

# Understanding and responding to antimicrobial resistance in Timor-Leste – towards a One Health approach

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## Background

- Antimicrobial resistance poses an enormous risk to human and animal health globally.
- Menzies was awarded the Fleming Fund Country Grant to support strengthening of the antimicrobial resistance (AMR) and antimicrobial use (AMU) system in Timor-Leste in 2019.
- Routine AMR and AMU surveillance systems was not established prior to the beginning of the country grant.

## Strategies

Figure 1: One Health approach to AMR and AMU capacity building



### Leadership structure

- Support functioning of the National Multisectoral Committee for Antibiotic Resistance

### Laboratory

- Sharing and loan of equipment and consumables between the human and animal health laboratories
- Collaboration of staff in the human and animal health laboratories

### Procurement

- Development of stock management systems in human and animal health laboratories
- Development of laboratory equipment maintenance plan for human health and animal health sectors

### Surveillance

- Support the sharing and joint analysis of AMR and AMU results between human and animal health sectors
- Support national symposium on AMR and AMU surveillance

### Training

- Joint training session on antimicrobial resistance

### Collaboration

- Working alongside existing organisations involved in capacity building in human and animal health

## Progress

Several agreements have been signed with Timor-Leste government departments, which strengthens Menzies work on AMR with a One Health approach in Timor-Leste

- Memorandum of Understanding (MOU) signed with Ministry of Health (MOH) in 2018
- MOU signed with Ministry of Agriculture and Fisheries (MAF) in 2019
- Technical Agreement signed with National Health Institute (INS) in Dili in September 2019
- Technical Agreement signed with National Health Laboratory (NHL) in Dili in February 2020,
- Technical Agreement signed with National Directorate of Veterinary (NDV) in Dili in February 2020

Figure 2: Signing of the MoU between Menzies School of Health Research and the Timor-Leste Ministry of Agriculture and Fisheries in September 2019



Menzies Timor-Leste office opened in Dili in November 2019 to support the growing work being implemented by Menzies and partners in Timor-Leste. It demonstrates Menzies intent on long term commitment to the country, and provides a platform for deepening relationships between human and animal health sectors.

Multiple mentoring sessions on antimicrobial resistance which included participants from the human and animal health sectors

The Menzies medical laboratory scientist mentor from the National Health Laboratory provides assistance in bacteriology and AST in VDL. Consumables and equipment were shared between NHL and VDL for AST. The momentum from Fleming Fund activities has also resulted in collaboration between the laboratories in the response to COVID-19.

## Conclusions

One Health approach to AMR and AMU capacity building is progressing in Timor-Leste, and it is fostering closer links between human and animal health sectors beyond the response to antimicrobial resistance.

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