

## Public and Private Acute Group C, Other Specialist Acute, and Specialist Women's Critical Care benchmarking report July – December 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 occupied bed days.

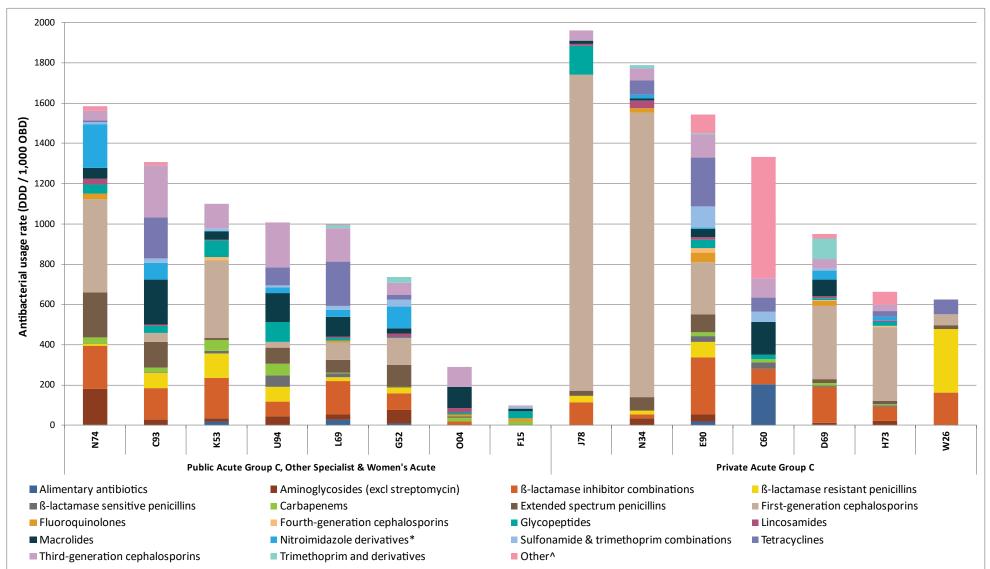
Contributing hospitals are assigned to Australian Institute for Health and Welfare (AIHW) defined peer groups.<sup>1</sup> Contributing hospitals can find their de-identifying code via the NAUSP Portal 'Maintain My Hospital' drop-down menu.

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: <u>https://www.whocc.no/atc\_ddd\_methodology/purpose\_of\_the\_atc\_ddd\_system/</u>

The chart below presents aggregate antibacterial usage data in the Critical Care for the respective contributing hospitals over the six-month period from 1 July 2024 to 31 December 2024.

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

Chart 1: Critical Care antibacterial usage rates (DDD/1000 OBD) in NAUSP Public and Private Acute Group C, Other Specialist Acute, and Specialist Women's contributor hospitals, July-December 2024



Alimentary antibiotics = colistin (oral), fidaxomicin, neomycin (oral), nystatin (oral), paromomycin, rifaximin, vancomycin (oral).

\*Nitroimidazole derivatives = metronidazole, tinidazole

<sup>^</sup>Other = amphenicols, antimycotic antibiotics, combinations for eradication of *Helicobacter pylori*, monobactams, nitrofurans, linezolid, daptomycin, other cephalosporins, polymyxins, rifamycins, second-generation cephalosporins, steroids, streptogramins and streptomycin.

## This report includes data from 15 Public and Private Acute Group C, Other Specialist Acute and Specialist Women's hospitals:

