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AUSTRALIAN COMMISSION ON SAFETY AND QUALITY IN HEALTH CARE

WHAT'S NEW IN AURA

June 2018 Newsletter

Recent publications available on the Commission or AURA partner websites include:

- **Australian Group on Antimicrobial Resistance (AGAR)**

As part of the AURA Surveillance System, the Commission funds the Australian Society for Antimicrobials (ASA) for the AGAR. AGAR conducts targeted surveillance of selected pathogens for antimicrobial resistance via three sepsis outcome programs – the Gram-negative Sepsis Outcome Program, the Australian Enterococcal Sepsis Outcome Program, and the Australian Staphylococcal Sepsis Outcome Program. All states and territories are represented in the AGAR cohort. Separate detailed annual reports are routinely prepared for each of these programs and published on the AGAR website.

AGAR has been in operation since 1985 and been part of the AURA Surveillance System since 2015. The AURA National Coordination Unit worked with AGAR to develop the first amalgamated report on the three AGAR Sepsis Outcome Programs to highlight key findings, provide expanded discussion of results, increase access to the information and assist with the interpretation of results into policy and practice. The target audience for the report is infectious disease and/or microbiology clinicians, other clinicians involved in the response to AMR and antimicrobial stewardship programs, and health system and health service managers.

The AGAR Sepsis Outcome Programs 2016 Report is available at:

www.safetyandquality.gov.au/publications/agar-sepsis-outcome-program-2016-report/

- **National Antimicrobial Utilisation Surveillance Program (NAUSP)**

NAUSP is administered by SA Health and is a key AURA Surveillance System partner. NAUSP provides an important tool for hospitals to inform their local antimicrobial stewardship programs. It also contributes to meeting the requirements for accreditation against the National Safety and Quality Health Service (NSQHS) Standard Preventing and Controlling Healthcare-Associated Infection <https://www.safetyandquality.gov.au/wp-content/uploads/2017/12/National-Safety-and-Quality-Health-Service-Standards-second-edition.pdf>. NAUSP is a voluntary program that focuses on standardised measurement of antimicrobial use in Australian adult public and private hospitals. In excess of 200 hospitals from all states and territories now contribute to NAUSP; including all principal referral hospitals.

Antimicrobial usage for adult hospitals usage is measured in defined daily doses per 1,000 occupied bed days. As part of the AURA Surveillance System, a series of annual reports has been published on analyses of NAUSP data, the most recent of which relates to 2016. NAUSP also publishes six monthly benchmarking reports for hospital peer groups, speciality units, and the states and territories.

The 2016 NAUSP annual report included analyses of data contributed by 169 hospitals (143 public and 26 private) in 2016. All Principal Referral Hospitals and 88% (93/106) of Public Acute Group A and B hospitals participated in the program in 2016. This report is at: www.safetyandquality.gov.au/wp-content/uploads/2018/01/2016-NAUSP-Annual-Report-January-2018.pdf

The analyses showed a continuing decline in aggregate total-hospital antibacterial usage since 2012, likely reflecting the effectiveness of antimicrobial stewardship programs associated with implementation of the National Safety and Quality Health Service (NSQHS) Standards. Data on antifungal usage in Australian hospitals were included in the report for the first time in 2016. For more information about NAUSP, including becoming a contributor, visit the [NAUSP website](http://www.safetyandquality.gov.au).

- The **National Alert System for Critical Antimicrobial Resistances (CARAlert)** was established as part of AURA in March 2016 and collects surveillance data on nationally agreed priority organisms with critical resistance to last-line antimicrobial agents. The latest update report is available from: www.safetyandquality.gov.au/wp-content/uploads/2016/04/Report-April-2018-CARAlert-Data-Update-5-1-January-to-28-February-2018.pdf
- The **Australian passive AMR surveillance system (APAS)** was established as part of AURA and based on the OrgTRX surveillance system commenced by Queensland Health. The system has now been expanded to public and private laboratory services in most states and territories. The objective of APAS is to provide analysis capability and reporting at the local, jurisdictional and national levels, enabling clinicians and policy-makers access to enhanced information, data and reports to inform appropriate public health action in response to AMR. APAS collects, analyses and reports on data on AMR from hospitals, aged care, community and private pathology services. A process is under way to incorporate historical AMR records from 2005 to the present, where available. To date, this work has resulted in over 50 million records from participating services from 2005 to the present, enabling AMR patterns to be reviewed. A report on the trend analyses of APAS data will be published shortly.
- **Pilot project on paediatric antimicrobial utilisation**

As part of the objective of the AURA National Coordination Unit to enhance surveillance capacity; a pilot on paediatric antimicrobial utilisation will be held in June 2018. This work will be undertaken in collaboration with the National Antimicrobial Utilisation Surveillance Program (NAUSP).

