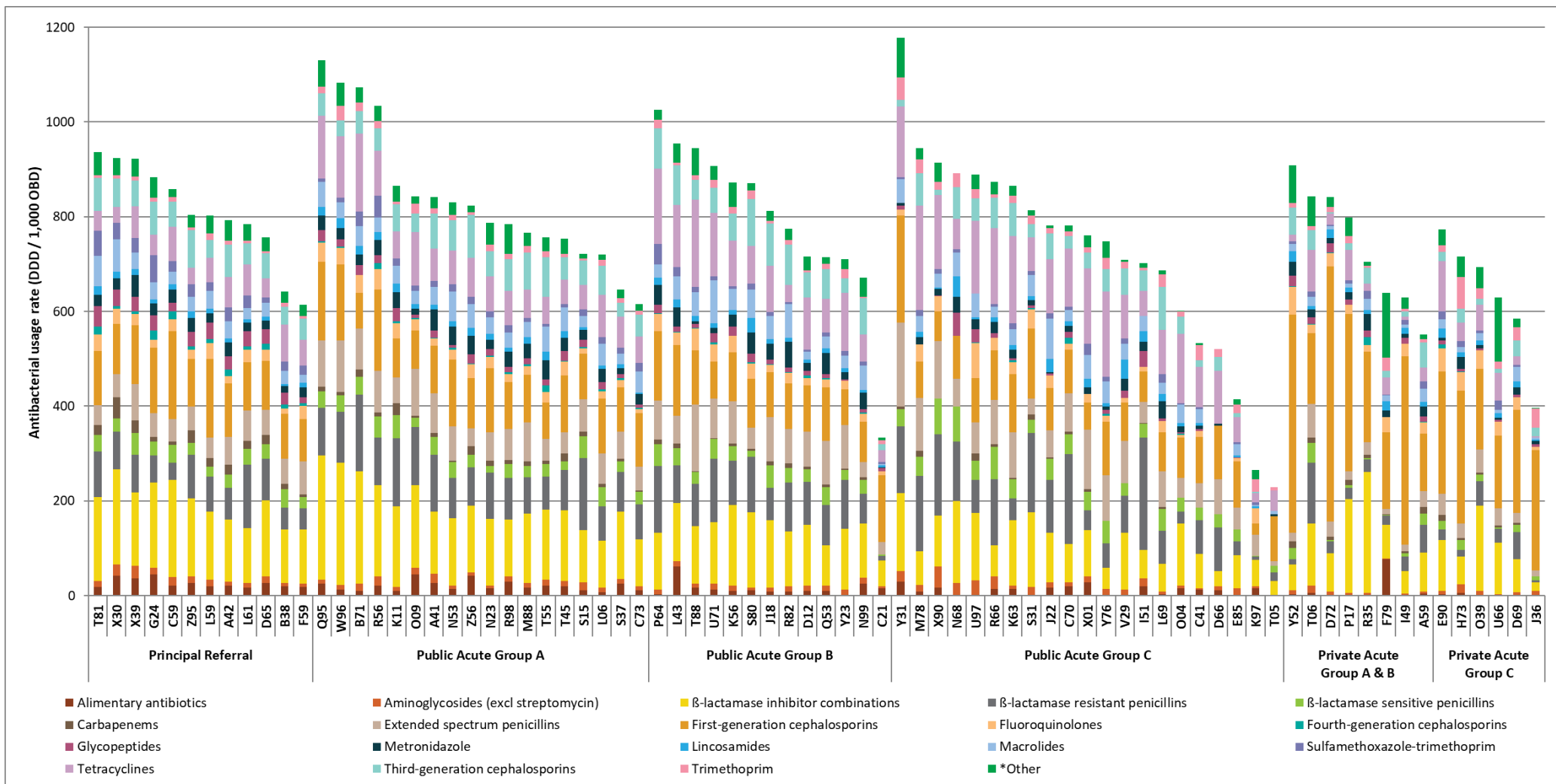
DDD values for each antimicrobial are assigned by the World Health Organization based on the “assumed average maintenance dose per day for the main indication in adults”. DDDs are reviewed annually by the WHO as dosing recommendations change over time. For more information refer to:

