Victoria – statewide benchmarking report
January 2021 to June 2021

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.\(^1\) 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: https://www.whocc.no/atc_ddd_methodology/purpose_of_the_atc_ddd_system/

The chart below presents total acute antibacterial usage data for the respective contributing hospitals over the six-month period from 1st January 2021 to the 30th June 2021. Unless otherwise specified, the aggregate rates exclude usage in the emergency department and the operating theatre.

Chart 1: Total hospital antibacterial usage rates (DDD/1000 OBD) in NAUSP contributor hospitals, by peer group, Victoria, January - June 2021

Alimentary antibiotics = rifaximin, fidaxomycin. *Other = amphenicols, monobactams, nitrofurans, linezolid, daptomycin, other cephalosporins, polymyxins, rifamycins, second-generation cephalosporins, steroids, streptogramins and streptomycin.

[Hospital G51 includes ED and theatre usage in the aggregate rate]

This report includes data from the following 34 Victorian hospitals:

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
CENTRAL GIPPSLAND HEALTH
FRANKSTON HOSPITAL
GEELONG HOSPITAL
HEALESVILLE DISTRICT HOSPITAL
HOLMESGLEN PRIVATE HOSPITAL
MAROONDAH HOSPITAL
MERCY WOMEN’S HOSPITAL
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 MELBOURNE
ST VINCENT’S PRIVATE FITZROY
ST VINCENT’S PRIVATE HOSPITAL KEW
ST VINCENT’S PRIVATE WERRIBEE
SWAN HILL DISTRICT HEALTH
THE NORTHERN HOSPITAL
WARRNAMBOOL BASE HOSPITAL
WERRIBEE MERCY HOSPITAL
WEST GIPPSLAND HOSPITAL
WESTERN HEALTH FOOTSCRAY
WESTERN HEALTH SUNSHINE
## ANTIBACTERIAL CLASSES

<table>
<thead>
<tr>
<th>Alimentary antibiotics</th>
<th>Macrolides</th>
<th>Aminoglycosides</th>
<th>β-lactamase inhibitor combinations</th>
<th>β-lactamase resistant penicillins</th>
<th>β-lactamase sensitive penicillins</th>
<th>Carbapenems</th>
<th>Streptogramins</th>
<th>Sulfonamide-trimethoprim combinations</th>
<th>Tetracyclines</th>
<th>Extended-spectrum penicillins</th>
<th>First-generation cephalosporins</th>
<th>Fluoroquinolones</th>
<th>Fourth-generation cephalosporins</th>
<th>Glycopeptides</th>
<th>Imidazole derivatives</th>
<th>Intermediate-acting sulfonamides</th>
<th>Lincosamides</th>
</tr>
</thead>
<tbody>
<tr>
<td>paromomycin</td>
<td>erythromycin</td>
<td>tobramycin</td>
<td>amoxicillin-clavulanate</td>
<td>dicloxacillin</td>
<td>benzylpenicillin</td>
<td>meropenem</td>
<td>pristinamycin</td>
<td>sulfamethoxazole - trimethoprim</td>
<td>doxycycline</td>
<td>ampicillin</td>
<td>cefalexin</td>
<td>ciprofloxacin</td>
<td>cefepime</td>
<td>vancomycin</td>
<td>metronidazole</td>
<td>clindamycin</td>
<td></td>
</tr>
<tr>
<td>rifaximin</td>
<td>spiramycin</td>
<td>gentamicin</td>
<td>piperacillin-tazobactam</td>
<td>flucloxacillin</td>
<td>phenoxymethyl-penicillin</td>
<td>ertapenem</td>
<td>streptomycin</td>
<td>- combinations</td>
<td>minocycline</td>
<td>amoxicillin</td>
<td>cefalotin</td>
<td>norfloxacin</td>
<td>ceftirome</td>
<td>teicoplanin</td>
<td>sulfadiazine</td>
<td>lincomycin</td>
<td></td>
</tr>
<tr>
<td>fidaxomicin</td>
<td>roxithromycin</td>
<td>neomycin</td>
<td></td>
<td></td>
<td>benzathine benzylpenicillin</td>
<td>doripenem</td>
<td>- tigecycline</td>
<td></td>
<td>tetracycline</td>
<td>oral ampicillin</td>
<td>cefazolin</td>
<td>levofloxacin</td>
<td>-</td>
<td>dalbavancin</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>clarithromycin</td>
<td>amikacin</td>
<td></td>
<td></td>
<td>procaine benzylpenicillin</td>
<td>imipenem - cilastatin</td>
<td>streptokinase</td>
<td>- trimethoprim</td>
<td></td>
<td></td>
<td>amoxicillin - vaborbactam</td>
<td>-</td>
<td>moxifloxacin</td>
<td>-</td>
<td>dalbavancin</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>azithromycin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>meropenem - cilastatin</td>
<td>tetracyclines</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>linezolid</td>
<td>-</td>
<td>dalbavancin</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

### 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. NAUSP is administered by the Specialist Services Unit, Communicable Disease Control Branch, Department for Health and Wellbeing, 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.