

South Australia

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.

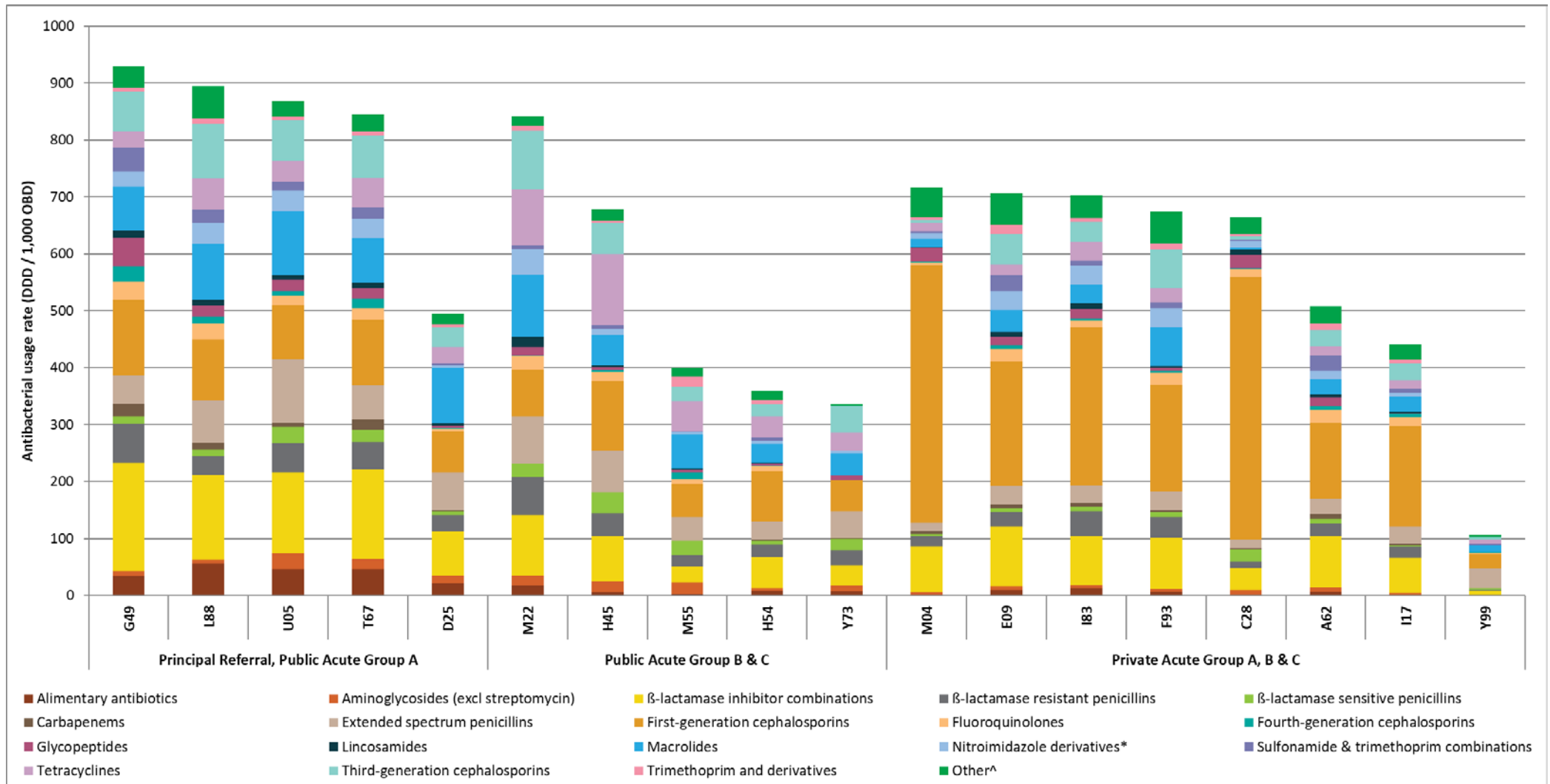
DDD values for each antimicrobial are assigned by the World Health Organization based on the "assumed average maintenance dose per day for the main indication in adults". DDDs are reviewed annually by the WHO as dosing recommendations change over time. For more information refer to:

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, South Australia, 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 18 hospitals in SA:

Ashford Hospital	Modbury Hospital
Burnside War Memorial Hospital	Mount Barker District Soldiers Memorial Hospital
Calvary Adelaide Private Hospital	Noarlunga Hospital
Calvary Central Districts Hospital	Port Lincoln Hospital
Calvary North Adelaide Hospital	Queen Elizabeth Hospital
Flinders Medical Centre	Royal Adelaide Hospital
Flinders Private Hospital	South Coast District Hospital
Gawler Health Service	St Andrew's Hospital
Lyell McEwin Hospital	
Memorial 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 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
Aminoglycosides (excl streptomycin)	amikacin		lincomycin
	gentamicin	Macrolides	azithromycin
	neomycin		clarithromycin
	tobramycin		erythromycin
Beta lactamase inhibitor combinations	amoxicillin-clavulanate		roxithromycin
	ampicillin-sulbactam	Nitroimidazole derivatives	metronidazole (oral, rectal)
	piperacillin-tazobactam		tinidazole (oral, rectal)
	ticarcillin-clavulanate	Sulfonamide & trimethoprim combinations	trimethoprim-sulfamethoxazole
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
Carbapenems	doripenem		ceftazidime-avibactam
	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- tazobactam
	nitrofurantoin		faropenem
	cefaclor		
	cefoxitin		
	cefuroxime		