



Antimicrobial Utilisation Surveillance in Australian Hospitals

South Australia – Statewide antimicrobial benchmarking report for acute inpatient aggregate usage rates

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:

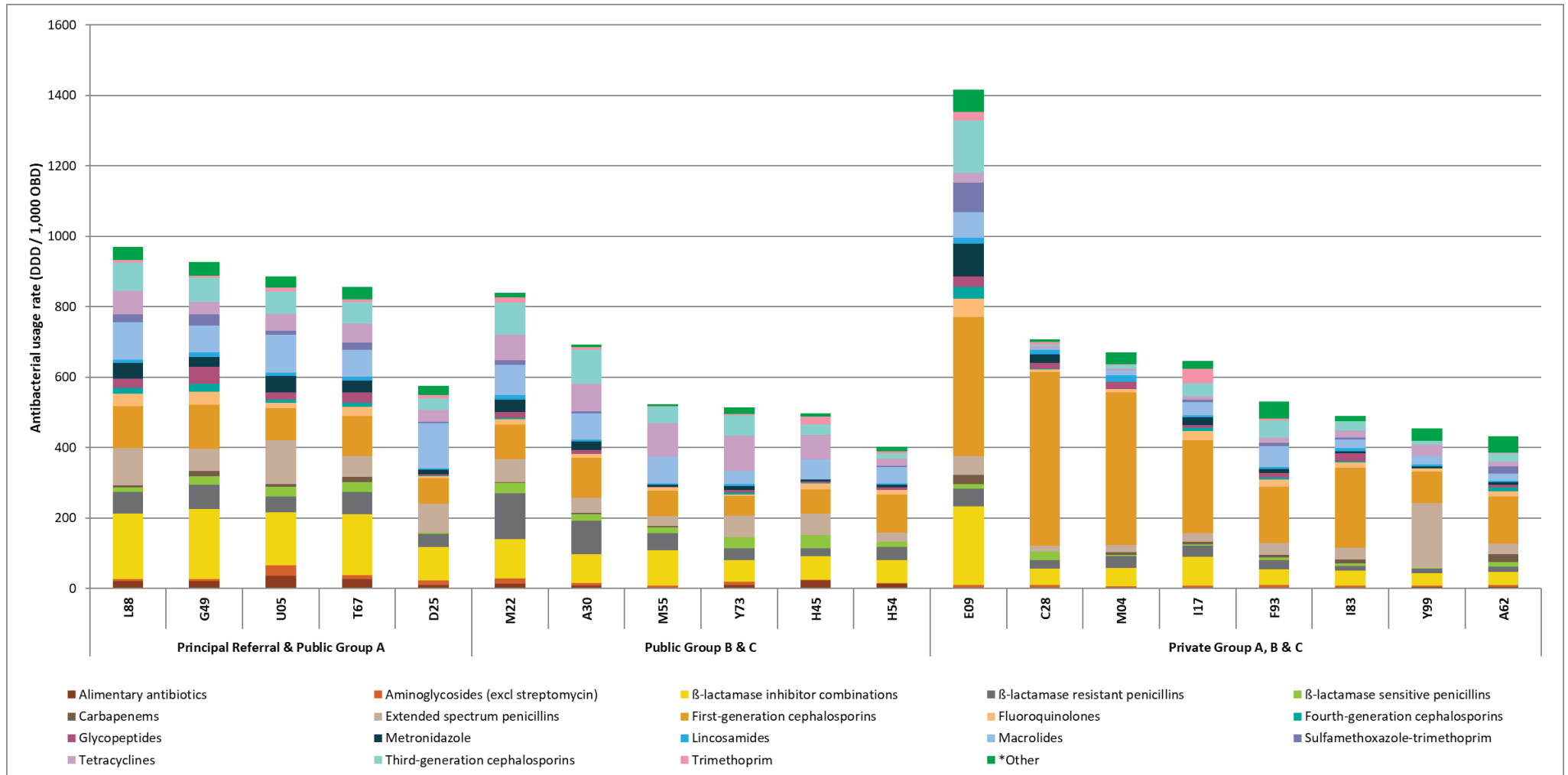
https://www.whocc.no/atc_ddd_methodology/purpose_of_the_atc_ddd_system/.

The charts below present the acute aggregated antibacterial usage rates for the respective contributing hospitals over the six-month period from 1 July 2023 to 31 December 2023. The same data are presented in both charts with outlier hospital(s) removed from Chart 1b.

Unless otherwise specified, the aggregate rates include all acute care areas of the hospital, excluding usage in the emergency department and the operating theatre.

