Antimicrobial utilisation rates provided in this report are calculated using the number of defined daily doses (DDDs) of the antimicrobial agent or class consumed in each month per 1,000 occupied bed days using aggregated data for contributing hospitals in the peer group. Rates for aggregated use of all antibacterials by all contributors for the specialty are shown. Rates are also reported for use of 6 target antibacterial classes within the Respiratory specialty.

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.

Aggregated rates for this reporting period include data from 4 hospital(s). Some hospitals were unable to submit data for this reporting period and these rates may vary from previous reports.

Enquiries regarding this report should be directed to the Senior Pharmacist, National Antimicrobial Utilisation Surveillance Program (ph (08) 7425 7169 or health.nausphelp@sa.gov.au)

1. TOTAL SPECIALTY ANTIMICROBIAL USE (INCLUDING ALL CLASSES)

![Chart 1: Total Respiratory antimicrobial use (all classes)](image)

2. TOTAL SPECIALTY USE BY ANTIMICROBIAL CLASS (SELECTED CLASSES)

Total specialty antimicrobial utilisation rates for 3rd and 4th generation cephalosporins, glycopeptides, carbapenems, fluoroquinolones, aminoglycosides and anti-pseudomonal penicillins with beta-lactamase inhibitor are displayed for the period July 2017 to June 2019 in charts 2 and 3.

![Chart 2: Respiratory usage of 3rd/4th generation cephalosporins, glycopeptides and carbapenems](image)

![Chart 3: Respiratory usage of fluoroquinolones, aminoglycosides and anti-pseudomonal penicillins plus beta-lactamase inhibitor](image)
3. SPECIALTY ANTIMICROBIAL UTILISATION RATES FOR INDIVIDUAL AGENTS

Specialty antimicrobial utilisation rates for individual agents within reported classes are shown in charts 4 to 9 below.

**Chart 4: Respiratory usage of glycopeptides (vancomycin and teicoplanin)**

**Chart 5: Respiratory usage of 3rd/4th generation cephalosporins (ceftriaxone and cefotaxime grouped together)**

**Chart 6: Respiratory usage of carbapenems (meropenem, ertapenem and imipenem with cilastatin)**

**Chart 7: Respiratory usage of fluoroquinolones (ciprofloxacin, moxifloxacin and norfloxacin)**

**Chart 8: Respiratory usage of aminoglycosides (gentamicin, amikacin and tobramycin).**

**Chart 9: Respiratory usage of parenteral penicillins with beta-lactamase inhibitor (piperacillin-tazobactam and amoxicillin-clavulanate).**
4. SPECIALTY ANTIMICROBIAL UTILISATION RATES

Specialty rates for other agents of interest are shown in chart/s below.

Chart 10: Respiratory usage of macrolides (azithromycin, clarithromycin, erythromycin)
This report includes data from the following hospitals:

**NSW:** NEPEAN HOSPITAL, WESTMEAD HOSPITAL

**QLD:** GREENSLOPES HOSPITAL

**SA:** ROYAL ADELAIDE HOSPITAL