NAUSP
National Antimicrobial Utilisation Surveillance Program

Antimicrobial Utilisation Surveillance in Australian Hospitals

National aggregated antibacterial usage rates in Australian hospitals

Dec 2023 – Dec 2025

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 using aggregated data from all hospitals currently contributing to NAUSP. Aggregated usage rates of all antibacterials by all contributing hospitals are shown for the total acute use (excluding Emergency Department and theatre) and for critical care. Rates are also reported for 6 target antibacterial classes, and national critical care and non-critical care rates are shown for individual agents within the 6 target classes.

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/.

Usage rates for this reporting period include data from 240 hospitals. Critical care rates include data from 148 contributors. Some hospitals were unable to submit data for this reporting period and comparator rates may vary from previous reports.

Enquiries regarding this report should be directed to the Program Manager, NAUSP (email: Health.NAUSPhelp@sa.gov.au).

1. TOTAL HOSPITAL ANTIBACTERIAL USE (INCLUDING ALL CLASSES)

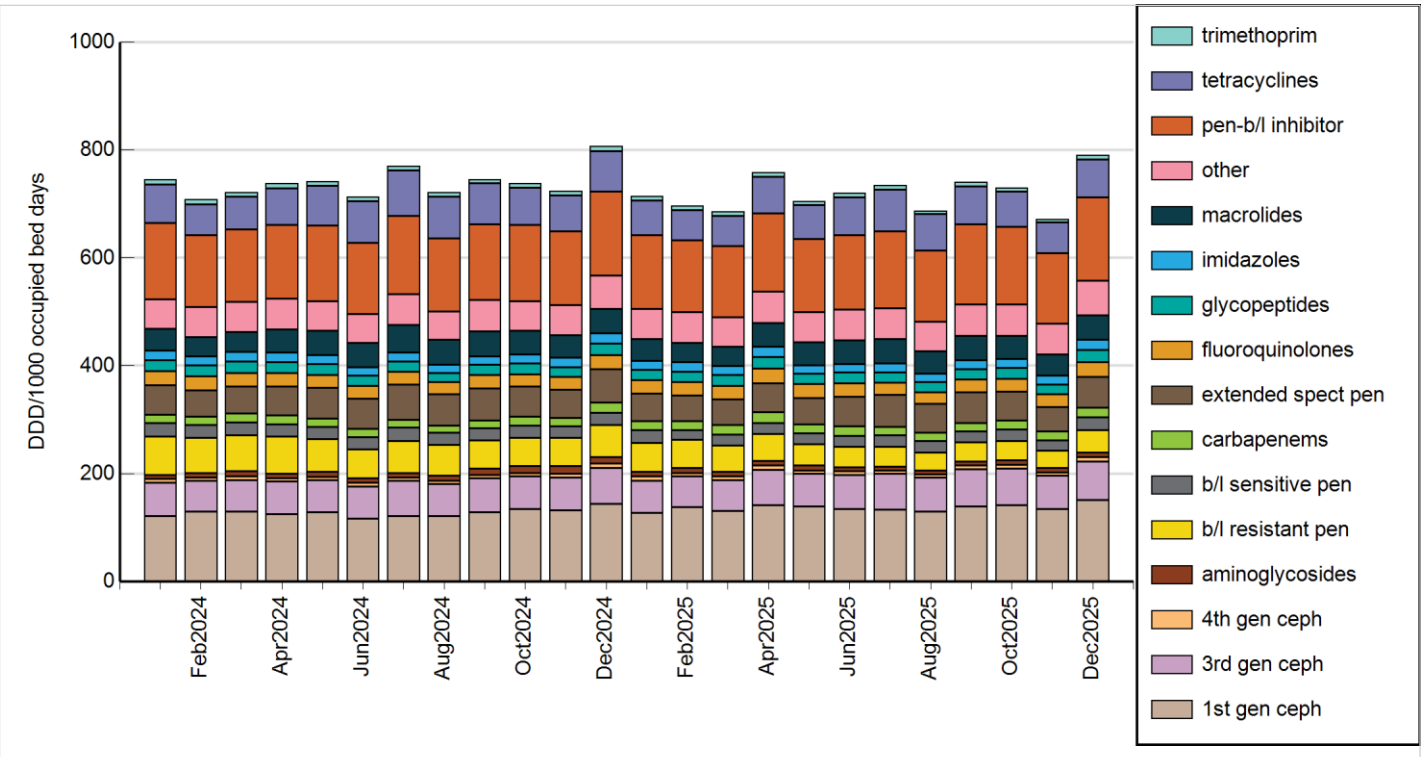

Chart 1: Total hospital antimicrobial use by all contributors (all classes)

