

Western Australia
Statewide benchmarking report – Emergency Department
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 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.

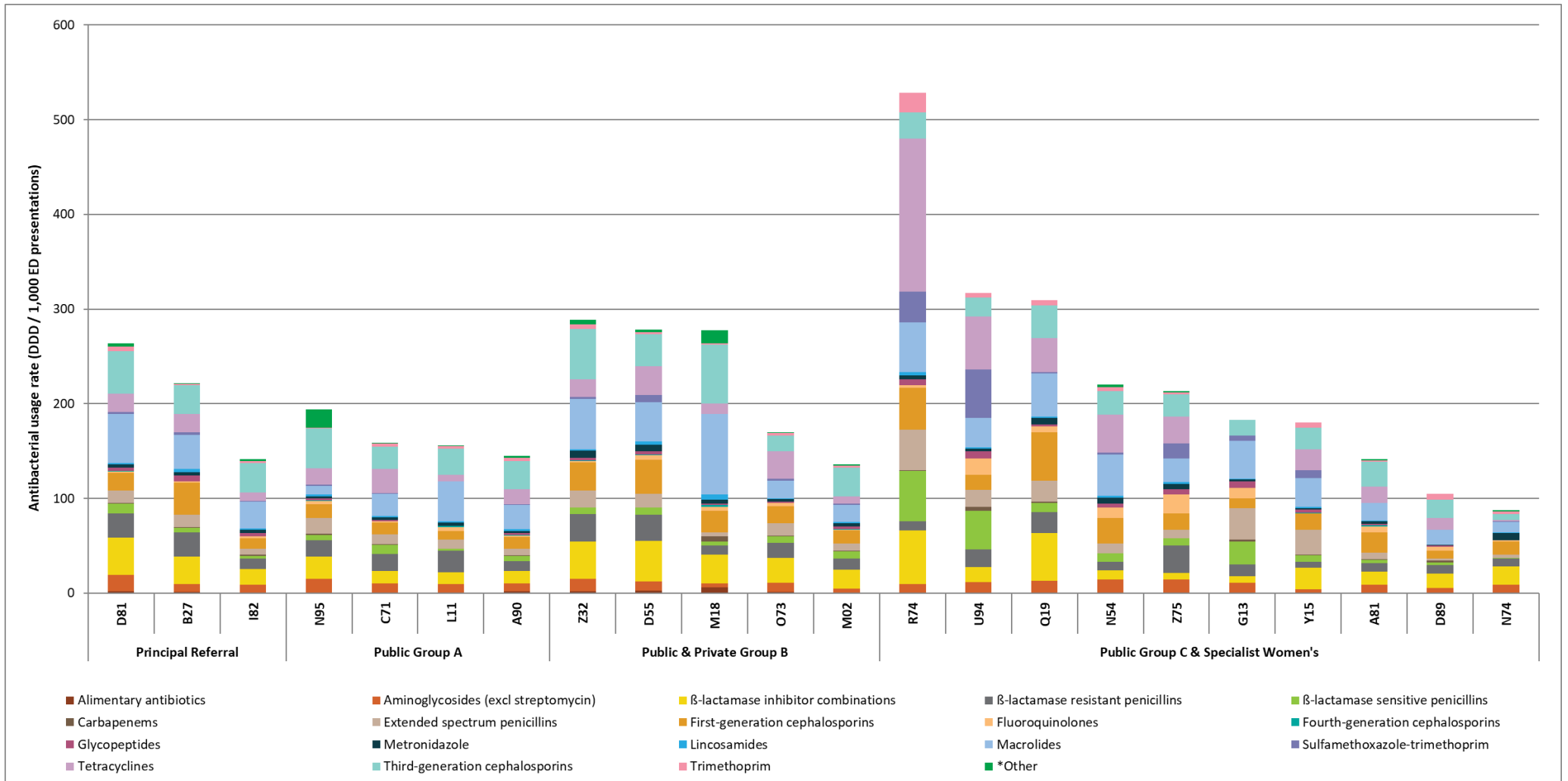
DDD values for each antimicrobial are assigned by the World Health Organization based on the "assumed average maintenance dose per day for the main indication in adults". DDDs are reviewed annually by the WHO as dosing recommendations change over time. For more information refer to: https://www.whocc.no/atc_ddd_methodology/purpose_of_the_atc_ddd_system/

The charts below presents aggregated antibacterial usage data in the Emergency Department for the respective contributing hospitals over the six-month period from 1 July 2023 to 31 December 2023. Both charts illustrate the same data however outlier hospital(s) have been removed from Chart 1b.

