Queensland and Northern Territory

Statewide benchmarking report – Emergency Department

January 2024 – June 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.

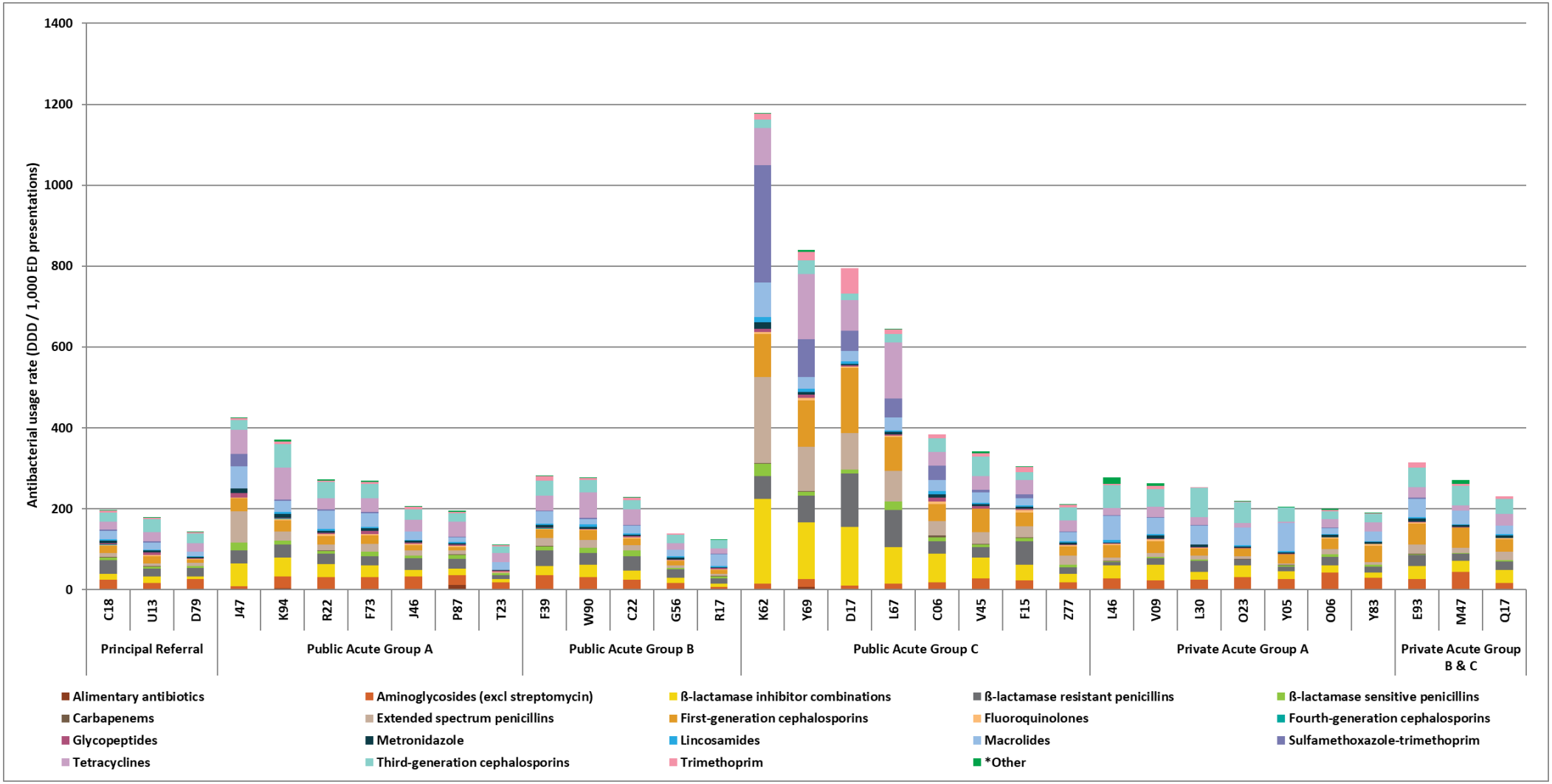
DDD values for each antimicrobial are assigned by the World Health Organization based on the "assumed average maintenance dose per day for the main indication in adults". DDDs are reviewed annually by the WHO as dosing recommendations change over time. For more information refer to: https://www.whocc.no/atc_ddd_methodology/purpose_of_the_atc_ddd_system/

The charts below present aggregated antibacterial usage data in the Emergency Department for the 33 respective contributing hospitals over the six-month period from 1 January 2024 to 30 June 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].

