# National Multi-Sectoral Steering Committee (NMSC) for Antimicrobial Resistance

The NMSC will provide the necessary political commitment and support for national AMR containment efforts in Maldives and to the international global health community. Given the ultimate goal of AMR containment efforts that are geared to improve human health outcomes, the NMSC will be formed under the leadership of MoH with Minister of Health as the Chairperson.

#### Composition of NMSC

The NMSC will be chaired by Minister for Health and Co-Chaired by Minister of Fisheries and Ocean Resources and Minister of Agriculture and Animal Welfare. Its membership will be as follows:

- · Minister of Health (Chairman) or Ministers representative
- Minister of Minister of Fisheries and Ocean Resources or Ministers representative
- Minister of Agriculture and Animal Welfare or Ministers representative
- Minister of Climate Change, Environment and Energy or Ministers representative
- Minister of Education or Ministers representative
- Minister of Finance or Ministers representative or Ministers representative

#### Logistics of the NMSC

The NMSC will meet bi-annually when it will be appraised of AMR control efforts in the country. NMSC will provide necessary political support to avail financial and human resource for programme implementation. The secretariat of NMSC will be National AMR Coordination Unit (NACU) in MFDA and the technical support will be provided by National AMR Coordination Committee (NACC).

#### National AMR Coordinating Committee (NACC)

The NACC will be support and monitor NACU in implementation of NAP AMR and will draw its powers and mandate from the Decree by Minster of Health while NMSC will provide strategic vision to AMR control efforts. The NACC will provide the platform for programme planning and implementation through a supporting structure comprising of stakeholders in relevant ministries and technical working groups for individual strategic objectives.

The NACC is envisioned as a multi-sectoral group of senior officials from different ministries with adequate representation of non-governmental agencies, cooperatives, civil society representatives, media, international agencies (WHO/FAO/OIE). By way of its multi-sectoral composition, it will ensure adequate integration of AMR containment efforts into the existing health system, public health and disease-specific programmes, animal health and food production sector and other environmental initiatives.

The chair and vice chair will be appointed by the Minister of Health, and its Secretariat will be NACU in MFDA. Its membership will be drawn from the:



- Ministry for Health (MFDA, HPA, QARD) (CORE members)
- •Ministry of Fisheries and Ocean Resources (CORE members)
- Ministry of Agriculture and Animal Welfare (CORE members)
- Ministry of Climate Change, Environment and Energy (CORE members)
- Ministry of Education (CORE members)
- · Ministry of Finance (CORE members)
- •Regulatory authorities- EPA, Utility Regulatory Authority (with ENVIRONMENT)
- Professional associations Maldivian Medical Association, Nursing and Allied health association, animal health, environmental association and relevant councils.
- Representatives from major hospitals to include at least one Microbiologists, ID specialist consultant (x2) IPC nurse(x1)
- ·Representative from NRL
- Veterinarian
- · Academia representative x 1 MNU,1 Villa (1 count as one for quorum)

Note: Committee can be amended or revised as per functionality within THE 5-year period. Quorum to be finalize in NACC first meeting and to decide the core members and non-core members). Suggested: Core members should include those from the relevant ministries and representative from clinical background x 2 (minimum).

## Logistics of the NACC

The NACC will meet regularly once every 4 months and or as required. The NACC will have a rotatory Chairmanship between Ministry for Health, Ministry of Fisheries and Ocean Resources and Ministry of Agriculture and Animal Welfare. The rotation will happen annually. If any member is unable to attend 3 consecutive meetings of the committee NACU needs to inform the relevant ministry/organization.

#### Roles and responsibilities of NACC:

Roles and responsibilities of the NACC have been mentioned in the Strategic Plan. Broadly, it will be responsible for:

- Finalise the NAP AMR Operational plan and budget
   Planning, monitoring & evaluation of different strategic interventions and activities of NAP AMR
- Support NACU on the implementation, coordination and monitoring of NAP AMR objectives
- Constitute technical working groups for main objectives that include providing technical input for program support and decision-making
- Facilitate collaborations with internal and external agencies and organizations in the field of surveillance and innovations
- Advocate for prevention and containment of AMR



# National AMR Coordinating Unit (NACU)

The National AMR coordination unit (NACU) in MFDA will be the implementation agency for NAP AMR objectives. The NACU will provide the platform for programme implementation, coordination and monitoring with support from the National AMR Coordination committee (NACC). NACU will also act as the secretariat for NMSC and NACC. The AMR program manager in NACU will be overall responsible for the functioning of NACU with support from NACC and NMSC