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

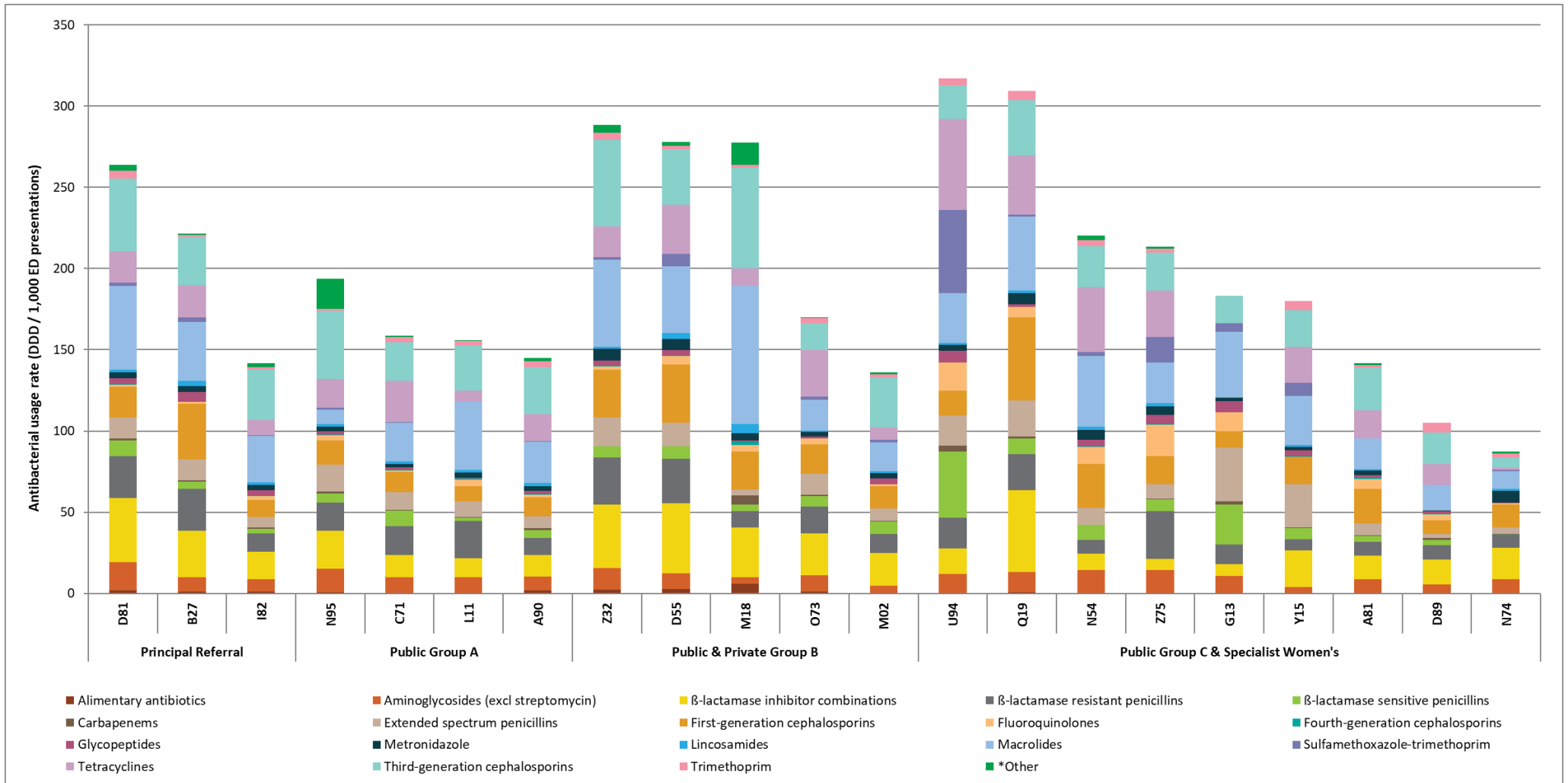
¹ AIHW. *Hospital resources 2017-18: Australian hospital statistics*. Available from <https://www.aihw.gov.au/reports/hospitals/hospital-resources-2017-18-ahs/data>

