Western Australia

Statewide benchmarking report – Emergency Department

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 Emergency Department presentations.

Contributing hospitals are assigned according to Australian Institute for health and Welfare (AIHW) defined peer groups.[1] Deidentified contributor codes can be located via the 'Maintain My Hospital' drop-down menu in the NAUSP Portal.

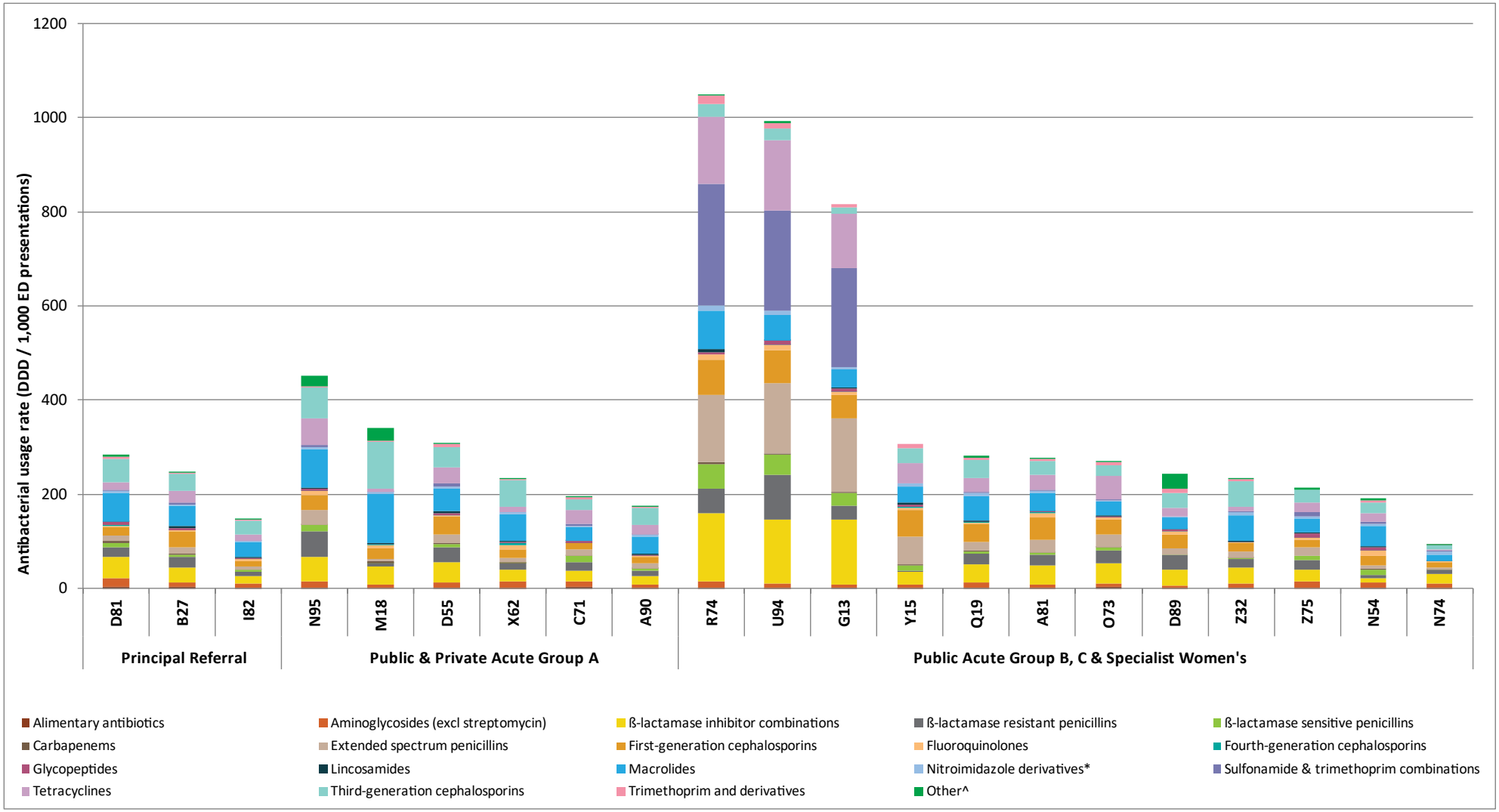
DDD values for each antimicrobial are assigned by the World Health Organization based on the "assumed average maintenance dose per day for the main indication in adults". DDDs are reviewed annually by the WHO as dosing recommendations change over time. For more information refer to: https://www.whocc.no/atc_ddd_methodology/purpose_of_the_atc_ddd_system/

The charts below present aggregated antibacterial usage data in the Emergency Department for the respective contributing hospitals over the six-month period from 1 July 2024 to 31 December 2024. The same data are presented in both charts with outlier hospital(s) removed from Chart 1b.

[Note: Not all NAUSP contributors are able to provide stratified data for the Emergency Department].