#### The main functions of NACU are:

- Act as the main coordination unit and responsible for regular monitoring and evaluation of NAP AMR implementation
- Ensure regular data collection and information sharing by instituting effective communication and coordination among all stakeholders, the members of NACC and their constituencies, sectors and disciplines;
- Coordinate national activities for establishment of AMR surveillance systems
- Reporting implementation status to NACC, national agencies and international partners as required including Report on prevalence of and trends in AMR to the global AMR surveillance system (GLASS)
- ·Lead the drafting and update of a national action plan for containment of AMR
- · Provide secretariate support to NACC, NMSC and all TSCs

## Composition (minimum requirement)

- •AMR program manager (technical background)
- AMR assistant program manager (technical background)
- · Admin support at least one

#### Appointing a National Focal Point

National AMR focal (National F.P) will be assigned by MoH. National F.P point shall be responsible for coordinating AMR activities and tasks in the health, animal, fisheries, food production and environment sectors. The responsibilities of NFP will be to:

- ·Build sustained partnerships and work nationally and internationally on containment of AMR;
- Identify stakeholders and facilitate formation of an inclusive NACC
- Support and facilitate formation of the National AMR coordination unit (NACU) with appointment of AMR program manager, assistant program manager and admin support for the unit.
- Support NACU on drafting of a national action plan for containment of AMR
- Monitor and support the regular data collection and information sharing and facilitate provision of required resources to NACU
- Support and advocacy for AMR related activities

#### Forming Technical Sub Committees

Technical Sub Committees (TSC) will form an integral part of the governance mechanism in Maldives. These will be multi-sectoral in composition and will report to the NACC. They will be formed as a priority and will be mandated with specific tasks such as providing technical input, conducting situational analysis, assist in drafting NAPs, support agencies in planning and budgeting, commissioning specialised working groups and overseeing implementation of strategic interventions and corresponding key activities under the five objectives of GAP in the NAP. The Chairperson of each TSC will automatically become a member of NACC.

The proposed thematic TSCs that will be formed include:

- 1. Awareness
- 2. Surveillance
- 3. Infection Prevention and Control and Hygiene
- 4. Optimizing Antimicrobial Use
- Research and Innovation

Each of the TSCs will be responsible for supporting the lead agencies in programme planning and budgeting referring to NAP on AMR while focusing on One Health and for coordinating between the different agencies and secretariat. They will be responsible for monitoring and evaluation and based on their interactions and review mechanisms come up with a set of workable recommendations for the relevant key agencies.

The 5 TSCs will be mandated by the NACC and will report to their chairpersons and to the AMR program manager in NACU. The organisational structure, composition, locus of coordination centre and general terms of reference are listed below. Specific jobs of individual TSCs have been detailed in the Strategic Plan document. If any member is unable to attend 3 consecutive meetings of the committee, NACU needs to inform the relevant ministry/organization.

#### General Terms of references of Technical Sub Committee

Technical Sub Committee (TSC) will be multi-sectoral in composition and will report to the NACC. In their respective strategic objective, the TSC will:

- Implement proposed activities by the National AMR Coordination committee in line with NAP
- Draft detailed annual plan and revise annually at sub activity level NAP
- Provide strategic direction by identifying intervention and key activities
- Conduct situational analyses
- Support lead agencies in planning and developing budget for different activities
- ·Monitor and evaluate implementation of strategic interventions and corresponding key activities
- ·Provide technical input
- Commission specialised working groups working groups

Specialised working groups will be commissioned by the TSCs for delivering on specific tasks in the respective strategic areas. The working groups will work under technical guidance and supervision of respective TSC and will comprise of in-country as well as international experts, including those from WHO/FAO/OIE. The Working groups will be tasked with functions such as evaluation of existing policies, frameworks, interventions and guidelines and the development of guidelines and standards.

## Integration of NAP AMR activities into existing programs/activities

Lead agencies and supporting agencies will be identified for implementation of each of the main 7 objectives of NAP aim to integrate the activity into existing programs where possible. The lead agency will be responsible for implementation of the specific component of the NAP AMR objective, programme planning and budgeting while focusing on One Health approach. The lead agencies will be supported by TSC for implementation of the 5 main GAP objectives in NAP AMR as mentioned before.