Chart 1a: Emergency Department antibacterial usage rates (DDD/1000 emergency presentations) in NAUSP-contributor hospitals, by peer group, Western Australia, July - December 2023



[Alimentary antibiotics = rifaximin, fidaxomicin, paromomycin. 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: Emergency Department antibacterial usage rates (DDD/1000 emergency presentations) in NAUSP-contributor hospitals*, by peer group, Western Australia, July – December 2023



[Alimentary antibiotics = rifaximin, fidaxomicin, paromomycin. 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 not shown (Hospital R74)**

This report includes data from the following 22 hospitals in WA:

Albany Hospital
Armadale Kalamunda Group
Broome Hospital
Bunbury Regional Hospital
Busselton Health
Derby Hospital
Fiona Stanley Hospital
Geraldton Hospital
Hedland Health Campus
Hollywood Private Hospital
Joondalup Health Campus
Kalgoorlie Health Campus
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

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 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 DOHAC.

ANTIBACTERIAL CLASSES				
Alimentary antibiotics	fidaxomicin	Lincosamides	clindamycin	
	paromomycin		lincomycin	
Aminoglycosides	rifaximin	Macrolides	azithromycin	
	amikacin		clarithromycin	
	gentamycin		erythromycin	
	neomycin		roxithromycin	
β-lactamase inhibitor combinations	tobramycin	Monobactams	aztreonam	
	amoxicillin - clavulanate		Nitrofurans derivatives	nitrofurantoin
β-lactamase resistant penicillins	piperacillin - tazobactam	Polymyxins	colistin	
	dicloxacillin		polymyxin B	
β-lactamase sensitive penicillins	flucloxacillin	Second-generation cephalosporins	cefaclor	
	benzathine benzylpenicillin		cefamandole	
	benzylpenicillin		cefotetan	
	phenoxymethylpenicillin		cefoxitin	
Carbapenems	procaine benzylpenicillin	Steroid antibacterials	cefuroxime	
	doripenem		fusidic acid	
	ertapenem		Streptogramins	pristinamycin
	imipenem - cilastatin		Streptomycins	streptomycin
	meropenem		Sulfonamide-trimethoprim combinations	sulfamethoxazole - trimethoprim
Extended-spectrum penicillins	meropenem - vaborbactam	Tetracyclines	doxycycline	
	amoxicillin		minocycline	
	ampicillin		tetracycline	
	pivmecillinam		tigecycline	
First-generation cephalosporins	temocillin	Third-generation cephalosporins	cefixime	
	cefalexin		cefotaxime	
	cefalotin		ceftazidime	
Fluoroquinolones	cefazolin	Trimethoprim	ceftazidime - avibactam	
	ciprofloxacin		ceftriaxone	
	levofloxacin		Other (including other cephalosporins and penems)	ceftaroline fosamil
	moxifloxacin			ceftolozane - tazobactam
norfloxacin	daptomycin			
Fourth-generation cephalosporins	cefepime	Glycopeptides	faropenem	
	cefpirome		fosfomycin	
Imidazole derivatives	dalbavancin	Intermediate-acting sulfonamides	linezolid	
	oritavancin		rifampicin	
	teicoplanin		tedizolid	
	vancomycin			
Intermediate-acting sulfonamides	metronidazole			
	sulfadiazine			