2. TOTAL INTENSIVE CARE UNIT ANTIBACTERIAL USE (INCLUDING ALL CLASSES)

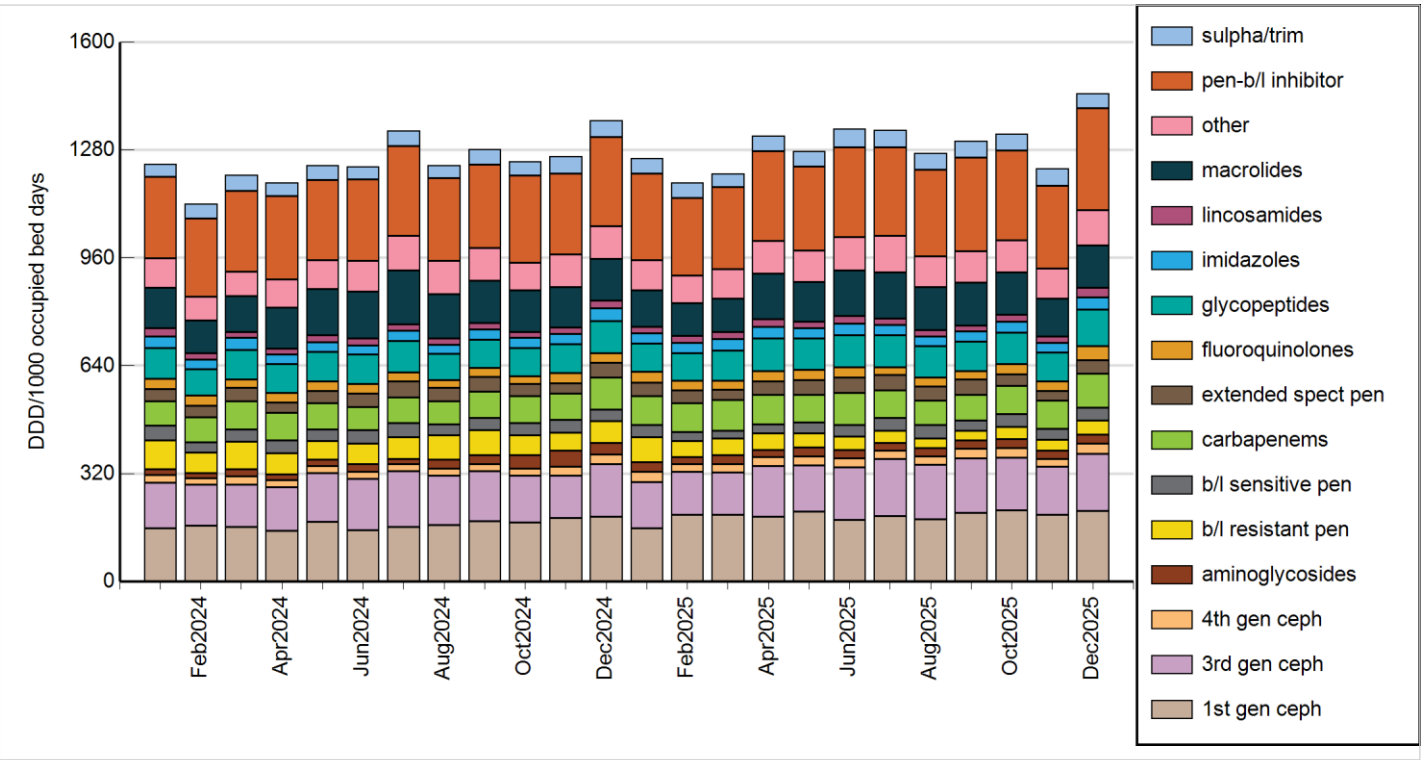

Chart 2: Total Critical Care antimicrobial use by all contributors (all classes)

3. TOTAL HOSPITAL USE BY ANTIBACTERIAL CLASS (SELECTED CLASSES)

Total hospital antimicrobial utilisation rates for 3rd/4th generation cephalosporins, glycopeptides, carbapenems, fluoroquinolones, aminoglycosides and anti-pseudomonal penicillin/ß-lactamase inhibitor combinations are displayed for the period July 2023 to June 2025 in charts 3 and 4. In the following charts, 'C' denotes peer group.

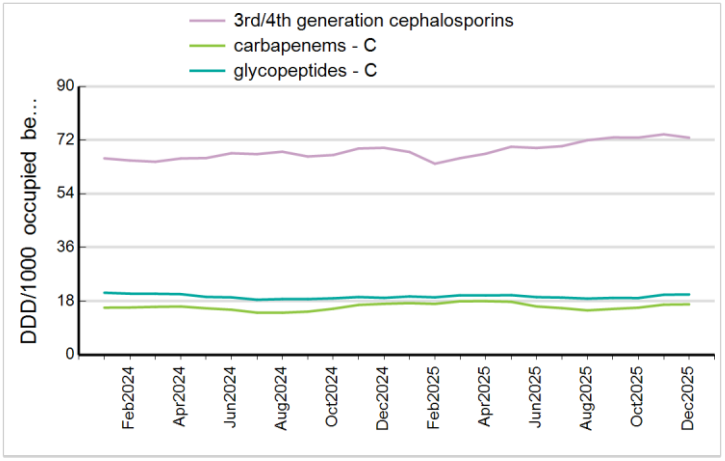

Chart 3: Total hospital usage of 3rd/4th generation cephalosporins, glycopeptides and carbapenems

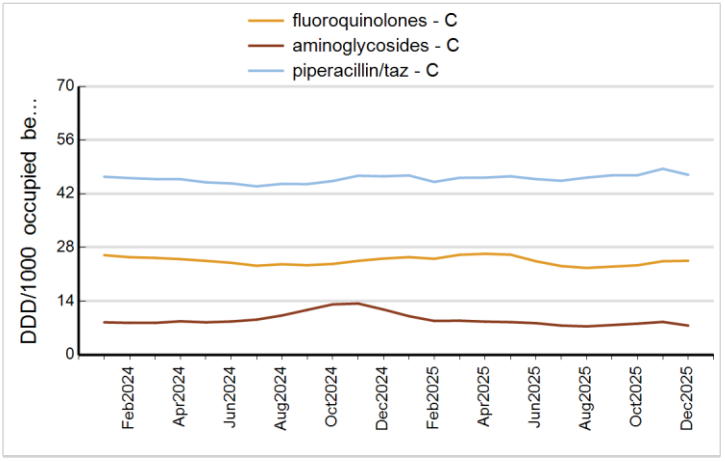

Chart 4: Total hospital usage of fluoroquinolones, aminoglycosides and anti-pseudomonal penicillins plus ß-lactamase inhibitor

4. CRITICAL CARE (ICU/HDU) COMPARED TO OTHER HOSPITAL USAGE (NON-CRITICAL CARE)

Usage rates for Critical Care compared to non-Critical Care for each antimicrobial class are shown in charts 5 - 10. Higher usage rates in Critical Care compared to non-Critical Care are expected, based on the density of usage in these areas.