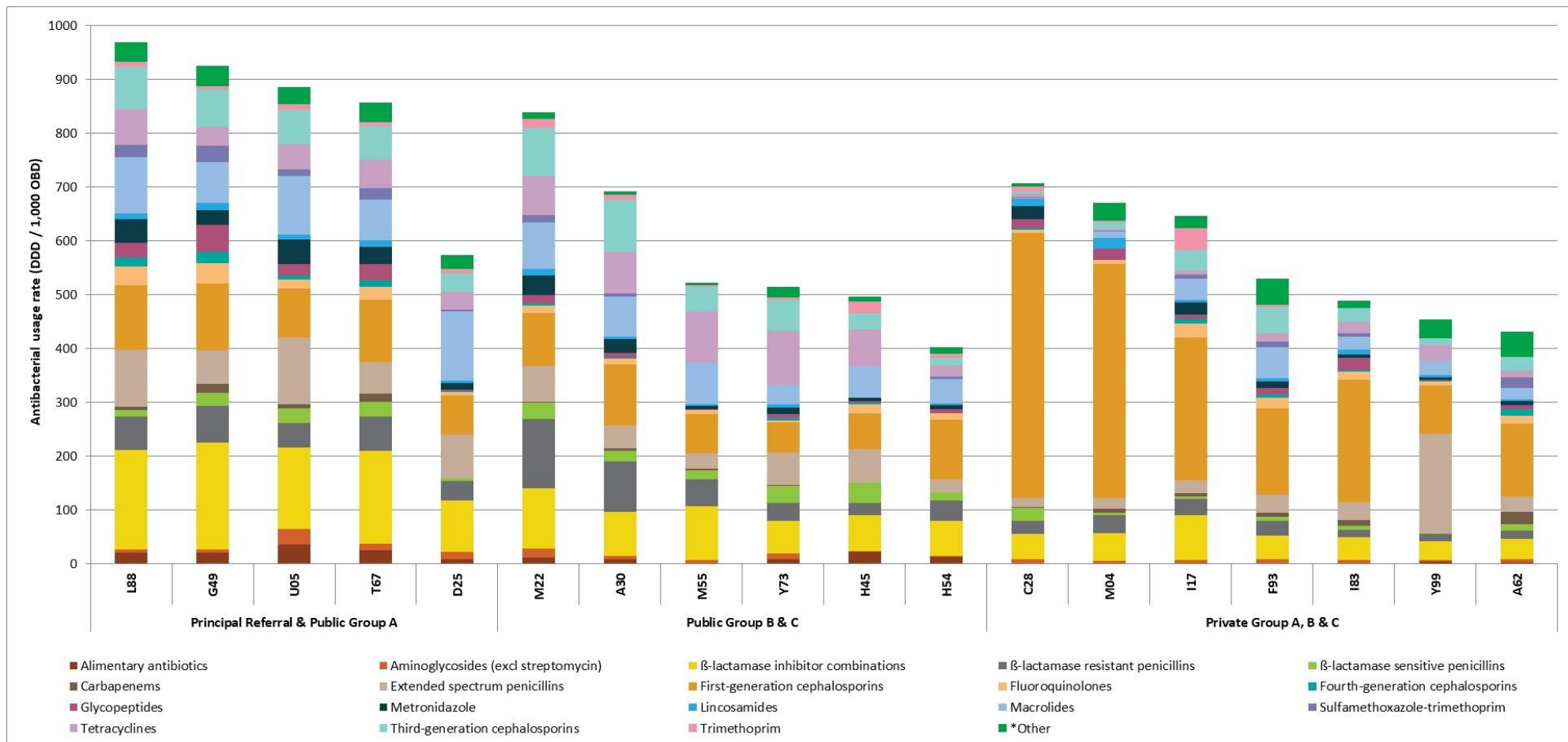
¹ AIHW. *Hospital resources 2017-18: Australian hospital statistics*. Available from <https://www.aihw.gov.au/reports/hospitals/hospital-resources-2017-18-ahs/data>

Chart 1a: Total acute hospital antibacterial usage rates (DDD/1000 OBD) in NAUSP contributor hospitals, by peer group, South Australia, July-December 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.

Chart 1b: Total acute hospital antibacterial usage rates (DDD/1000 OBD) in NAUSP contributor hospitals, by peer group, South Australia, July-December 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.

***Note: One outlier hospital removed (Hospital E09)**

This report includes data from the following 19 hospitals in SA:

Ashford Hospital
Burnside War Memorial Hospital
Calvary Adelaide Private Hospital
Calvary Central Districts Hospital
Calvary North Adelaide Hospital
Flinders Medical Centre
Flinders Private Hospital
Gawler Health Service
Lyell McEwin Hospital
Memorial Hospital
Modbury Hospital
Mount Barker District Soldiers Memorial Hospital
Mt Gambier Hospital
Noarlunga Hospital
Port Lincoln Hospital
Queen Elizabeth Hospital
Royal Adelaide Hospital
South Coast District Hospital
St Andrew's 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 Antimicrobial Programs, 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	fidaxomicin	Lincosamides	clindamycin	
	paromomycin		lincomycin	
	rifaximin		azithromycin	
Aminoglycosides	amikacin	Macrolides	clarithromycin	
	gentamycin		erythromycin	
	neomycin		roxithromycin	
	tobramycin		spiramycin	
β-lactamase inhibitor combinations	amoxicillin - clavulanate	Monobactams	aztreonam	
	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	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	Trimethoprim	ceftazidime - avibactam	
	levofloxacin		ceftriaxone	
	moxifloxacin		trimethoprim	
	norfloxacin		ceftaroline fosamil	
Fourth-generation cephalosporins	cefepime	Other (including other cephalosporins and penems)	ceftolozane - tazobactam	
	ceftazidime		daptomycin	
Glycopeptides	dalbavancin		faropenem	
	oritavancin		fosfomicin	
	teicoplanin		linezolid	
	vancomycin		rifampicin	
Imidazole derivatives	metronidazole		tedizolid	
Intermediate-acting sulfonamides	sulfadiazine			