Surveillance of antimicrobial usage in paediatric settings is a gap in Australia's overall surveillance of antimicrobial use in hospitals. The main reason for this is the lack of a suitable metric for measuring use over time in paediatric populations. The pilot project will evaluate potential metrics for surveillance in the Australian context. The data collection period for the pilot is June 2018.

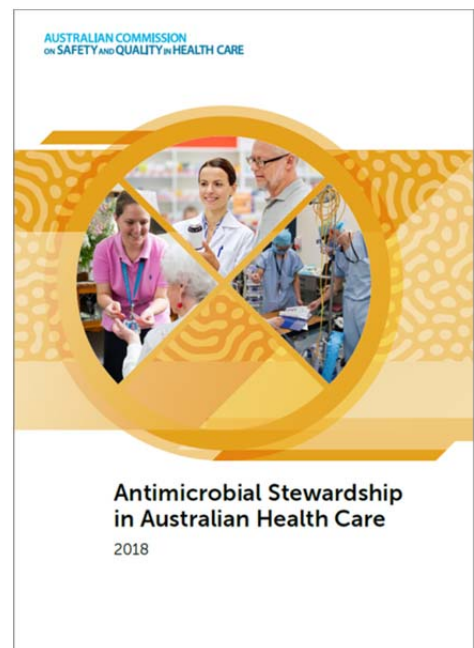
The pilot sites are:

- Sydney Children's Hospital Network – Sydney Children's Hospital (NSW) and Westmead Children's Hospital (NSW)
- John Hunter Children's Hospital (NSW)
- Royal Children's Hospital (Vic)
- Monash Children's Hospital (Vic)
- Women's and Children's Hospital (SA)

- An important resource from the Commission has recently been released which will greatly contribute to the fight against AMR. Australian AMS programs have been shown to decrease unnecessary and inappropriate use, improve patient outcomes and reduce antimicrobial resistance, toxicity and unnecessary costs.

The Australian Commission on Safety and Quality in Health Care released ***Antimicrobial Stewardship in Australian Health Care 2018*** in May 2018. The 'AMS book Second Edition' has been written by leading Australian medical, scientific, pharmacy, nursing and infection control experts to improve antimicrobial prescribing and use and to contain the growing problem of antimicrobial resistance (AMR).

This Second Edition of the AMS Book will provide Australian hospitals with world leading guidance and support that will ensure patients receive appropriate antibiotic treatment.



High levels of antimicrobial use and inappropriate use of antimicrobials are a major cause of AMR; resources such as the AMS Book support clinicians to continue to improve appropriate prescribing of antimicrobials.

AMR presents a threat to public health and patient safety, leads to prolonged or serious illness, additional treatments, prolonged hospitalisation or death. With few new antimicrobials coming onto the market in the foreseeable future, the options for treating resistant infections are becoming increasingly limited.

The National Safety and Quality Health Service Standard – Preventing and Controlling Healthcare Associated Infections requires all Australian hospitals to implement an AMS program. Since the introduction of these standards there has been a higher prioritisation of AMS activities by health service organisations, with both public and private hospitals now auditing antimicrobial prescribing. All principal referral hospitals in Australia now participate in national surveillance of antimicrobial use. There has been a 12.6% reduction in hospital antimicrobial usage between 2011 and 2016.

Along with infection prevention and control, hand hygiene, and surveillance, AMS is a key strategy in national and international programs to prevent the further emergence of AMR and decrease preventable healthcare-associated infection.

Antimicrobial Stewardship (AMS) programs improve the appropriate use of antimicrobials by ensuring that they are prescribed according to evidence-based guidelines, with choice, dose, and duration of antibiotics, ensuring the best patient outcome. The AMS Book is available as an e-book and can be downloaded from the Commission's website at www.safetyandquality.gov.au/our-work/healthcare-associated-infection/antimicrobial-stewardship/book/

Further information and AURA resources can be found at:

www.safetyandquality.gov.au/antimicrobial-use-and-resistance-in-australia/resources-page/

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