Table 5: NAPAMR objectives and responsibilities of stakeholder agencies

S.No	Objective	Lead Agency for implementation	Supporting agencies	implementation support
1	Establish governance structure for AMR	MoH-MFDA/NACU	QARD, HPA, MoAAW & MoFOR, MoCCEE, MoE, MoF	NMSC (Monitored by NACC)
2	Strengthen the regulatory system related to AMR	MFDA- MTG (Human)	MoAAW & MoFOR: (Terrestrial, marine and aquatic animals & Plants) MoCCEE: environmental MFDA-Food safety	NMSC (Monitored by NACC)
3	Improve awareness and understanding of antimicrobial resistance through effective communication, education and training	NACU	QARD, HPA MoAAW & MoFOR, MoCCEE MoE, Associations, MNU, NGO/ Red Cresent	TSC for Awareness
4	Strengthen the knowledge and evidence base through surveillance	NAGU	QARD (HAI), MoAAW & MoFOR, MoCCEE, MFDA-Food safety HPA-disease	TSC for Surveillance
5	Reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures	QARD/ NACU (IPC & patient safety incident reporting system)	HPA (WASH), MFDA-food safety, MoAAW & MoFOR, MoCCEE	TSC for IPC and hygeine
6	Optimize use of antimicrobials	QARD & MTG	MoAAW & MoFOR, MFDA	TSC for optimizing antimicrobial use
7	Sustainable investment in research, innovation and new interventions.	NACU	QARD, HPA, MoAAW & MoFOR, MoCCEE, MoE, Associations, MNU, Villa College	TSC for research and innovation

# Objective 2: Strengthen The Regulatory System Related to AMR

The regulatory process of ensuring quality, safety and efficacy of antimicrobials in the country shall be implemented. Antimicrobial use in animal feeds and other non-therapeutic uses shall be restricted and the discharge of antimicrobial compounds into the environment shall be regulated. Define the regulatory role of:

- 1.MFDA
- 2. QARD
- 3. HPA
- 4. MoAAW
- 5.MoFOR
- 6.MoCCEE
- 7.URA (Utility Regulatory Authority)

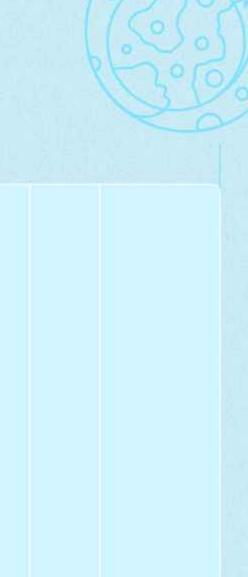


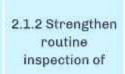


Table 6: Objective 2- Strengthen the regulatory system related to AMR

Strategy	Activiteis	Performance indicator	Target	Time line	Lead agency	Implementing partners	
2.1 Strengthen regulatory provisions on import, sale and storage of antimicrobials in human, animal health, agricultural practices and environment	2.1.1 Update the national AMR containment policy (of antimicrobials in human, animal health, agricultural practices and environment) and organizational framework within the charter of the Policy	2.1.1.1 Develop a national AMR containment policy and propose a formal organisational structure responsible for implementation of the National AMR containment policy. The Policy will mandate provisions for the five strategic objectives enshrined in GAP and NAP AMR for Maldives	1	102025	NACU	MOH, MoAAW & MoFOR, MoCCEE, URA	
		2.1.1.2 Required regulatory provisions updated on availability, import, sales storage and disposal of antimicrobials					







2.1.2 Strengthen 2.1.2.1 Inspection reports Facilities Annually from pharmacies (human &

Evaluate essential medical list (EML) to assess the antimicrobial agents. Antimicrobial agents in the EML will be considered for inclusion based on Maldives's situation of current levels of AMR, availability, supply chains, financial outlays, international guidelines and standard treatment guidelines in human medicine, veterinary medicine and aquaculture (including antimicrobial growth promoters; AGPs). Existing EML to be reviewed in light of the National AMR Containment Regulation and Policy?

> at central level annually once

MTG-MFDA/ MoAAW NACU/ MFDA

MoAAW & MoFOR QARD



	the pharmacies & godowns  2.2.1 Ensure availability of essential	animal) and medication handling/storage facilities generated  2.2.1 Audit on availability of essential antimicrobials in market (as per the essential	Peripheral all facilities at least once before end of 2028.  80% of EAL available in market	Start 2024	MoH (QARD, MTG-MFDA) NACU	MoH procurement Board run
2.2 The antimicrobials in the country shall be	antibiotics	antimicrobial list-EAL)	central and peripheral (take represent- ative sampling method)		NACU	hospital MoAAW & MoFOR QARD
appropriate and of proven quality, safety and efficacy	2.2.2 Approve market authorization for antimicrobials based on evidence of safety and efficacy and GMP audit of the manufacturers.	2.2.2.1 Market authorization issued and GMP audit reports	Annual Audit report showing 100% of medications used are GMP verified	Annually (from 2025)	MTG-MFDA NACU	MoAAW & MoFOR QARD
	2.2.3 Conduct QC testing of antimicrobials	2.2.3.1 Antimicrobials tested	Sampling of antibiotics done according to approved sampling method (including	Annual target defined by TSC (from 2025)	MTG-MFDA and MFDA-NHL NACU	MoAAW & MoFOR QARD

