Antimicrobial utilisation rates provided in this report are calculated using the number of defined daily doses (DDD) of the antimicrobial agent or class consumed each month per 1,000 occupied bed days using average data for contributing hospitals in the Western Australia peer group.

A change to the DDD for a number of high volume antimicrobials occurred in January 2019. This has been applied to all retrospective data. For more information refer to WHO WTC/DDD alterations 2019.

Antimicrobial classes reported on pages 2 to 3 are:
- 3rd/4th generation cephalosporins (ceftriaxone, cefotaxime, ceftazidime, cefepime);
- glycopeptides (vancomycin, teicoplanin);
- carbapenems (meropenem, imipenem/cilastatin, ertapenem);
- fluoroquinolones (ciprofloxacin, moxifloxacin, norfloxacin);
- aminoglycosides (gentamicin, tobramycin, amikacin); and
- anti-pseudomonal penicillins plus β-lactamase inhibitor (piperacillin/tazobactam).

Aggregated rates for this reporting period include data from 26 hospitals and 6 ICUs. Some hospitals were unable to submit data for this reporting period and comparator rates may vary from previous reports.

Enquiries should be directed to the Senior Pharmacist, NAUSP (email: healthantibio@sa.gov.au)

1. TOTAL HOSPITAL ANTIMICROBIAL USE (INCLUDING ALL CLASSES)

Chart 1: total hospital antimicrobial use by all contributors (all classes)
2. TOTAL INTENSIVE CARE UNIT ANTIMICROBIAL USE (INCLUDING ALL CLASSES)

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

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

4. **ANTIMICROBIAL USAGE RATES FOR INDIVIDUAL AGENTS**

Aggregated state-wide antimicrobial usage rates for individual agents within reported classes are shown in Charts 4 to 9 below.

- **Chart 4**: 3rd/4th generation cephalosporins
- **Chart 5**: Glycopeptides (vancomycin, teicoplanin)
- **Chart 6**: Carbapenems
- **Chart 7**: Fluoroquinolones
- **Chart 8**: Aminoglycosides
- **Chart 9**: Parenteral penicillin/β-lactamase inhibitor combinations
This report includes data from the following hospitals:

WA: ALBANY HOSPITAL, BENTLEY HEALTH SERVICE, BROOME HOSPITAL, BUNBURY REGIONAL HOSPITAL, BUSSELTON HEALTH, DERBY HOSPITAL, ESPERANCE HOSPITAL, FIONA STANLEY HOSPITAL, FREMANTLE HOSPITAL, GERALDTON HOSPITAL, HEDLAND HEALTH CAMPUS, KALGOORLIE HEALTH CAMPUS, KING EDWARD MEMORIAL HOSPITAL, KUNUNURRA HOSPITAL, MOUNT HOSPITAL, NARROGIN HOSPITAL, NORTHAM HOSPITAL, GSBORNE PARK HOSPITAL, ROCKINGHAM HOSPITAL, ROYAL PERTH HOSPITAL, SIR CHARLES GAIRDNER HOSPITAL, ST JOHN OF GOD BUNBURY, ST JOHN OF GOD MICALD, ST JOHN OF GOD MT LAWLEY, ST JOHN OF GOD MURDOCH, ST JOHN OF GOD SUBIACO.