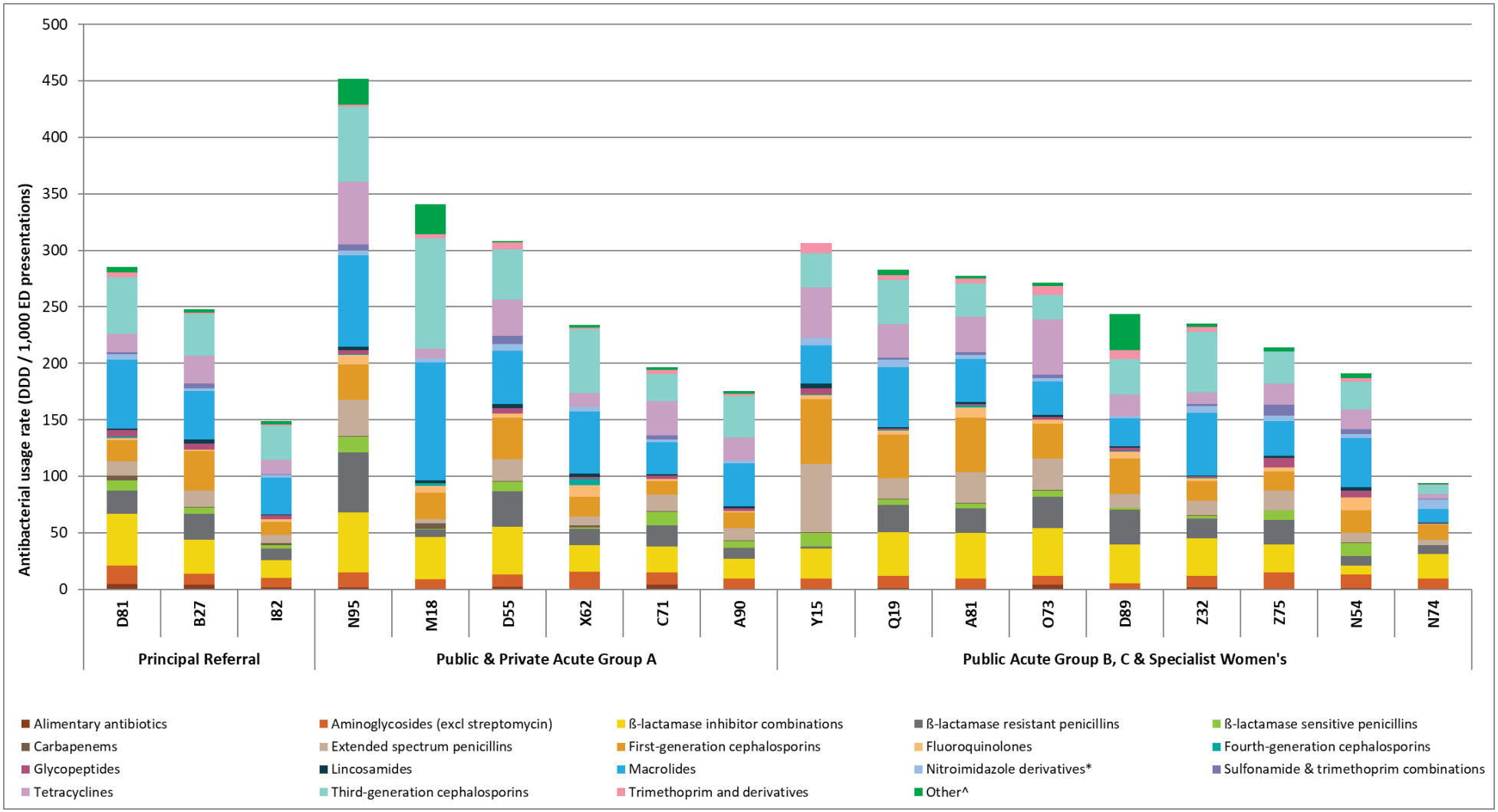
[1] AIHW. *Hospital resources 2017-18: Australian hospital statistics.* Available from https://www.aihw.gov.au/reports/hospitals/hospital-resources-2017-18-ahs/data

Chart 1a: **Emergency Department antibacterial usage rates (DDD/1000 emergency presentations) in NAUSP contributor hospitals, by peer group, Western Australia, July-December 2024**



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

Chart 1b: Emergency Department antibacterial usage rates (DDD/1000 emergency presentations) in NAUSP contributor hospitals, by peer group, Western Australia, July-December 2024



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NOTE: Outlier hospitals R74, U94 and G13 removed

This report includes data from the following 21 hospitals in WA:

Albany Health Campus
Armadale Kalamunda Group
Broome Hospital
Bunbury Regional Hospital
Busselton Health
Derby Hospital
Fiona Stanley Hospital
Geraldton Hospital
Hedland Health Campus
Hollywood Private Hospital
Karratha Health Campus
Katanning Health Service
King Edward Memorial Hospital
Kununurra Hospital
Narrogin Hospital
Northam Hospital
Rockingham Hospital
Royal Perth Hospital
Sir Charles Gairdner Hospital
St John Of God Midland
St John Of God Murdoch

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 (DOHAC). 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 DOHAC.

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		