1000	
19/200	
16000	
3196	

			post market surveillance for substandard and falsified antimicrobial)			
2.3 The non-therapeutic use of antimicrobials in animal feed and agricultural practice including residues in food products shall be restricted	non-therapeutic use of antimicrobials in	2.3.1.1 Include Regulatory provisions for non-therapeutic use of antimicrobials in animal feed in place	1	2Q2025	MoAAW & MoFOR MFDA and NACU	
2.4 Regulate antimicrobial compounds discharged into the environment	2.4.1 To strengthen regulations disposal of antimicrobials and monitoring of including waste and wastewater discharge contaminated with antimicrobials from human and agricultural usage.	2.4.1.1 Regulatory provisions to prevent contamination of the environment with antimicrobial compounds	1	2Q2025	Moccee NACU/ MFDA	NACU -MFDA HPA MoAAW & MoFOR MFDA Food Safety URA



1	201
1%	700
60	200
1	300

2.5. Institute an effective overall M&E system of the NAP AMR components	2.5.1 Develop and implement periodic monitoring (project status check) plan for AMRNAP	2.5.1.1 Develop NAP AMR M&E tool	1	2Q2025	NACU/MFDA	MoAAW & MoFOR, HPA, QARD, MoCCEE
		2.5.1.2 Program Personnel trained on M&E	3	102025		MoAAW & MoFOR, HPA, QARD, MoCCEE
		2.5.1.3 No. of monitoring reports generated	10	Bi annually (start 2025)		MoAAW & MoFOR, HPA, QARD, MoCCEE
	2.5.2 Conduct end of plan period evaluation with technical assistant from an evaluation expert and generate an evaluation roport	2.5.2.1 No. of post implementation (end of plan period) evaluations conducted and report generated	1	2029 (project end period)		





# Strategic Objective 3: Improve awareness and understanding of AMR through effective communication, education and training

The GAP AMR has identified the need to raise awareness of AMR and promote behavioural change through public communication programmes that target different audiences in human health, animal health (terrestrial, aquatic and marine) and agricultural practices as well as a wide range of consumers related to these sectors. The GAP AMR has also focused on making AMR as a core component of the professional education training, certification, continuing education and development in the health and veterinary sectors and agricultural practice. This approach is expected to foster proper understanding and awareness amongst professionals.

The Situation Analysis in Maldives revealed that awareness campaigns on AMR have initiated by MFDA. Awareness campaigns have been targeted to including general public and professionals in health sector and to some level AMR related awareness has been targeted to animal and food safety sector during antimicrobial awareness week.

Introduction of AMR in curricular interventions in schools has been started and some work has been done to incorporation AMR related materials into curriculum of health and allied health services. Regarding animal health and agricultural practices guidelines related to IPC and AMR in livestock and fisheries sectors are being finalized and following which conduction of awareness and training sessions for those in this field has been planned from MoAAW & MoFOR

Activities related to the third objective "Improve awareness and understanding of AMR through effective communication, education and training "will depend on the communication plan. The following activities and timeline give a suggestion for the way forward and minimum targets.



Table 7: Objective 3- Improve awareness and understanding of AMR through effective communication, education and training

# Objective 3: Improve awareness and understanding of AMR through effective communication, education and training

Strategy	Activiteis	Performance indicator	Target	Time line	Lead agency	Implementing partners		
	3.1.1 Update the AMR communication and education strategy	3.1.1.1 Update and endorse the AMR communication and advocation strategy by AMR NACC	1	202025				MFDA, QARD, HPA, MoAAW & MoFOR, MoCCEE, MoE, MoHE
3.1 The public	endorse AMR	3.1.1.1 TV program developed and aired	8	Bi-		MFDA, QARD		
education and awareness shall be promoted through appropriate	communication plan with targets for 2025-2029	3.1.1.2 Radio Program developed and aired3.1.1 Develop TV/radio Program on AMR and broadcast	8	Annually (from 2024)	NACU Supported by Awareness & Education TSC	HPA, MoAAW & MoFOR, MoCCEE, MoE, MoHE		
medium on AMR related topics;	3.1.2 Design, develop designated social media profile for AMR	3.1.2.1 Twitter handle for AMR Maldives	1	3Q2025		MFDA, QARD HPA, MoAAW &		
AMR, IPC, hygiene (WaSH), food safety, vaccination in human and animals etc.		3.1.2.2 Number of social media posts designed, developed, and released	50	From 2024 monthly one		MoFOR, MoCCEE, MoE, MoHE		
	3.1.3 Utilization of influential personalities for AMR awareness	3.1.3.1 Number of AMR ambassadors (Social media influencers, community and political level influencers) from different key areas	3	5 years (depend on comm- unication strategy)		MFDA, QARD HPA, MoAAW & MoFOR, MoCCEE, MoE, MoHE		
	3.1.4 Create awareness among	3.1.4.1 Awareness sessions for school	Cover 60% of schools	Annually (from 2025)		MFDA, QARD		