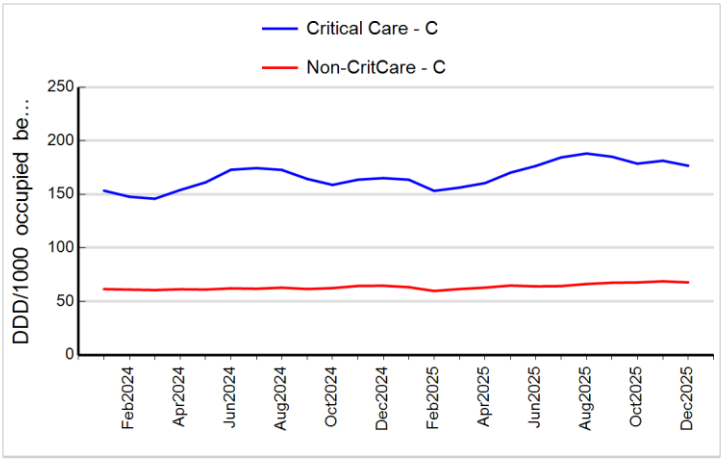

Chart 5: 3rd/4th generation cephalosporins

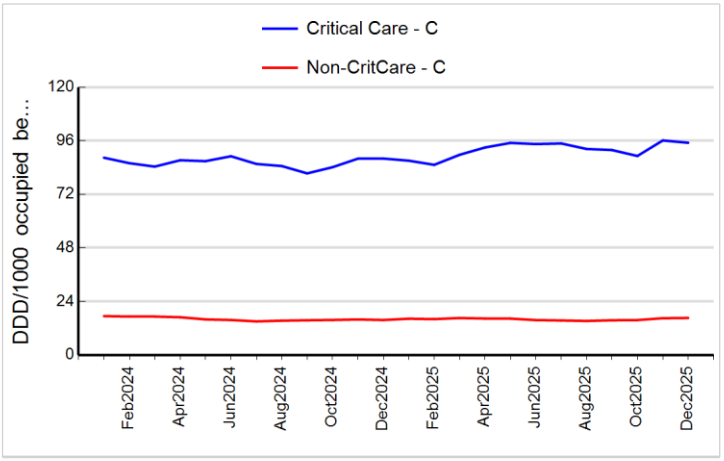

Chart 6: glycopeptides

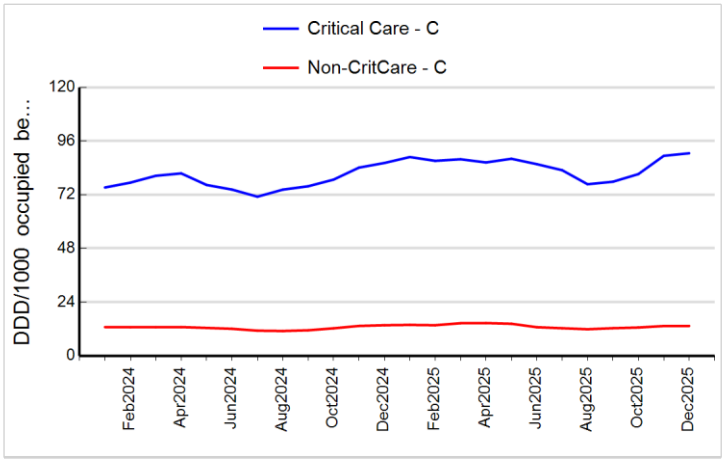

Chart 7: carbapenems

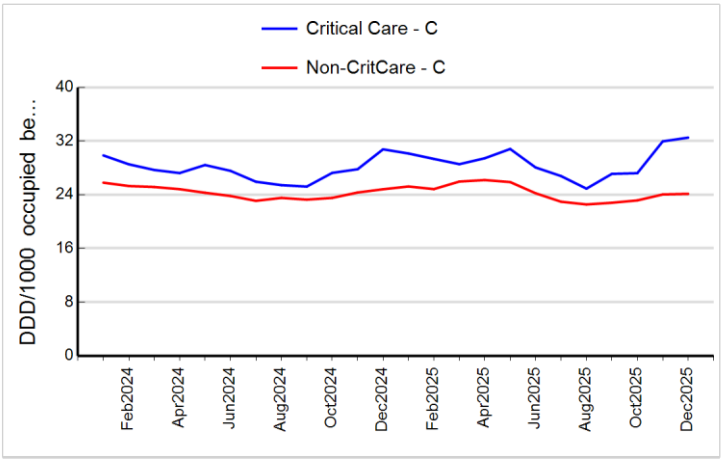

Chart 8: fluoroquinolones

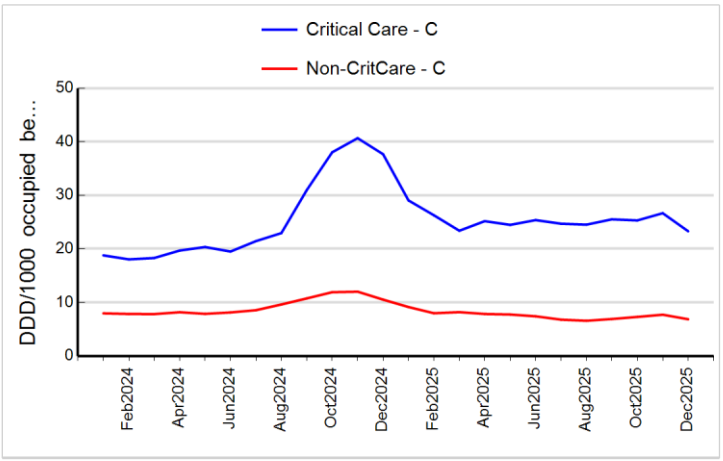

Chart 9: aminoglycosides

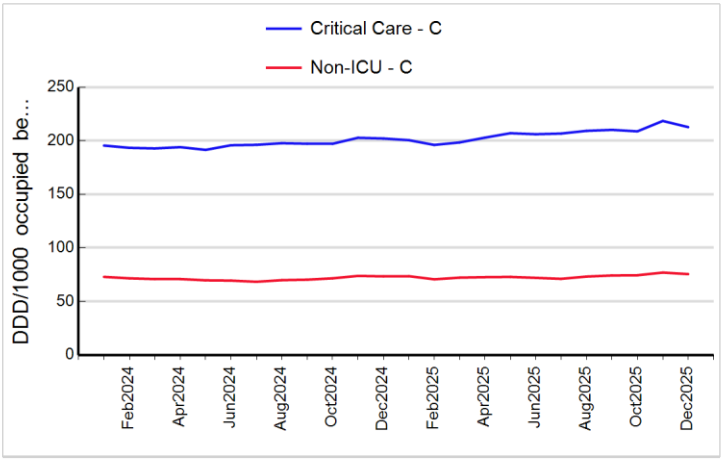

