



Antimicrobial Utilisation Surveillance in Australian Hospitals

Victoria – Statewide antimicrobial benchmarking report for acute inpatient aggregate usage rates

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 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.

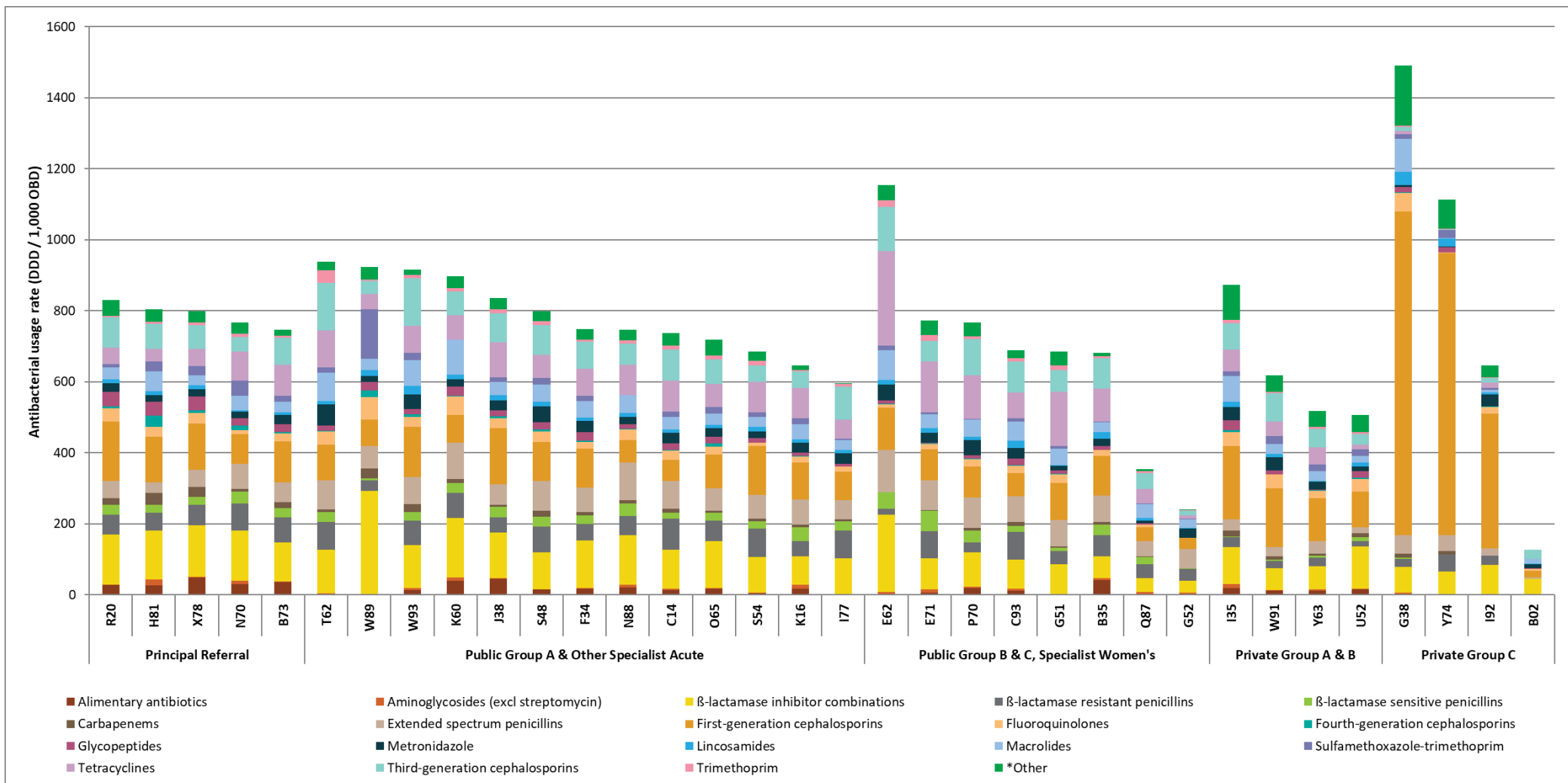
DDD values for each antimicrobial are assigned by the World Health Organization based on the “assumed average maintenance dose per day for the main indication in adults”. DDDs are reviewed annually by the WHO as dosing recommendations change over time. For more information refer to:

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 2023 to 31 December 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, Victoria, July-December 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, streptogragins and streptomycin.

This report includes data from the following 34 hospitals in Victoria:

Albury Wodonga - Albury	Royal Melbourne Hospital
Albury Wodonga - Wodonga	Sandringham Hospital
Alfred Hospital	South Eastern Private Hospital
Angliss Hospital	St John Of God Geelong
Austin Hospital	St Vincent's Hospital Melbourne
Ballarat Base Hospital	St Vincent's Private East Melbourne
Bendigo Health	St Vincent's Private Fitzroy
Box Hill Hospital	St Vincent's Private Hospital Kew
Central Gippsland Health	St Vincent's Private Hospital Werribee
Frankston Hospital	Swan Hill District Health
Geelong Hospital	The Northern Hospital
Grampians Health - Horsham	Warrnambool Base Hospital
Holmesglen Private Hospital	Werribee Mercy Hospital
John Fawkner Private Hospital	West Gippsland Hospital
Maroondah Hospital	Western Health Footscray
Mercy Women's Hospital	Western Health Sunshine
Peter MacCallum Cancer Centre	
Rosebud 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.

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ANTIBACTERIAL CLASSES				
Alimentary antibiotics	fidaxomicin	Lincosamides	clindamycin	
	paromomycin		lincomycin	
	rifaximin		azithromycin	
Aminoglycosides	amikacin	Macrolides	clarithromycin	
	gentamycin		erythromycin	
	neomycin		roxithromycin	
	tobramycin		spiramycin	
β-lactamase inhibitor combinations	amoxicillin - clavulanate		Monobactams	aztreonam
	piperacillin - tazobactam	Nitrofurans derivatives	nitrofurantoin	
β-lactamase resistant penicillins	dicloxacillin	Polymyxins	colistin	
	flucloxacillin		polymyxin B	
β-lactamase sensitive penicillins	benzathine benzylpenicillin		Second-generation cephalosporins	cefaclor
	benzylpenicillin			cefamandole
	phenoxymethylpenicillin			cefotetan
	procaine benzylpenicillin	cefoxitin		
Carbapenems	doripenem	Steroid antibacterials		cefuroxime
	ertapenem		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	Trimethoprim		ceftazidime - avibactam
	levofloxacin			ceftriaxone
	moxifloxacin		trimethoprim	
	norfloxacin		ceftaroline fosamil	
Fourth-generation cephalosporins	cefepime		Other (including other cephalosporins and penems)	ceftolozane - tazobactam
	ceftirome	daptomycin		
Glycopeptides	dalbavancin	faropenem		
	oritavancin	fosfomicin		
	teicoplanin	linezolid		
	vancomycin	rifampicin		
Imidazole derivatives	metronidazole			tedizolid
Intermediate-acting sulfonamides	sulfadiazine			