

Antimicrobial Utilisation Surveillance in Australian Hospitals

South Australia – 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. Contributing hospitals can find their de-identifying code via the NAUSP Portal 'Maintain My Hospital' drop-down menu.

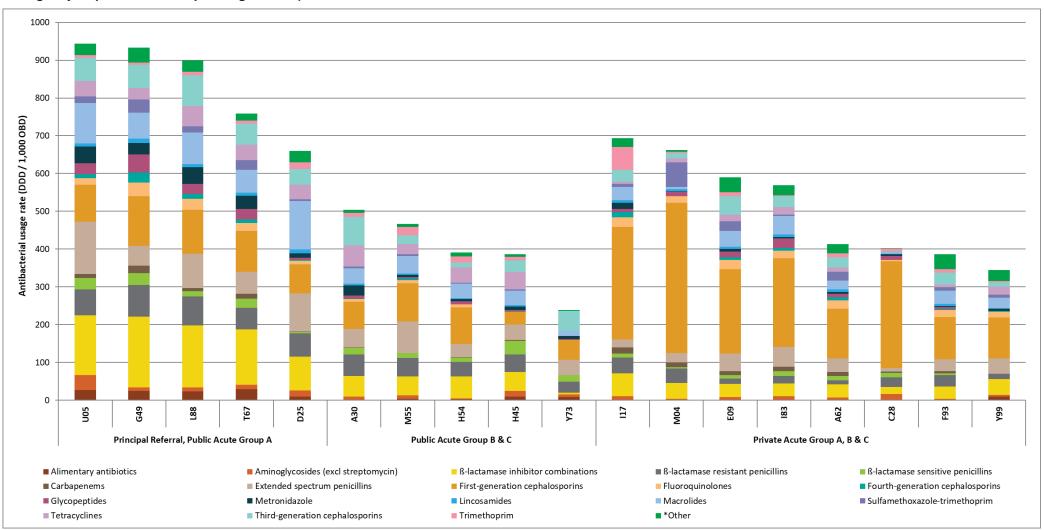
DDD values for each antimicrobial are assigned by the World Health Organization based on the "assumed average maintenance dose per day for the main indication in adults". DDDs are reviewed annually by the WHO as dosing recommendations change over time. For more information refer to:

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 18 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, South Australia, 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 18 hospitals in South Australia:

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

Queen Elizabeth Hospital

Royal Adelaide Hospital

South Coast District Hospital

St Andrew's Hospital

Alimentary antibiotics	fidaxomicin	Lincosamides	clindamycin
	paromomycin		lincomycin
	rifaximin	Macrolides	azithromycin
Aminoglycosides	amikacin		clarithromycin
	gentamycin		erythromycin
	neomycin		roxithromycin
	tobramycin		spiramycin
ß-lactamase inhibitor combinations	amoxicillin - clavulanate	Monobactams	aztreonam
	piperacillin - tazobactam	Nitrofuran derivatives	nitrofurantoin
ß-lactamase resistant penicillins	dicloxacillin	Polymyxins	colistin
	flucloxacillin		polymyxin B
ß-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	cefixime
	cefalotin		cefotaxime
	cefazolin		ceftazidime
Fluoroquinolones	ciprofloxacin		ceftazidime - avibactam
	levofloxacin		ceftriaxone
	moxifloxacin	Trimethoprim	trimethoprim
	norfloxacin		ceftaroline fosamil
Fourth-generation cephalosporins	cefepime	Other (including other cephalosporins and penems)	ceftolozane - tazobactan
	cefpirome		daptomycin
Glycopeptides	dalbavancin		faropenem
	oritavancin		fosfomycin
	teicoplanin		linezolid
	vancomycin		rifampicin
lmidazole derivatives	metronidazole		tedizolid
Intermediate-acting sulfonamides	sulfadiazine		