Chart 10: parenteral penicillins / ß-lactamase inhibitors

5. CRITICAL CARE ANTIMICROBIAL UTILISATION RATES FOR INDIVIDUAL AGENTS

Critical Care antimicrobial utilisation rates for individual agents within reported classes are shown in the Charts 11 - 16 below.

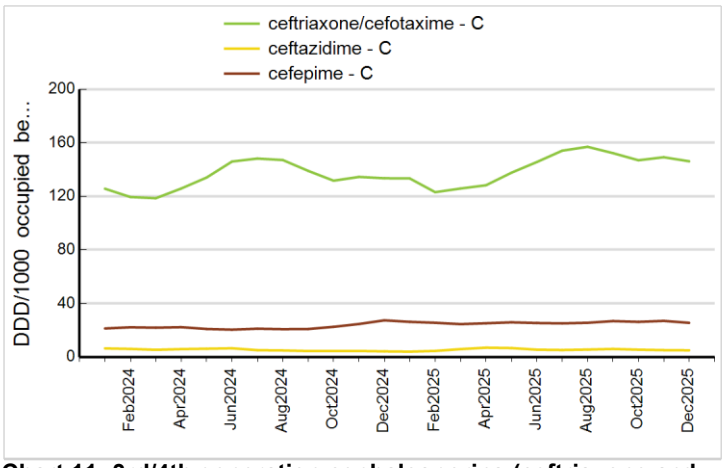

Chart 11: 3rd/4th generation cephalosporins (ceftriaxone and cefotaxime grouped together)

