



UNITED ARAB EMIRATES
MINISTRY OF HEALTH & PREVENTION

NATIONAL AMR ACTION PLAN UAE 2025-2031





© United Arab Emirates Ministry of Health and Prevention, 2025

© United Arab Emirates Ministry of Climate Change and Environment, 2025

United Arab Emirates National Action Plan on Antimicrobial Resistance (NAP-AMR) 2025-2031.

Document ref. number: AMR/NAP-AMR/02, version 1.0

Contributing Bodies (in alphabetical order)

- Abu Dhabi Agriculture and Food Safety Authority (ADAFSA)
- Abu Dhabi Public Health Center (ADPHC)
- Department of Health, Abu Dhabi (DoH)
- Dubai Health (DH)
- Dubai Health Authority (DHA)
- Dubai Municipality
- Emirates Health Services Establishment (EHS)
- Khalifa University, Abu Dhabi
- Ministry of Climate Change and Environment
- Ministry of Health and Prevention (MOHAP)
- Ministry of presidential affairs hospitals
- Mohammed Bin Rashid University of Medicine and Health Sciences, Dubai
- Public and private clinical microbiology laboratories (see Annex 5.6)
- Public and private healthcare facilities (see Annex 5.5)
- RAK Medical and Health Sciences University
- United Arab Emirates University, Al Ain
- Zayed University Dubai

All rights reserved. The Ministry of Health and Prevention welcomes requests for permission to reproduce or publish of any text, tables, graphs or figures from this report in peer-reviewed journals.

For media enquiries, please contact:

MOHAP Government Communications Department

E-Mail: gov.comm@MOHAP.gov.ae

Email: AMR.EHS@ehs.gov.ae

Tel.: +971 (4) 230 1000, or Tel.: +971 (4) 230 1607



Contents

Heading	Page Number
Acknowledgement	4
Abbreviations	5
Introduction	6
Executive Summary	7
Previous/current efforts in UAE	8
About this NAP	14
Current National Action Plan- Governance	14
Objective- Governance and infrastructure	19
Objective 1 - To improve awareness and understanding of antimicrobial resistance through effective communication, education and training:	21
Objective 2- To strengthen the knowledge and evidence base through surveillance and research	26
Objective 3- To reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures	35
Objective 4- To optimize the use of antimicrobial medicines in human and in animal health	39
Objective 5- To develop the economic case for sustainable investment	49
Objective 6- One Health approach	50
Objective- AMR diplomacy	54
References	55



Acknowledgement

The Ministry of Health and Prevention and the Ministry of Climate Change and Environment wish to thank all participating entities and individuals in the United Arab Emirates for participating in the development of this National Action Plan.

Authors: Najiba Abdulrazzaq (Co-Chair, National AMR Committee)

Contributors: Abeer Rajeh Khalil, Abiola Catherine Senok, Adnan Alatoom, Afra Saeed AlDoobi, Ahmad Lutfi Subhi, Ahmed Abdulkareem Al Hammadi, Aisha Abdullah Al Marzouqi, Anju Nabi, Carole Ayoub Moubareck, Dean Everett, Duaa Jawhar, Elias Tannous, Entersar Al Hammadi, Fathima Rashid AlShehhi, Fatima Al Dhaheri , Ghada Abdel Wahab, Hana M S Saleh Salama, Huda Sulaiman Aldhanhani, Hussein Al-Awadhi, Joseph Boutros Tannous, Kholoud Jamal Bin Rafi, Laila Mohammed Jassim Al-Dabal, Lamees Ali Mahmoud Al-Bawaneh , Leili Chamani-Tabriz , Manal Abdelfattah Ahmed Aly, Maya Habous, Meera Saeed Mohamed, Moeena Zain , Mohammed Saleh Ali Suwaileh , Mona Muhammad Alawi Al-Safi, Nawal Ahmed Mohammed Al-Kaabi, Nehad Nabeel Alshirawi, Nermine Khalifa, Nortan Ibrahim Hashad, Pramod Chhabrani, Rania El-Lababidi, Sarah Osman, Shaikha Mohamed Aldahmani, Sheikha Ghannam Al Kaabi, Somansu Basu, Stefan Weber, Yassir Mohammed Eltahir Ali, Zulfa Omar Deesi

All rights reserved.

