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## **New report shows wide variation in antimicrobial usage in Australian hospitals**

A new report on antimicrobial use in Australian hospitals shows there is wide variation in usage between hospitals, indicating that although overall usage rates have decreased slightly in recent years, there is still considerable room for improvement.

The report, *Antimicrobial use in Australian hospitals: 2014 report of the National Antimicrobial Utilisation Surveillance Program* (NAUSP), released today by the Australian Commission on Safety and Quality in Health Care (the Commission), provides important information on how much antimicrobials are being used in Australian hospitals.

The Commission's Senior Medical Advisor, Professor John Turnidge, said "Antimicrobial resistance is a serious threat to public health. One of the major contributors to resistance is misuse of antibiotics. Prudent antimicrobial prescribing is essential for reducing the emergence of widespread antimicrobial resistance in pathogens. The NAUSP report provides rich data on usage patterns which can be used to develop effective antimicrobial stewardship strategies."

The NAUSP is a passive surveillance system measuring rates of antimicrobial usage in hospital settings. The 2014 NAUSP report provides the results of data from 129 participating acute care hospitals (111 public and 18 private) ranging from principal referral hospitals to small public acute hospitals across Australia. For Australian public hospital beds, this represents more than 90 per cent of principal referral hospital beds and 82 per cent of total beds in public hospitals with more than 50 beds.

Senior Pharmacist for the NAUSP, Vicki McNeil from the SA Health Infection Control Service, said "The report shows us that there is still room for improvement in antimicrobial use in hospitals. Although Australian antimicrobial usage rates have come down marginally, they continue to be greater than in some benchmark countries, Netherlands and Sweden."

### **Key findings**

The 2014 NAUSP report found:

- 20 agents accounted for 92 per cent of all antibacterials used in Australian hospitals on a defined daily dose basis, with six antibacterials representing more than 50 per cent. These included amoxicillin with clavulanic acid, flucloxacillin and cephazolin. This is similar to the findings from the 2014 National Antimicrobial Prescribing Survey, with some minor variations likely due to differences in the method of data collection.
- In 2014, the total rate for antibacterials prescribed in Australia decreased by 2.2 per cent from 2013, which is a decrease of 6.2 per cent from Australia's peak usage in 2010.
- Usage rates varied widely between hospitals, with a high of 2040 and a low of 330 defined daily doses per 1000 occupied bed days. Some of this variation can be attributed to variations in complexity of care provided in different hospitals.

The NAUSP forms part of the Commission's Antimicrobial Use and Resistance in Australia (AURA) Surveillance System, to monitor antimicrobial resistance and usage rates in Australia as a basis for prevention and containment of antimicrobial resistance.

The 2014 NAUSP report is available for download from the Commission's website on <http://www.safetyandquality.gov.au/national-priorities/amr-and-au-surveillance-project/national-antimicrobial-utilisation-surveillance-program/>

## **Australian Commission on Safety and Quality in Health Care**

The Commission is the lead agency for the development and coordination of national improvements in safety and quality in health care across Australia. The Commission aims to support health care professionals, organisations and policy makers who work with patients and carers.

The Commission promotes appropriate prescribing and administration of antibiotics to improve the safety and quality of health care through a number of initiatives including the NSQHS Standards and the Antimicrobial Stewardship Clinical Care Standard, with the aim of improving patient outcomes and preventing and containing antibiotic resistance.

As one of the key elements of Australia's *National Antimicrobial Resistance Strategy 2015-2019*, the Commission is establishing a national surveillance system for antimicrobial use and resistance. The AURA Surveillance System will systematically collect, analyse and report rates of resistance and antimicrobial use.

## **National Antimicrobial Utilisation Surveillance Program**

The NAUSP is a surveillance program that measures rates of antimicrobial usage in hospital settings; the Program commenced in July 2004 and is operated by the Infection Control Service, Communicable Disease Control Branch, SA Health and funded by the Australian Commission on Safety and Quality in Health Care through the Australian Government Department of Health. The Program provides contributing hospitals with bimonthly and annual reports on their antibiotic usage rates, enabling them to compare their usage to similarly peered hospitals, thus identifying areas for improvement. Since 2008, all Australian states and territories have been represented in the program. The number of hospitals participating in the Program has doubled since the introduction of the NSQHS Standards in 2011.

The Program uses standardised usage density rates, based on the World Health Organization's Anatomical Therapeutic Chemical standards for 'defined daily doses' (DDD). The denominator is the frequently used metric of inpatient 'occupied-bed-days' (OBDs). Reporting on antimicrobial use, based on DDDs, enables assessment and comparison of total-hospital use as a rate.

## **MEDIA INQUIRIES**

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