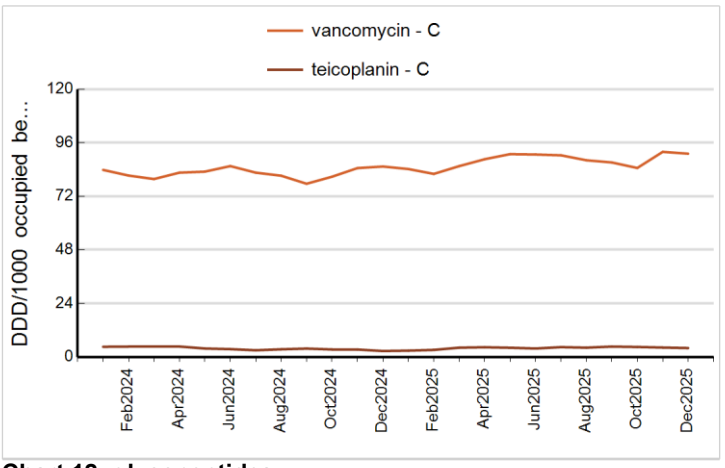

Chart 12: glycopeptides

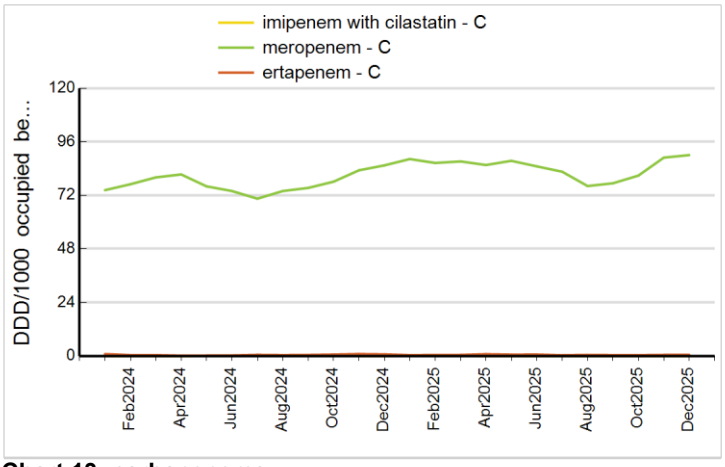

Chart 13: carbapenems

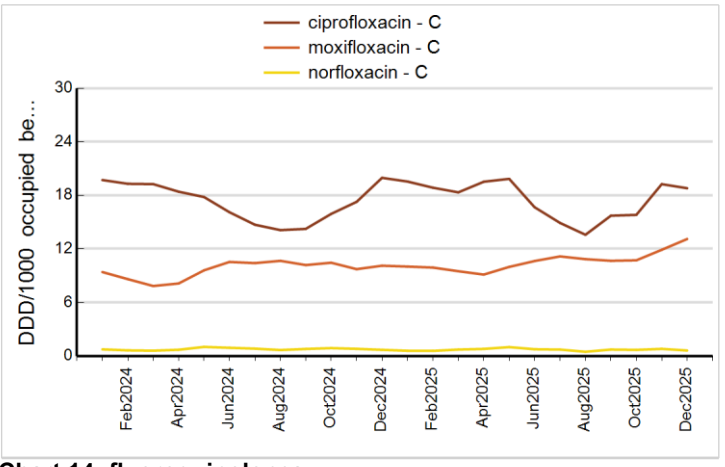

Chart 14: fluoroquinolones

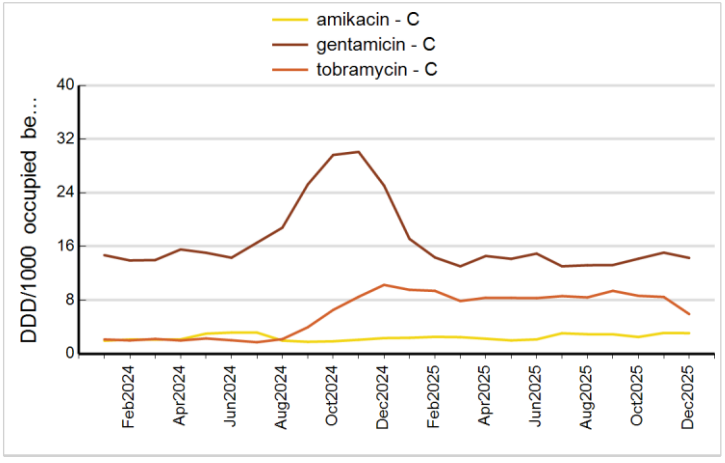

Chart 15: aminoglycosides

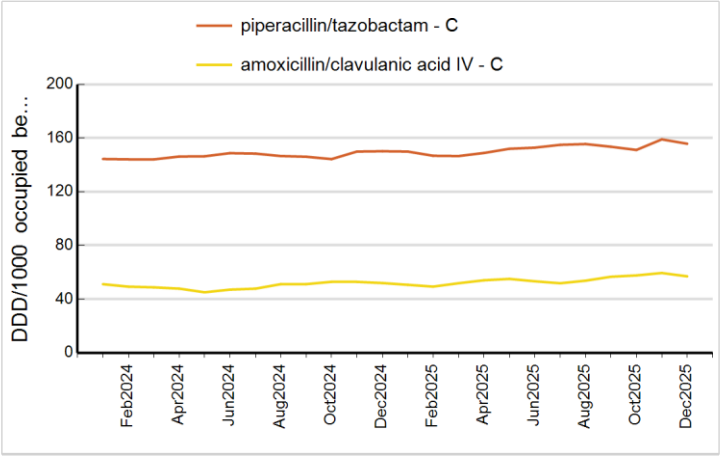

Chart 16: parenteral penicillin / ß-lactamase inhibitors

6. NON-CRITICAL CARE ANTIMICROBIAL UTILISATION RATES FOR INDIVIDUAL AGENTS

Non-Critical Care antimicrobial utilisation rates for individual agents within reported classes are shown in Charts 17 - 22 below.

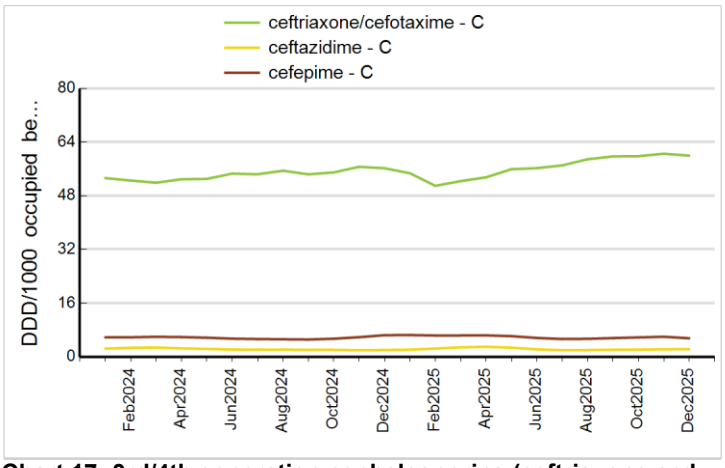

Chart 17: 3rd/4th generation cephalosporins (ceftriaxone and cefotaxime grouped together)

