

**Statement from Council of Presidents of Medical Colleges (CPMC) and the
Australian Commission on Safety and Quality in Health Care
Compliance with Australian guidelines for prescribing antimicrobials**

The Council of Presidents of Medical Colleges and the Australian Commission on Safety and Quality in Health Care (the Commission) support safe and effective prescribing of antimicrobials for treatment of infections and for surgical prophylaxis.

Optimising antimicrobial use is essential to improve the safe delivery of healthcare in Australia and reduce the risk that antimicrobial resistance (AMR) poses to future patient care. The Therapeutic Guidelines: Antibiotic¹ and local evidence-based guidelines should inform prescribing of antimicrobials. Guidelines are tailored to the changing patterns of AMR across Australia and ensure the most appropriate antimicrobials are recommended for patient care, balanced against the need to preserve efficacious antimicrobials for the future. Increasing rates of AMR mean that preserving the efficacy of antimicrobials, by ensuring they are used only when absolutely indicated, is more important now than ever.

Australia now outranks the European Union and European Economic Area (EU/EEA) average in *Escherichia coli* third-generation cephalosporin resistance (13.6% versus 13.4%), in methicillin resistance in *Staphylococcus aureus* (17.4% versus 14.1%), and is second only to Cyprus for the rate of *Enterococcus faecium* vancomycin resistance (45% versus 59.1%) in countries under surveillance. Resistance to vancomycin in *E. faecium* in the EU/EEA is 17.1%.²

The Hospital National Antimicrobial Prescribing Survey (NAPS), undertaken as part of the Antimicrobial Use and Resistance in Australia (AURA) Surveillance System that is coordinated by the Commission, has shown there was minimal improvement in overall appropriateness of prescribing from 2013 to 2018 (75.8% to 77.7%). Compliance with Therapeutic Guidelines: Antibiotic or local guidelines, declined from 72.1% in 2013 to 67.7% in 2018.³ The Surgical NAPS has identified similar issues; in 2019, 32% of procedural prophylaxis and 63% of post-procedural prophylaxis were deemed inappropriate. Four procedure groups contributed more than half (58.1%) of all inappropriate episodes – orthopaedic, plastic and reconstructive, abdominal and urological surgery.⁴

Whilst antimicrobial use in the community has been declining since 2015, Australia remains in the top quarter of countries for antimicrobial use, as measured by defined daily doses (DDDs) per 1,000 inhabitants, compared with 30 European countries and Canada.⁵ A large percentage of patients are prescribed antimicrobials for conditions for which there is no evidence of benefit, including influenza and acute bronchitis.⁵

In addition, since surveillance of antimicrobial use commenced in aged care homes in 2016, ongoing concerning high levels of inappropriate prescribing of antimicrobials have been identified.⁶ These include high rates of:

- Topical antimicrobial use for extended periods, and a large proportion of prn prescriptions
- Use of cefalexin for extended periods for prophylaxis for asymptomatic bacteriuria, when prophylaxis is not indicated for this condition.

The Commission's Antimicrobial Stewardship Clinical Care Standard sets out the principles for safe prescribing. These include: when a patient is prescribed antimicrobials, whether empirical or directed, this should be done in accordance with the current version of the Therapeutic Guidelines (or local antimicrobial formulary).⁷ Prescribing choices should also be informed by the patient's clinical condition and/or the results of microbiology testing.

All clinicians have a role to play in promoting safe and effective prescribing of antimicrobials.

References:

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