

# Medical Research Future Fund



## Antimicrobial Resistance

### INVESTMENT

The Australian Government will invest **\$5.9 million** to support research on antimicrobial usage and resistance in Australia. Research will be consistent with the achievement of the objectives of the *National Antimicrobial Resistance Strategy 2015-2019*.

### KEY ELEMENTS

- Knowledge gaps on the development and spread of resistance – focussing on the drivers of antimicrobial resistance, strategies to reduce unnecessary and inappropriate use, and mechanisms of transfer.
- New therapies, diagnostic technologies and approaches – investigation of novel treatments, repurposing of existing medicines, new rapid and point-of-care diagnostic technologies, and best-practice to prevent the emergence of resistance and its spread.
- Accelerated translation – development of new products, policies and approaches to prevent, detect and respond to resistance.

### RATIONALE

- Antimicrobials have enabled advances in modern medicine that would not otherwise be possible, and contributed to agriculture and food production industries.
- The effectiveness of existing antimicrobials is being reduced by emerging resistance.
- Infections are becoming increasingly difficult to treat, and for some infections there are few remaining treatment options.
- Antimicrobial resistance is an increasing problem in Australia, the region and globally.
- New research investment is needed to ensure the ongoing availability of effective antimicrobials.

### DESIRED OUTCOMES

- Discovery of new antimicrobials or alternative therapies.
- Development of new technologies to support rapid and point-of-care identification of infectious agents and appropriate treatments.
- Early translation and impact on behaviours that drive inappropriate antimicrobial usage.
- Actions to improve prescribing practice and eliminate inappropriate use.

### MEDICAL RESEARCH FUTURE FUND

The Medical Research Future Fund (MRFF) demonstrates the Government's strong commitment to research and innovation. The MRFF provides a long term sustainable source of funding for endeavours that aim to improve health outcomes, quality of life and health system sustainability.

The MRFF will double direct Australian Government funding for health and medical research.

**The MRFF is a dedicated vehicle for priority investment in health and medical research.**

The MRFF, established under the *Medical Research Future Fund Act 2015*, provides grants of financial assistance to support health and medical research and innovation in improving the health and wellbeing of Australians. It operates as an endowment fund with the capital preserved in perpetuity. At maturity, the MRFF will reach \$20 billion.

The first disbursements from the MRFF focus on translating research into real health benefits, breakthrough investments in new technologies and challenges, and enhancing Australia's reputation for research excellence and leadership.

Over \$65 million will be injected into a range of programs that cut across the research pipeline – fuelling new discoveries and the translation and commercialisation of great Australian ideas.





## KEY FACTS

- The global unrestrained use of antimicrobials across human and animal health, in agriculture and food production is responsible for accelerating the development of antimicrobial resistance to the point where it has become a global health priority.
- Australia has one of the highest rates of antibiotic use among countries with comparable health systems. Survey data suggest a large proportion of use is inappropriate and unnecessary.
- In 2015, 10.7 million Australians were prescribed antimicrobials – 45 per cent of the population.
- High rates of antibiotic use are associated with increasing rates of antibiotic resistance.
- Existing awareness and education campaigns have not been effective in reducing high rates of antibiotic prescribing and inappropriate use.
- High seasonal variation in usage patterns suggests antibiotics are being used to treat colds and flu and for other upper respiratory tract infections for which antibiotics are not routinely indicated.
- Rates of resistance to some common antibiotics are increasing globally. Australia has one of the highest rates of resistance to vancomycin in the world.
- The commercial return on the discovery and development of new antibiotics is relatively low. This has resulted in most large and mid-sized pharmaceutical companies withdrawing from antibiotic research.
- There is global recognition of the need for increased investment in research and development to combat antimicrobial resistance.

## IMPLEMENTATION

- Research grants will be awarded to meritorious proposals submitted in response to a Targeted Call for Research (TCR), consistent with established National Health and Medical Research Council processes.
- The TCR questions will be consistent with the key elements of the program and the *National Antimicrobial Resistance Strategy 2015-2019*.
- The call will occur in the second half of 2017.

## ADVISORY BOARD

The Australian Medical Research Advisory Board, established in accordance with the *MRFF Act*, is responsible for consulting on and developing a five-yearly Strategy that sets out the vision, aims and objectives for the MRFF and an accompanying two-yearly list of Priorities. The Government must consider the Strategy and Priorities in making MRFF investment decisions.

## STRATEGY 2016-2021

**VISION:** A health system fully informed by quality health and medical research.

Identifies key strategic investment platforms that set to position Australia to meet future healthcare challenges:

- Strategic and international horizons
- Data and infrastructure
- Health services and systems research
- Capacity and collaboration
- Trials and translation
- Commercialisation

## PRIORITIES 2016-2018

The first MRFF disbursements address identified Priorities under each strategic platform, are a mix of strategic investments, and use a range of administrative mechanisms to maximise impact. More disbursements will occur in 2017-18.

## FOR MORE INFORMATION

 [www.health.gov.au/MRFF](http://www.health.gov.au/MRFF)  [MRFF@health.gov.au](mailto:MRFF@health.gov.au)

