

## Western Australia – Statewide benchmarking report Emergency Department antibacterial usage July 2021 to December 2021

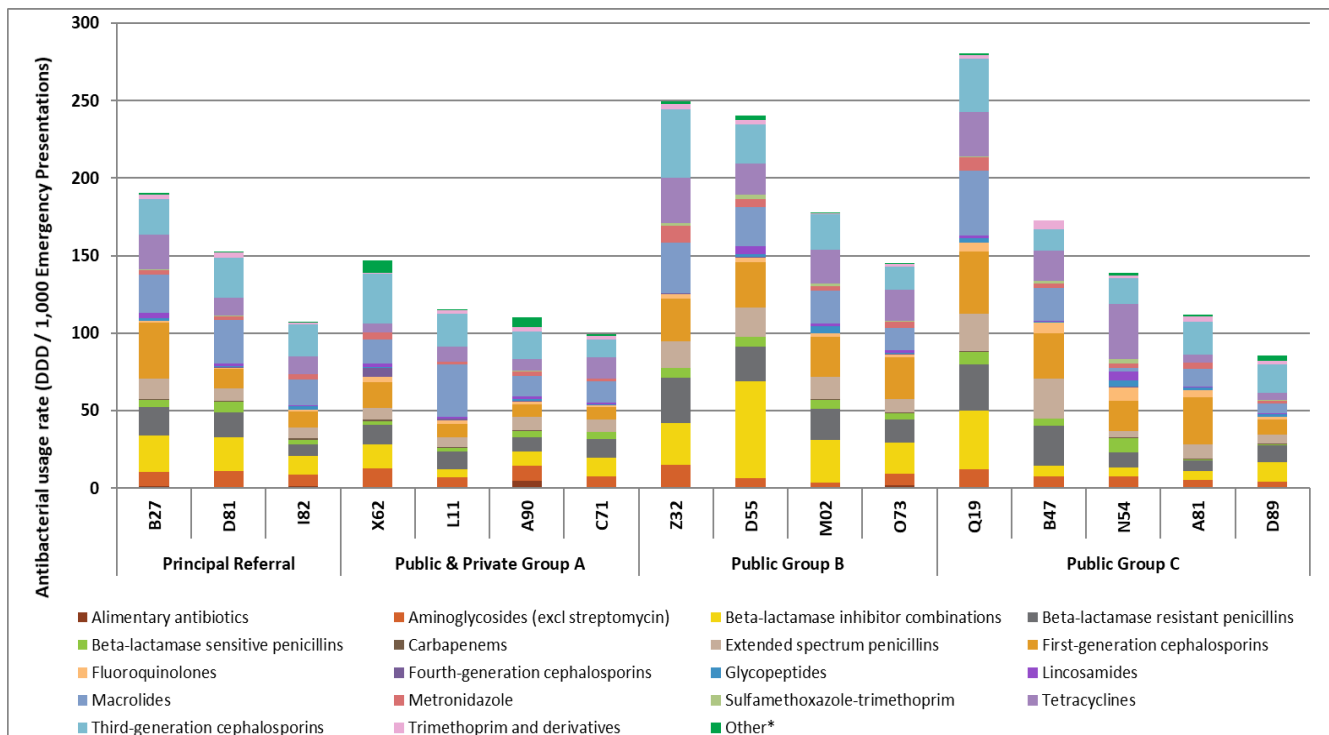
Antibacterial utilisation rates provided in this report are calculated using the number of defined daily doses (DDD) of the antibacterial class consumed each month per 1,000 Emergency Department presentations.

Contributing hospitals are assigned to Australian Institute for Health and Welfare (AIHW) defined peer groups.<sup>1</sup> 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/](https://www.whocc.no/atc_ddd_methodology/purpose_of_the_atc_ddd_system/)

The chart below presents aggregated antibacterial usage data in the Emergency Department for the respective contributing hospitals over the six-month period from 1 July 2021 to 31 December 2021. [Note: Not all NAUSP contributors are able to provide stratified data for the Emergency Department].

**Chart 1: Emergency Department antibacterial usage rates (DDD/1000 emergency presentations) in NAUSP contributor hospitals, by peer group, Western Australia, July-December 2021**



Alimentary antibiotics = rifaximin, fidaxomicin, paromomycin. Other = antimycobacterial antibiotics, monobactams, nitrofurans, linezolid, daptomycin, other cephalosporins and penems, polymyxins, second-generation cephalosporins, steroids, streptogramins and streptomycin.

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

This report includes data from the following 16 hospitals:

ALBANY HOSPITAL  
 ARMADALE KALAMUNDA GROUP  
 BUNBURY REGIONAL HOSPITAL  
 BUSSELTON HEALTH  
 ESPERANCE HOSPITAL  
 FIONA STANLEY HOSPITAL  
 GERALDTON HOSPITAL  
 HEDLAND HEALTH CAMPUS  
 JOONDALUP HEALTH CAMPUS

KALGOORLIE HEALTH CAMPUS  
 NARROGIN HOSPITAL  
 NORTHAM HOSPITAL  
 ROCKINGHAM HOSPITAL  
 ROYAL PERTH HOSPITAL  
 SIR CHARLES GAIRDNER HOSPITAL  
 ST JOHN OF GOD MURDOCH

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

*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. NAUSP is administered by the Specialist Services Unit, Communicable Disease Control Branch, Department for Health and Wellbeing, 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.