

# Malaysian Action Plan on Antimicrobial Resistance

## Progress Report & Plan for 2018



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This was discussed during the Technical Working Group, National Antimicrobial Resistance Committee meeting on 7 December 2017 chaired by Dr Kamaruzaman.

Objective 4 of the Malaysian Action Plan on Antimicrobial Resistance, which is to optimise the use of antimicrobial medicines in human and animal health, emphasises on the extension of reduction in national human consumption of antibiotics and the consumption of antibiotics used in food production as the objective's potential measure of effectiveness.

There are seven strategies manifested in realising the objective:

**Strategy 1:** Ensure activities of distribution, prescription and dispensing of antimicrobials are in accordance with national legislation.

**Strategy 2:** Ensure marketing authorisation is given only to antimicrobial agents that are quality-assured, safe and efficacious.

**Strategy 3:** Regular review of the National Essential Medicines Lists and National Antibiotic Guideline to ensure purchasing and prescribing of antimicrobial medicines are based on current recommendations.

**Strategy 4:** Strengthening of laboratory capacity for efficient identification of pathogens and their antimicrobial susceptibility.

**Strategy 5:** Provision of stewardship programme in healthcare facilities.

**Strategy 6:** Introduction of incentives to optimise appropriate use of antimicrobial agents.

**Strategy 7:** Development of policies on the use of antimicrobial agents in terrestrial and aquatic animals including reduction in nontherapeutic use of antimicrobial medicines in animal health.

Statistically, there were 25 actions that have been planned for the year 2017 to 2020, wherein six out of it were planned to be implemented in 2017. To date, five actions were successfully implemented in 2017 in which two actions have been completed while another three actions have been initiated but not yet completed.

### Actions Planned for Implementation in 2018

*i. Strategy 1: Ensure activities of distribution, prescription and dispensing of antimicrobials are in accordance with national legislation.*

There are two actions that have been proposed under this strategy. First is regular inspections/ audits on the sale of antimicrobial agents in community pharmacies. Second is on the regulation and conditions under the existing licensing regulation which can be realised in three further courses of action; farm licensing to be used in Antimicrobial Usage (AMU) report as a condition to renew license (State Enactment), to propose regulation on the prescription of antimicrobials in animal feed (Section 19 Animal Feed Act 2009) and to propose guidelines for antimicrobial use in aquaculture premises under the current regulation.

#### Target Group

1<sup>st</sup> action: Community pharmacists.

2<sup>nd</sup> action: Licensed farm, Feed miller and Home mixer.

*i. Strategy 3: Regular review of the National Essential Medicines Lists and National Antibiotic Guideline to ensure purchasing and prescribing of antimicrobial medicines are based on current recommendations.*

The action is on the National Essential Medicines List.

#### Target Group

Healthcare practitioners.

*i. Strategy 5: Provision of stewardship programme in healthcare facilities.*

The action is on the development of AMS policies in public healthcare facilities.

#### Target Group

MOH hospitals, health clinics and medical institutions.

*i. Strategy 6: Introduction of incentives to optimise appropriate use of antimicrobial agents.*

The action is on the market access for products from farm with MyGAP certification.

#### Target Group

Farmers.

*i. Strategy 7: Development of policies on the use of antimicrobial agents in terrestrial and aquatic animals including reduction in non-therapeutic use of antimicrobial medicines in animal health.*

There are three actions that have been proposed under this category. The first action is on the

development of National guideline on antimicrobial drugs use in veterinary sector which includes National Veterinary Antibiotic Guideline (NVAG) and list of controlled antibiotics for food-producing animals. The second action is on the development of best practices in aquaculture with regards to antimicrobial usage (revision of current list of antimicrobials for aquaculture and its withdrawal periods). The third action is to reduce by phase, certain critically important antibiotics for human health, from the veterinarian usage which can be realised by determining the trend of antibiotics usage by AMU Surveillance Program and establishing research and trials on the use of alternative antimicrobials to identify equivalent antibiotics for replacement.

#### Target Group

1<sup>st</sup> and 2<sup>nd</sup> action: Feed millers and farmers.

3<sup>rd</sup> action: Feed millers and farmers (including aquaculture).

- i. Strategy 7: Development of policies on the use of antimicrobial agents in terrestrial and aquatic animals including reduction in nontherapeutic use of antimicrobial medicines in animal health.*

The action is on the development of guidelines on disposal of unused or expired antibiotics in the public, private and animal sectors to prevent environment contamination.

#### Target Group

Public, private human and animal sectors.