Atherton Hospital Brisbane Private Hospital Broome Hospital Calvary Bruce Private Hospital Calvary St. Vincent's Launceston Grampians Health - Horsham Hurstville Private Hospital Kareena Private Hospital King Edward Memorial Hospital Lithgow Hospital Maitland Private Hospital Mercy Women's Hospital Moruya Hospital St Vincent's Private Hospital Lismore Victorian Heart 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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|                                             | colictin (oral)             |                                               | dalbavancin                                        |
|---------------------------------------------|-----------------------------|-----------------------------------------------|----------------------------------------------------|
| Alimentary<br>antibiotics                   | colistin (oral)             | 4                                             |                                                    |
|                                             | fidaxomicin                 | Glycopeptides                                 | oritavancin                                        |
|                                             | neomycin (oral)             |                                               | teicoplanin                                        |
|                                             | nystatin (oral)             |                                               | vancomycin<br>metronidazole                        |
|                                             | paromomycin                 | Imidazole derivatives                         | (parenteral)                                       |
|                                             | rifaximin                   | Intermediate acting<br>sulfonamides           | sulfadiazine                                       |
|                                             | vancomycin (oral)           | Lincosamides                                  | clindamycin                                        |
| Aminoglycosides<br>(excl streptomycin)      | amikacin                    | Lincosannaes                                  | lincomycin                                         |
|                                             | gentamicin                  | - Macrolides                                  | azithromycin                                       |
|                                             | neomycin                    |                                               | clarithromycin                                     |
|                                             | tobramycin                  |                                               | erythromycin                                       |
| Beta lactamase<br>inhibitor<br>combinations | amoxicillin-clavulanate     |                                               | roxithromycin                                      |
|                                             | ampicillin-sulbactam        | Nitroimidazole                                | metronidazole<br>(oral, rectal)                    |
|                                             | piperacillin-tazobactam     | derivatives                                   | tinidazole (oral, rectal                           |
|                                             | ticarcillin-clavulanate     | Sulfonamide &<br>trimethoprim<br>combinations | trimethoprim-<br>sulfamethoxazole                  |
| Beta lactamase<br>resistant penicillins     | dicloxacillin               | - Tetracyclines                               | doxycycline                                        |
|                                             | flucloxacillin              |                                               | minocycline                                        |
| Beta lactamase<br>sensitive penicillins     | benzathine benzylpenicillin |                                               | tetracycline                                       |
|                                             | benzylpenicillin            |                                               | tigecycline                                        |
|                                             | phenoxymethylpenicillin     | Third generation cephalosporins               | cefotaxime                                         |
|                                             | procaine benzylpenicillin   |                                               | ceftazidime                                        |
| Carbapenems                                 | doripenem                   |                                               | ceftazidime-<br>tazobactam                         |
|                                             | ertapenem                   |                                               | ceftriaxone                                        |
|                                             | imipenem-cilastatin         | Trimethoprim and<br>derivatives               | trimethoprim                                       |
|                                             | meropenem                   | Other antibacterials<br>& combinations        | daptomycin                                         |
|                                             | meropenem-vaborbactam       |                                               | fosfomycin                                         |
| Extended spectrum<br>penicillins            | amoxicillin                 |                                               | linezolid                                          |
|                                             | ampicillin                  |                                               | methenamine<br>hippurate                           |
|                                             | piperacillin                |                                               | tedizolid                                          |
|                                             | pivmecillinam               |                                               | esomeprazole,<br>amoxicillin and<br>clarithromycin |
|                                             | temocillin                  |                                               | chloramphenicol                                    |
| First generation cephalosporins             | cefalexin                   |                                               | streptomycin                                       |
|                                             | cefazolin                   |                                               | colistin                                           |
| Fluoroquinolones                            | ciprofloxacin               |                                               | polymyxin B                                        |
|                                             | levofloxacin                |                                               | sodium fusidate                                    |
|                                             | moxifloxacin                |                                               | cycloserine                                        |
|                                             | norfloxacin                 |                                               | rifabutin                                          |
|                                             | ofloxacin                   |                                               | rifampicin                                         |
| Fourth generation cephalosporins            | cefepime                    |                                               | rifapentine                                        |
| Other antibacterials & combinations         | pristinamycin               | Other<br>cephalosporins and<br>penems         | cefiderocol                                        |
|                                             | quinupristin/dalfopristin   |                                               | ceftaroline                                        |
|                                             | aztreonam                   |                                               | ceftolozane-avibactar                              |

| nitrofurantoin | faropenem |
|----------------|-----------|
| cefaclor       |           |
| cefoxitin      |           |
| cefuroxime     |           |