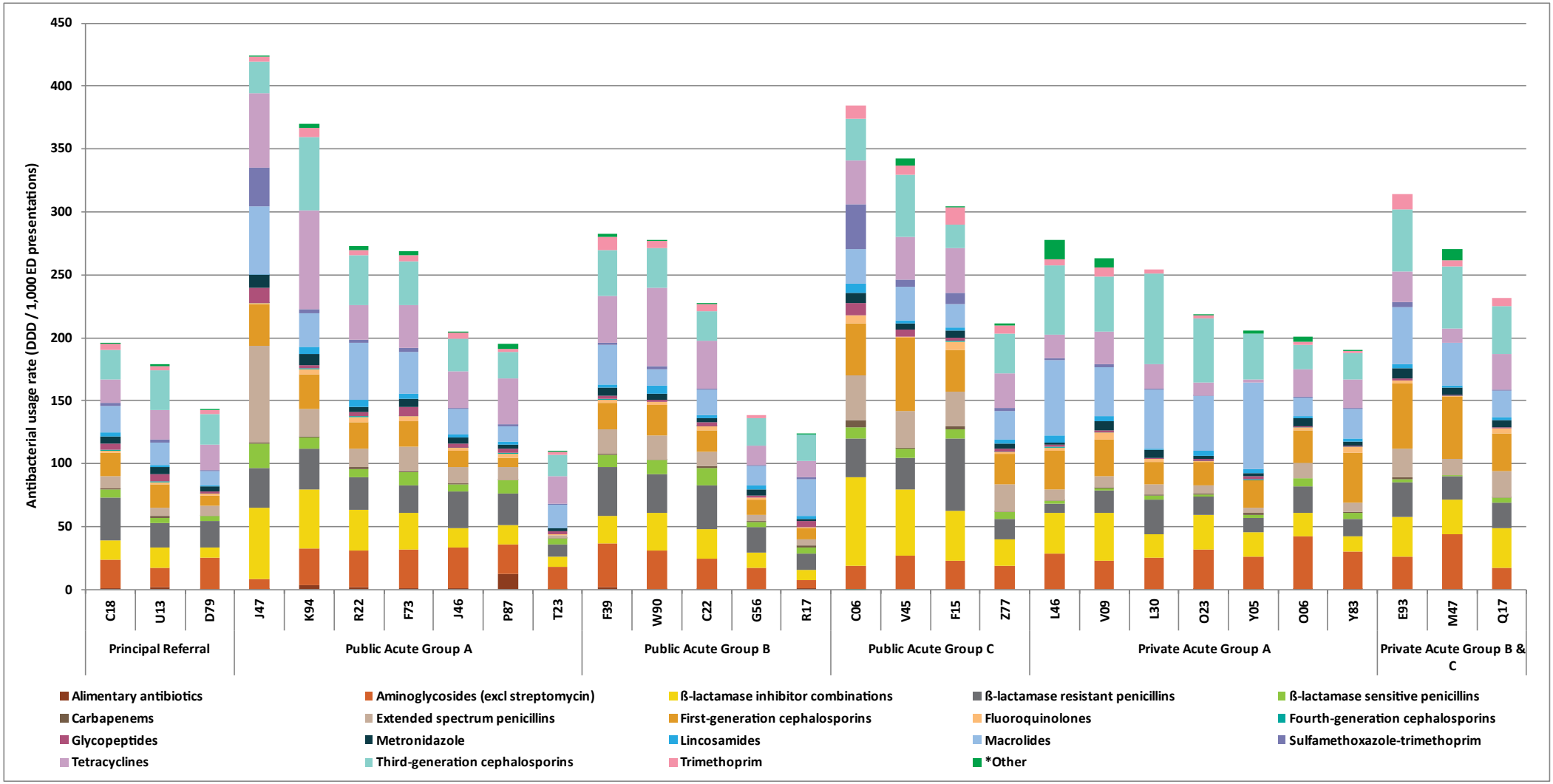
[1] AIHW. *Hospital resources 2017-18: Australian hospital statistics.* Available from https://www.aihw.gov.au/reports/hospitals/hospital-resources-2017-18-ahs/data

Chart 1a: **Emergency Department antibacterial usage rates (DDD/1000 emergency presentations) in NAUSP contributor hospitals, by peer group, Queensland and Northern Territory, January – June 2024**



[Alimentary antibiotics = rifaximin, fidaxomicin, paromomycin. Other = amphenicols, antimycotics, combinations for eradication of *Helicobacter pylori*, fosfomycin, methenamine hippurate, 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, Queensland and Northern Territory, January – June 2024**



[Alimentary antibiotics = rifaximin, fidaxomicin, paromomycin. Other = amphenicols, antimycotics, combinations for eradication of *Helicobacter pylori*, fosfomycin, methenamine hippurate, monobactams, nitrofurans, linezolid, daptomycin, other cephalosporins, polymyxins, rifamycins, second-generation cephalosporins, steroids, streptogramins and streptomycin]

***Note: Four outlier hospitals removed (Hospitals K62, Y69, D17 and L67)**

This report includes data from the following 33 hospitals in Queensland and Northern Territory:

Alice Springs Hospital
Atherton Hospital
Buderim Private Hospital
Caboolture Hospital
Gladstone Hospital
Gove District Hospital
Greenslopes Hospital
Hervey Bay Hospital
Ipswich Hospital
John Flynn Private Hospital
Katherine District Hospital
Kilcoy Hospital
Kingaroy Hospital
Mackay Base Hospital
Mareeba Hospital
Maryborough Hospital
Mater Hospital Brisbane
Mater Private Hospital Brisbane
Mater Rockhampton
Mt Isa Hospital
Pindara Private Hospital
Redcliffe Hospital
Redland Hospital
Royal Brisbane And Women's Hospital
St Andrew's War Memorial Hospital
St Vincent's Private Hospital Northside
St Vincent's Private Hospital Toowoomba
Tennant Creek Hospital
The Prince Charles Hospital
Toowoomba Hospital
Townsville Hospital
Warwick Hospital
Wesley 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.

The National Antimicrobial Utilisation Surveillance Program (NAUSP) is funded by the Commonwealth Department of Health and Aged Care. 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 the Commonwealth.

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