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

The chart below presents the acute aggregated antibacterial usage rates for the 78 respective contributing hospitals over the six-month period from 1 January 2023 to 30 June 2023. 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, New South Wales and Australian Capital Territory, January-June 2023 (excludes Emergency Department and Operating Theatre)



Alimentary antibiotics = rifaximin, fidaxomicin. *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 the following 77 hospitals in New South Wales and Australian Capital Territory:

Armidale Hospital	Liverpool Hospital
Auburn Hospital	Macksville District Hospital
Bankstown Hospital	Maitland Hospital
Batemans Bay District Hospital	Maitland Private Hospital
Bathurst Base Hospital	Manning Base Hospital
Bellinger River District Hospital	Mater Hospital North Sydney
Belmont Hospital	Mayo Private Hospital
Blue Mountains Hospital	Milton-Ulladulla Hospital
Bowral Hospital	Moree Hospital
Brisbane Waters Private Hospital	Moruya Hospital
Broken Hill Base Hospital	Mt Druitt Hospital
Campbelltown Hospital	Mudgee District Hospital
Campbelltown Private Hospital	Muswellbrook Hospital
Canberra Hospital	Narrabri Hospital
Canterbury Hospital	Nepean Hospital
Cessnock District Hospital	Newcastle Mater
Chris O'Brien Lifehouse	Northern Beaches Hospital
Coffs Harbour Hospital	Orange Health Service
Concord Hospital	Port Macquarie Base Hospital
Cooma Hospital	Prince Of Wales Hospital
Dubbo Base Hospital	Queanbeyan Hospital
Fairfield Hospital	Royal North Shore Hospital
Forster Private Hospital	Royal Prince Alfred Hospital
Glen Innes District Hospital	Ryde Hospital
Gloucester Soldiers' Memorial Hospital	Scott Memorial Hospital
Gosford Hospital	Shellharbour Hospital
Gosford Private Hospital	Shoalhaven Hospital
Goulburn Base Hospital	Singleton District Hospital
Griffith Base Hospital	South East Regional Hospital
Gunnedah Hospital	St George Hospital
Hornsby Ku-Ring-Gai Hospital	St Vincent's Hospital Sydney
Hurstville Private Hospital	St Vincent's Private Hospital Sydney
Inverell District Hospital	Sutherland Hospital
John Hunter Hospital	Sydney Adventist Hospital
Kareena Private Hospital	Tamworth Hospital
Kempsey District Hospital	Wagga Wagga Base Hospital
Kurri Kurri Hospital	Westmead Hospital
Lingard Private Hospital	Wollongong Hospital
Lithgow Hospital	Wyong Hospital

ANTIBACTERIAL CLASSES			
Alimentary antibiotics	fidaxomicin	Lincosamides	clindamycin
	paromomycin		lincomycin
	rifaximin		azithromycin
Aminoglycosides	amikacin	Macrolides	clarithromycin
	gentamycin		erythromycin
	neomycin		roxithromycin
	tobramycin		spiramycin
β-lactamase inhibitor combinations	amoxicillin - clavulanate		Monobactams
	piperacillin - tazobactam	Nitrofurans derivatives	nitrofurantoin
β-lactamase resistant penicillins	dicloxacillin	Polymyxins	colistin
	flucloxacillin		polymyxin B
β-lactamase sensitive penicillins	benzathine benzylpenicillin	Second-generation cephalosporins	cefaclor
	benzylpenicillin		cefamandole
	phenoxymethylpenicillin		cefotetan
	procaine benzylpenicillin		cefoxitin
Carbapenems	doripenem		cefuroxime
	ertapenem	Steroid antibacterials	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
	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
	ceftazidime		daptomycin
Glycopeptides	dalbavancin		faropenem
	oritavancin		fosfomicin
	teicoplanin		linezolid
	vancomycin		rifampicin
Imidazole derivatives	metronidazole	tedizolid	
Intermediate-acting sulfonamides	sulfadiazine		