## Actions Targeted in 2019/2020 – The Road Map

### The Road Map

#### 2017

1. Training of two pharmacists under AMS Certificate Program by SIDP, US (online)
2. Development of training module

#### 2018 – 2019

1. Appointment of certified pharmacists as preceptors
2. Establishment of training centres

#### 2019 – 2020

1. Training of pharmacists from all MOH state hospitals at established training centres
2. Placement of trained pharmacists full time in AMS teams

- i. Strategy 4: Strengthening of laboratory capacity for efficient identification of pathogens and their antimicrobial susceptibility.*

There are four actions that have been proposed under this category. The first action is on the capacity building of the MOH hospital laboratories which can be realised through the placement of

clinical microbiologist in major hospitals, upgrading microbiology laboratory in major hospitals and MS ISO/IEC 15189 certification for microbiology laboratory in major hospitals.

The second action is on the capacity building of private hospital which can be realised through the employment of clinical microbiologist in major hospitals (in-house or visiting), upgrading microbiology laboratory in major hospitals and MS ISO/IEC 15189 certification for microbiology laboratory in major hospitals.

The third action is on the state-of-the-art equipment which includes automated and newer technology, to expedite identification of pathogens.

The fourth action is on expanding the coverage of Total Lab Information System in MOH Hospitals as well as networking or web-based system between MOH, university and private hospitals.

#### Target Group

1<sup>st</sup> Action: MOH hospitals.

2<sup>nd</sup> Action: Private hospitals.

3<sup>rd</sup> Action: MOH major hospitals.

4<sup>th</sup> Action: MOH hospitals, MOH, university and private hospitals.

- i. Strategy 7: Development of policies on the use of antimicrobial agents in terrestrial and aquatic animals including reduction in nontherapeutic use of antimicrobial medicines in animal health.*

The action is on the implementation of AMU surveillance which can be realised by conducting AMU surveillance in animal feed industry yearly.

#### Target Group

Animal feed industry.

## Ongoing Activities Incorporated into the Action Plan

- i. Strategy 2: Ensure marketing authorisation is given only to antimicrobial agents that are quality-assured, safe & efficacious.*

There are two actions that have been proposed under this strategy. First is strengthening the post-marketing surveillance of registered antimicrobials. Second is strengthening the legal actions regarding counterfeit antimicrobials in the market.

#### Target Group

1<sup>st</sup> Action: Product registration holders.

2<sup>nd</sup> Action: Premises dealing with antimicrobials in the market.

#### Evaluation Indices

1<sup>st</sup> Action: Number of products containing antimicrobials which undergo post-marketing surveillance within five years from the date of registration.

2<sup>nd</sup> Action: Number of unregistered antimicrobials seized.

*i. Strategy 5: Provision of stewardship programme in healthcare facilities.*

The action is to do the auditing on the adherence to the national or local antibiotic guideline. In this case, the scope of audit will vary according to the issues or the needs of facilities to integrate audit with point prevalence survey of antibiotic utilisation.

Target Group

Public hospitals.

WHO is recommending that farmers and the food industry stop using antibiotics routinely to promote growth and prevent disease in healthy animals. The new WHO recommendations aim to help preserve the effectiveness of antibiotics that are important for human medicine by reducing their unnecessary use in animals. In some countries, approximately 80% of total consumption of medically important antibiotics is in the animal sector, largely for growth promotion in healthy animals.

WHO guidelines on use of medically important antimicrobials in food-producing animals are available at [http://www.who.int/entity/foodsafety/areas\\_work/antimicrobial-resistance/cia\\_guidelines/en/index.html](http://www.who.int/entity/foodsafety/areas_work/antimicrobial-resistance/cia_guidelines/en/index.html) Over-use and misuse of antibiotics in animals and humans is contributing to the rising threat of antibiotic resistance. Some types of bacteria that cause serious infections in humans have already developed resistance to most, or all, of the available treatments, and there are very few promising options in the research pipeline.

“A lack of effective antibiotics is as serious a security threat as a sudden and deadly disease outbreak,” says Dr Tedros Adhanom Ghebreyesus, Director-General of WHO. “Strong, sustained action across all sectors is vital if we are to turn back the tide of antimicrobial resistance and keep the world safe.”

WHO strongly recommends an overall reduction in the use of all classes of medically important antibiotics in food-producing animals, including complete restriction of these antibiotics for growth promotion and disease prevention without diagnosis. Healthy animals should only receive antibiotics to prevent disease if it has been diagnosed in other animals in the same flock, herd, or fish population.



**Congratulations**

Malaysian Medical Association  
congratulates

**Dato' Prof Dr Awang Bulgiba Awang Mahmud**  
*(Member, Wilayah Branch)*

On the award of  
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By  
**Duli Yang Maha Mulia Paduka Seri Sultan Perak**  
**Sultan Nazrin Muizzuddin Shah**

on the occasion of  
**his 61st Birthday**

on  
3 November 2017