3.2 Education and training of healthcare and professionals	students, teachers and staff	3.1.4.2 Awareness sessions for students 3.1.4.3 implementation of the AMR content in curriculum	Cover 60% of schools	Annually (from 2025)	HPA, MoAAW & MoFOR, MoCCEE, MoE, MoHE
	3.1.4. Observe Antibiotic awareness week	3.1.4.1 Awareness week observed	4	Annually (from 2024)	MFDA, QARD HPA, MoAAW & MoFOR, MoCCEE, MoE, MoHE
	3.2.1 Incorporate in Undergraduate and post graduate curriculum for health-related fields (animal, human and environment)	3.2.1.1 AMR should be a core component in the syllabus of all relevant higher education programmes	Human health x 5 fields Animal x 1 Agricult- ure x1 Environ- ment x 1 field	4Q2027	MoE, MoHE QARD, Nursing Council, Medical & Dental Council, Allied health council
	3.2.2 CME on AMR related topics for professionals (human and animal health)- physical or online depend on	3.2.2.1 No of CMEs healthcare institutes. Depend on communication plandevelop/ provide access to online platform for healthcare professions CME on AMR	8 (minimum) for all hospitals	Biannually (start 2025)	MFDA, QARD HPA, MoAAW & MoFOR, MoCCEE, MoE, MoHE, Nursing Council, Medical & Dental
	communication plan	3.2.2.2 Healthcare facilities conducting regular AMR related CMES	> 50% of hospitals	Start 2025	Council, Allied health council
	3.2.3 Educational sessions to relevant stakeholders in ministries	3.2.3.1 Number of AMR related sessions for MoH, MoAAW & MoFOR, MoCCEE, MoE staff	4	Annually	MFDA, QARD HPA, MoAAW & MoFOR, MoCCEE, MoE, MoHE, disaster, defense



	3.2.4 Evaluate and ensure AMR related fields are incorporated in the training priority list for the country	3.2.4.1 Conduct a needs based assessment to develop human capacity for AMR related fields (for eg: Microbiology, Infectious diseases, Clinical Pharmacy, Infectious control nurse training, CSSD technicians, veterinarian, Food safety specialist, environment scientists etc.). priority list developed training in AMR related fields and shared with relevant authorities:  3.2.4.2 Ensure that the priority fields are included in annual training opportunities announced by Ministry of Higher Education	1	1Q2025	MFDA, QARD HPA, MoAAW & MoFOR, MoCCEE
3.3 Information on IPC, AMR and antimicrobial	3.3.1 Develop AMR related content for staff orientation program at the time of joining (hospitals,	3.3.1.1 AMR module developed for In-service orientation	1 (human)	202025	MFDA QARD HPA MoAAW & MoFOR MoCCEE
stewardship (human and health) for staff in healthcare and other relevant institutes			1 (animal)	- Lyeveu	
	pharmacy, clinics, institutes etc. related to human and animal). This maybe an online platform for staff to participate.	3.3.1.2 Participation of newly joined healthcare staff	> 50 % of newly joined staff from health care facilities	Annually from 2025	MFDA QARD HPA MoAAW & MoFOR MoCCEE

	1000	
	200	
b	(300)	1
	300	ļ

3.3.2 AMR sessions for staff in key agencies	3.3.2.1 Number of AMR related sessions for MoH, MoAAW & MoFOR, MoCCEE, MoE staff	20	Annually from 2025	MFDA QARD HPA MoAAW & MoFOR MoCCEE
3.4.1 Evaluate effectiveness of AMR related trainings and awareness activities through effective evaluation tools	3.4.1.1 KAP studies on AMR awareness	4	Annually from 2025	
3.4.2 Evaluate cultural drivers of health-seeking and health-providing behaviours, which affect the management of drug-resistant infections and patient outcomes	3.4.2.1 KAP study to evaluate cultural drivers of health seeking and health providing behaviour			