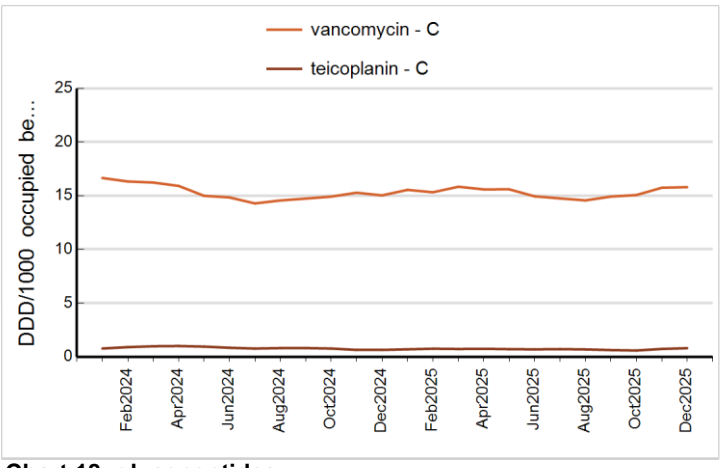

Chart 18: glycopeptides

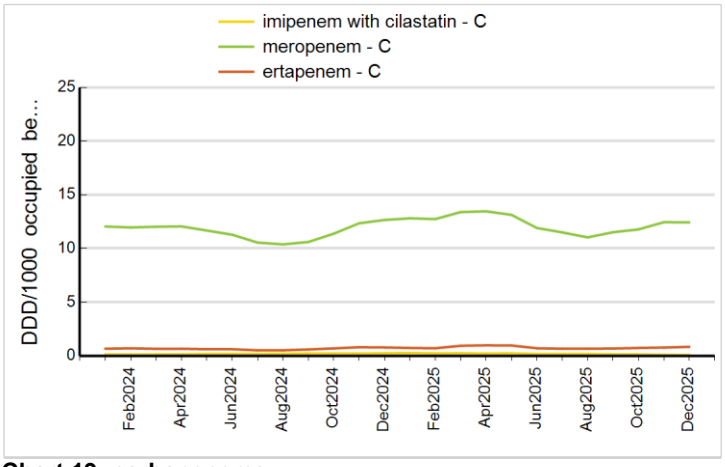

Chart 19: carbapenems

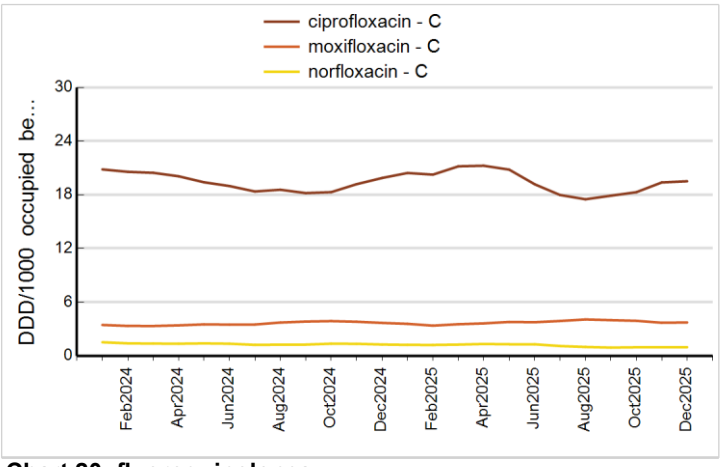

Chart 20: fluoroquinolones

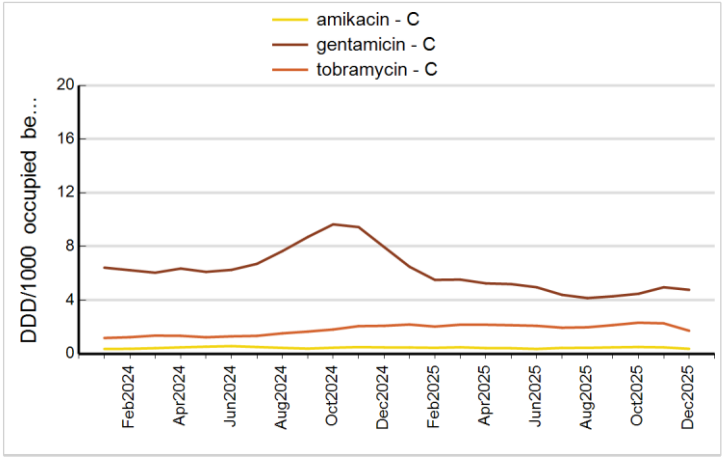

Chart 21: aminoglycosides

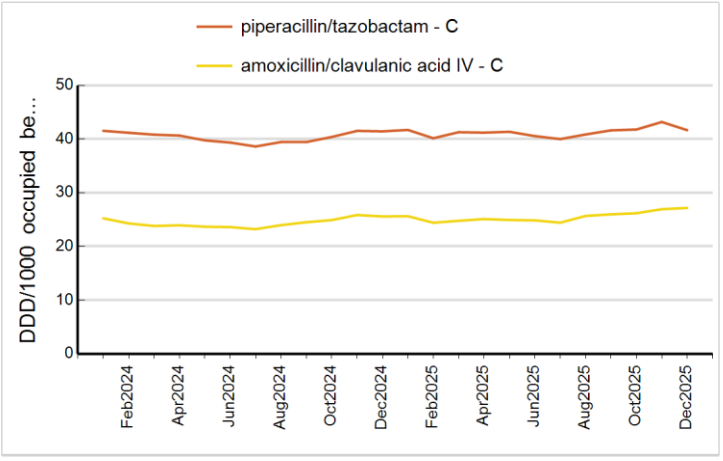

Chart 22: parenteral penicillin / ß-lactamase inhibitors

This report includes data from the following hospitals:

ACT: CALVARY JOHN JAMES HOSPITAL, NORTH CANBERRA HOSPITAL

NSW: ARMIDALE HOSPITAL, AUBURN HOSPITAL, BANKSTOWN HOSPITAL, BATEMANS BAY DISTRICT HOSPITAL, BATHURST BASE HOSPITAL, BELLINGER RIVER DISTRICT HOSPITAL, BELMONT HOSPITAL, BLACKTOWN HOSPITAL, BLUE MOUNTAINS HOSPITAL, BOWRAL HOSPITAL, BRISBANE WATERS PRIVATE HOSPITAL, BROKEN HILL BASE HOSPITAL, CALVARY RIVERINA HOSPITAL, CAMPBELLTOWN HOSPITAL, CAMPBELLTOWN PRIVATE HOSPITAL, CANTERBURY HOSPITAL, CESSNOCK DISTRICT HOSPITAL, CHRIS O'BRIEN LIFEHOUSE, COFFS HARBOUR HOSPITAL, CONCORD HOSPITAL, COOMA HOSPITAL, DUBBO BASE HOSPITAL, FAIRFIELD HOSPITAL, FORBES DISTRICT HOSPITAL, FORSTER PRIVATE HOSPITAL, GLEN INNES DISTRICT HOSPITAL, GLOUCESTER SOLDIERS' MEMORIAL HOSPITAL, GOSFORD HOSPITAL, GOSFORD PRIVATE HOSPITAL, GOULBURN BASE HOSPITAL, GRAFTON BASE HOSPITAL, GRIFFITH BASE HOSPITAL, GUNNEDAH HOSPITAL, HORNSBY KU-RING-GAI HOSPITAL, HURSTVILLE PRIVATE HOSPITAL, INSTITUTE OF RHEUMATOLOGY AND ORTHOPAEDICS, INVERELL DISTRICT HOSPITAL, JOHN HUNTER HOSPITAL, KAREENA PRIVATE HOSPITAL, KEMPSEY DISTRICT HOSPITAL, KURRI KURRI HOSPITAL, LINGARD PRIVATE HOSPITAL, LITHGOW HOSPITAL, LIVERPOOL HOSPITAL, MACKSVILLE DISTRICT HOSPITAL, MAITLAND HOSPITAL, MAITLAND PRIVATE HOSPITAL, MANNING BASE HOSPITAL, MATER HOSPITAL NORTH SYDNEY, MAYO PRIVATE HOSPITAL, MILTON-ULLADULLA HOSPITAL, MOREE HOSPITAL, MORUYA HOSPITAL, MT DRUITT HOSPITAL, MUDGEE DISTRICT HOSPITAL, MUSWELLBROOK HOSPITAL, NARRABRI HOSPITAL, NEPEAN HOSPITAL, NEPEAN PRIVATE HOSPITAL, NEWCASTLE MATER, NORTHERN BEACHES HOSPITAL, ORANGE HEALTH SERVICE, PARKES HOSPITAL, PORT MACQUARIE BASE HOSPITAL, PRINCE OF WALES HOSPITAL, QUEANBEYAN HOSPITAL, ROYAL NORTH SHORE HOSPITAL, ROYAL PRINCE ALFRED HOSPITAL, RYDE HOSPITAL, SCOTT MEMORIAL HOSPITAL, SHELLHARBOUR HOSPITAL, SHOALHAVEN HOSPITAL, SINGLETON DISTRICT HOSPITAL, SOUTH EAST REGIONAL HOSPITAL, ST GEORGE HOSPITAL, ST VINCENT'S HOSPITAL SYDNEY, SUTHERLAND HOSPITAL, SYDNEY HOSPITAL/SYDNEY EYE HOSPITAL, TAMWORTH HOSPITAL, WAGGA WAGGA BASE HOSPITAL, WESTMEAD HOSPITAL, WOLLONGONG HOSPITAL, WYONG HOSPITAL

NT : ALICE SPRINGS HOSPITAL, DARWIN PRIVATE HOSPITAL, GOVE DISTRICT HOSPITAL, KATHERINE DISTRICT HOSPITAL, PALMERSTON REGIONAL HOSPITAL, ROYAL DARWIN HOSPITAL, TENNANT CREEK HOSPITAL

QLD: ATHERTON HOSPITAL, BRISBANE PRIVATE HOSPITAL, BUDERIM PRIVATE HOSPITAL, CABOOLTURE HOSPITAL, GLADSTONE HOSPITAL, GOLD COAST PRIVATE HOSPITAL, GOLD COAST UNIVERSITY HOSPITAL, GREENSLOPES HOSPITAL, GYMPIE HEALTH SERVICE, HERVEY BAY HOSPITAL, IPSWICH HOSPITAL, JOHN FLYNN PRIVATE HOSPITAL, KILCOY HOSPITAL, KINGAROY HOSPITAL, MACKAY BASE HOSPITAL, MAREEBA HOSPITAL, MARYBOROUGH HOSPITAL, MATER BUNDABERG, MATER HOSPITAL BRISBANE, MATER MACKAY, MATER MOTHERS' HOSPITAL, MATER PRIVATE HOSPITAL BRISBANE, MATER PRIVATE HOSPITAL SPRINGFIELD, MATER PRIVATE HOSPITAL TOWNSVILLE - HYDE PARK, MATER PRIVATE HOSPITAL TOWNSVILLE - PIMLICO, MATER REDLAND PRIVATE, MATER ROCKHAMPTON, MT ISA HOSPITAL, NAMBOUR GENERAL HOSPITAL, PINDARA PRIVATE HOSPITAL, QUEEN ELIZABETH 2 JUBILEE HOSPITAL, REDCLIFFE HOSPITAL, REDLAND HOSPITAL, ROBINA HOSPITAL, ROYAL BRISBANE AND WOMEN'S HOSPITAL, ST ANDREW'S WAR MEMORIAL HOSPITAL, ST STEPHEN'S HOSPITAL HERVEY BAY, ST VINCENT'S PRIVATE HOSPITAL BRISBANE, ST VINCENT'S PRIVATE HOSPITAL NORTHSIDE, ST VINCENT'S PRIVATE HOSPITAL TOOWOOMBA, STARS - SURGICAL TREATMENT AND REHABILITATION SERVICES,SUNNYBANK PRIVATE HOSPITAL, SUNSHINE COAST UNIVERSITY HOSPITAL, THE PRINCE CHARLES HOSPITAL, TOOWOOMBA HOSPITAL, TOWNSVILLE HOSPITAL, WARWICK HOSPITAL, WESLEY HOSPITAL

