



**Australian Government**  
**Department of Health**

# ANTIMICROBIAL RESISTANCE – THE AUSTRALIAN CONTEXT

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# AMR in Australia

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- Good understanding but to date not much outcome from actions.
- The AURA 2016 report found that:
  - One of the highest rates of vancomycin resistance in *Enterococcus faecium* in the world.
  - E.Coli – ↑ extended spectrum B lactamase producing – community
  - Low incidence of Carbapenamase producing & highly resistant gram negatives
  - Low incidence fluoroquinolone resistance
  - Low incidence MDR Tuberculosis



# Antimicrobial use & overuse in Australia

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- Australia's antibiotic usage rates in human health are high compared with other OECD countries.
- Hospitals – interstate variation – overall 23% inappropriate (esp. surgical prophylaxis & respiratory infection).
- Community prescribing unacceptably high – nearly 50% once / year
- 50% of URTIs given Abs
- Aged care – 11% on ABs with < half having infection



# The One Health approach



- Like other countries we have adopted a One Health approach.
- Political and other response shared between Health and Agriculture.
- Very senior engagement



# Governance

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## Antimicrobial Resistance and Containment Steering Group

- Led by the Secretaries of the Departments of Health and Agriculture and Water Resources
- Australian Government Chief Medical Officer and Chief Veterinary Officer are members
- Provides leadership on AMR and oversees development & implementation of the National AMR Strategy

## Australian Strategic and Technical Advisory Group on AMR

- Co-chaired by the Australian Government Chief Medical Officer and Chief Veterinary Officer
- Includes representatives from across human health, animal health, agriculture & food, as well as jurisdictional representatives. Provides expert advice to the Steering Group on current and emerging issues, research priorities and implementation approaches to support the National AMR Strategy



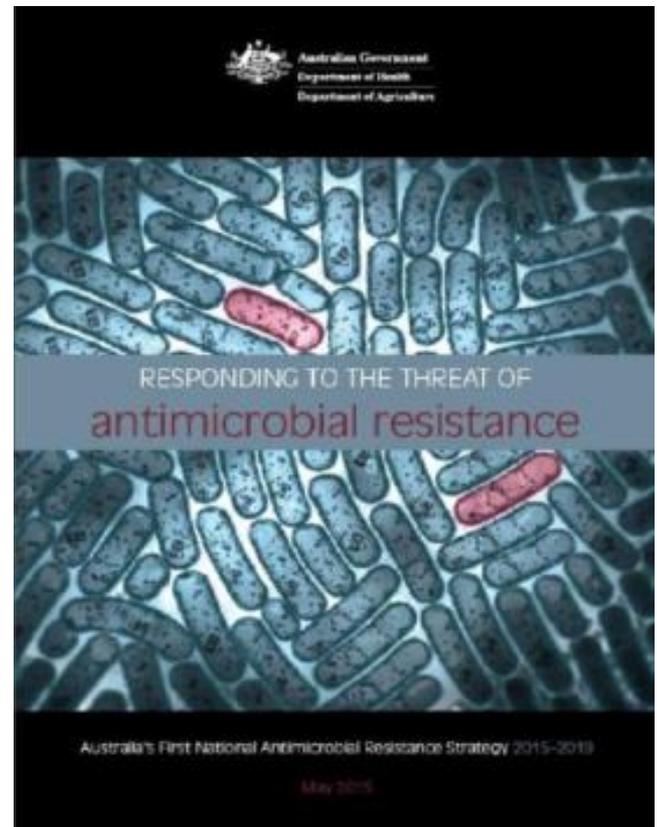
# Australian First National AMR Strategy 2015-2019

## Vision:

A society in which antimicrobials are recognised and managed as a valuable shared resource, maintaining their efficacy so that infections in humans and animals remain treatable and communities continue to benefit from the advances that antimicrobials enable.

## Goal:

Minimise the development and spread of antimicrobial resistance and ensure the continued availability of effective antimicrobials.





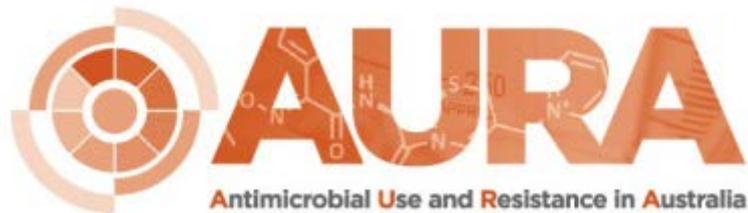
# Implementation Plan for the National AMR Strategy

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- Implementation Plan for the National AMR Strategy released in November 2016.
- 7 Objectives of the National AMR Strategy
  - Communication & Education
  - Stewardship
  - Surveillance
  - Infection Prevention & Control
  - Research & Development
  - International Partnerships
  - Governance
- Focus Area for Action - 4 to 7 per Objectives, gap analysis
- Several hundred activities
- First progress report expected to be released in October 2017.



# Surveillance of AMR and antimicrobial use



Government funding to the Australian Commission on Safety and Quality in Health Care - national surveillance for AMR and antibiotic usage for human health

Pulls together eight streams of data to provide an integrated picture.

First report mid 2016





# Examples of Current activities

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- Continued enhancement of the national surveillance system
- Expansion of the National Antimicrobial Prescribing Survey (NAPS)
- Stewardship in Aged Care - ?accreditation standard
- New national One Health AMR website
- NPS MedicineWise – partner GP research and intervention, letters to all GPs, new communications approaches
- Behavioural economics research into GP communication
- Projects - improving prescribing through software changes
- Gathering evidence base on AMR in food
- AMS programs for livestock and companion animal practice
- AMR surveillance - proof of concept projects in food & animal sectors
- List of antibiotics not to be registered for animal use
- Substantial research collaboratives



# International partnerships

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Some key international partnerships as identified under Objective 6 of the Implementation Plan for the National AMR Strategy include:

- 6.1.3 - Attend WHO meetings on the Global Action Plan to inform Australia's policy position and provide updates to international partners on progress. (2016-2019)
- 6.1.7 - Participate in the ministerial-level Alliance of Champions against AMR. (2016-19)
- 6.1.8 - Contribution to progressing implementation of meeting outcomes, including development of the Asia-Pacific One Health Initiative on AMR. (Ongoing)
- 6.1.10 - Participate in the Global Health Security Agenda (GHSA) Action Package on AMR, including attendance at relevant GHSA meetings. (Ongoing)
- 6.4.1 - Contribute data from Australia on AMR and AU to the WHO Global AMR Surveillance System (GLASS), to inform global surveillance reports developed by WHO. (Expected to commence 2016-17)
- 6.5.1 - Under the Chemical Biological and Radiological Memorandum of Understanding—Medical Countermeasures Consortium Antimicrobial Resistance task R&D is being undertaken in the following areas:
  - 1. Antimicrobial Target Discovery
  - 2. Mechanisms of Resistance / Persistence
  - 3. Immunomodulation.
  - 4. Novel Antimicrobial Approaches
  - 5. Mathematical Modelling and Systems
  - 6. Multi drug resistant *Klebsiella* medical countermeasures and models
  - 7. AMR diagnostics
- (2-5 years)



## Reflections of Newbie

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- Harness the political enthusiasm
- Focus – nationally and internationally
- Focus nationally on key interventions, such as
  - General Practice – targets, stewardship standards
  - New approach to community messages
  - Finalizing the “never list” for agriculture
  - Improving surveillance esp agriculture
  - An aged care strategy
  - Ensure we are ready for MRFF money
- Prioritizing our international engagement