SA : ASHFORD HOSPITAL, BURNSIDE WAR MEMORIAL HOSPITAL, CALVARY ADELAIDE PRIVATE HOSPITAL, CALVARY CENTRAL DISTRICTS HOSPITAL, CALVARY NORTH ADELAIDE HOSPITAL, FLINDERS MEDICAL CENTRE, FLINDERS PRIVATE HOSPITAL, GAWLER HEALTH SERVICE, LYELL MCEWIN HOSPITAL, MEMORIAL HOSPITAL, MODBURY HOSPITAL, MOUNT BARKER DISTRICT SOLDIERS MEMORIAL HOSPITAL, MT GAMBIER HOSPITAL, NOARLUNGA HOSPITAL, PORT LINCOLN HOSPITAL, QUEEN ELIZABETH HOSPITAL, ROYAL ADELAIDE HOSPITAL, SOUTH COAST DISTRICT HOSPITAL, ST ANDREW'S HOSPITAL

TAS: CALVARY LENAH VALLEY HOSPITAL, CALVARY ST. JOHN'S HOSPITAL, LAUNCESTON GENERAL HOSPITAL, MERSEY COMMUNITY HOSPITAL, NORTH WEST REGIONAL HOSPITAL, ROYAL HOBART HOSPITAL

VIC: ALBURY WODONGA - ALBURY, ALBURY WODONGA - WODONGA, ALFRED HOSPITAL, ANGLISS HOSPITAL, AUSTIN HOSPITAL, BALLARAT BASE HOSPITAL, BENDIGO HEALTH, BOX HILL HOSPITAL, CABRINI HOSPITAL BRIGHTON, CABRINI HOSPITAL MALVERN, CASEY HOSPITAL, CENTRAL GIPPSLAND HEALTH, DANDENONG HOSPITAL, FRANKSTON HOSPITAL, GEELONG HOSPITAL, GRAMPIANS HEALTH - HORSHAM, GRAMPIANS HEALTH - STAWELL, HOLMESGLEN PRIVATE HOSPITAL, JOHN FAWKNER PRIVATE HOSPITAL, KNOX PRIVATE HOSPITAL, MAROONDAH HOSPITAL, MERCY WOMEN'S HOSPITAL, MONASH MEDICAL CENTRE CLAYTON, MONASH MOORABBIN HOSPITAL, PETER MACCALLUM CANCER CENTRE, ROSEBUD HOSPITAL, ROYAL MELBOURNE HOSPITAL, SANDRINGHAM HOSPITAL, SOUTH EASTERN PRIVATE HOSPITAL, ST JOHN OF GOD GEELONG, ST VINCENT'S HOSPITAL MELBOURNE, ST VINCENT'S PRIVATE EAST MELB, ST VINCENT'S PRIVATE FITZROY, ST VINCENT'S PRIVATE HOSPITAL KEW, ST VINCENT'S PRIVATE HOSPITAL WERRIBEE, SWAN HILL DISTRICT HEALTH, THE BAYS HOSPITAL MORNINGTON, THE NORTHERN HOSPITAL, THE ROYAL VICTORIAN EYE & EAR HOSPITAL, VICTORIAN HEART HOSPITAL, WARRNAMBOOL BASE HOSPITAL, WERRIBEE MERCY HOSPITAL, WEST GIPPSLAND HOSPITAL, WESTERN HEALTH FOOTSCRAY, WESTERN HEALTH SUNSHINE

WA : ALBANY HEALTH CAMPUS, ARMADALE KALAMUNDA GROUP, BENTLEY HEALTH SERVICE, BROOME HOSPITAL, BUNBURY REGIONAL HOSPITAL, BUSSELTON HEALTH, COLLIE HOSPITAL, DERBY HOSPITAL, ESPERANCE 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, MARGARET RIVER HOSPITAL, MOUNT HOSPITAL, NARROGIN HOSPITAL, NORTHAM HOSPITAL, OSBORNE PARK HOSPITAL, ROCKINGHAM HOSPITAL, ROYAL PERTH HOSPITAL, SIR CHARLES GAIRDNER HOSPITAL, ST JOHN OF GOD MIDLAND, ST JOHN OF GOD MURDOCH, ST JOHN OF GOD SUBIACO, WARREN HOSPITAL MANJIMUP

The National Antimicrobial Utilisation Surveillance Program (NAUSP) is funded by the Australian Centre for Disease Control. NAUSP is administered by the Communicable Disease Control Branch, South Australian Department for Health and Wellbeing. 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 Australian Centre for Disease Control, or the Australian Commission on Safety and Quality in Health Care according to program agreements.