Citation, reproduction and/or publication of any text, tables, graphs or figures from this report in peer-reviewed journals require the written consent of the document owner.

For media enquiries please contact:

MOHAP Government Communication Department

E-Mail : gov.comm@MOHAP.gov.ae

Tel.: +971 42301000/ 042301607



Abbreviations

ABX	Antibiotics
ADAFSA	Abu Dhabi Agriculture and Food Safety Authority
ADPHC	Abu Dhabi Public Health Centre
AMR	Antimicrobial Resistance
ASP	Antimicrobial Stewardship
CMO	Chief Medical Officer
CNS	Central Nervous System
CSSTI	Complicated Skin and Soft Tissue Infections
CVRL	Central Veterinary Reference Laboratory
DH	Dubai Health
DHA	Dubai Health Authority
DoH	Department of Health, Abu Dhabi
EDE	Emirates Drug Establishment
EHS	Emirates Health Services Establishment
GI	Gastrointestinal
IAI	Intra-Abdominal Infections
IPC	Infection Prevention and Control
LTCF	Long-Term Care Facilities
MDRO	Multidrug Resistant Organisms
MOCCAEC	Ministry Of Climate Change and Environment
MOE	Ministry Of Education
MOHAP	Ministry Of Health and Prevention
NAP	National Action Plan
NRL	National Reference Lab
QCC	Quality Control Circle
RTI	Respiratory Tract Infections
STD	Sexually Transmitted Diseases
ToR	Terms of Reference
UAE	United Arab Emirates
UTI	Urinary Tract Infections
WHO	World Health Organization



Introduction

The rise of antimicrobial resistance (AMR) is an increasingly urgent health issue that affects both human and animal populations. As the effectiveness of antimicrobial treatments continues to decline, the ability to manage common infections is being compromised. This growing resistance not only hinders routine medical care but also places complex medical procedures, such as surgeries, chemotherapy, and organ transplants, at greater risk due to increased chances of infection and reduced treatment options.

In 2024 AMR caused 1.14 million deaths worldwide and was associated with 4.71 million deaths. WHO listed AMR among top 10 threats to global public health. It is now estimated that more than 39 million people around the world could die because of antibiotic resistance over the next 25 years. In the United Nation High level meeting on Antimicrobial Resistance in its 79 assembly on 20/09/2024; Global leaders approved the critical declaration committing countries on a clear set of targets and actions aiming towards reducing estimated global mortality by 10% by 2031.

The Ministry of Health and Prevention, the Ministry of Climate Change and Environment, and the relevant local authorities in the United Arab Emirates, are committed to advancing a coordinated, sustainable, and multi-sectoral national action plan to combat antimicrobial resistance (AMR). Guided by the oversight of the UAE National AMR Committee, specialized technical subcommittees have been formed to design and implement targeted strategies across key domains, including AMR surveillance, antimicrobial stewardship, infection prevention and control, as well as the management of AMR risks within the food, animal, and environmental sectors. These coordinated initiatives are being undertaken in close partnership with other governmental bodies, academic institutions, reference laboratories,



research centers, and relevant national stakeholders to ensure an integrated and effective response.

Executive summary

The United Arab Emirates (UAE) National Action Plan on Antimicrobial Resistance (NAP-AMR) 2025-2031 is a strategic, multi-sectoral initiative designed to combat the growing threat of antimicrobial resistance (AMR). The previous action plan 2019-2023 was extended to 2024, however, it had challenges such as lacking intersectoral data sharing, surveillance data collection resistance, monitoring infection control compliance and difficulty in antimicrobial stewardship enforcement. Building upon the achievements and lessons learnt from the previous 2019-2023 plan, this new action plan aims to preserve the effectiveness of antimicrobials for future generations through a comprehensive “One Health” approach, encompassing human health, animal health, agriculture, and the environment.

This plan addresses critical gaps identified in previous efforts, prioritizing key areas such as:

- **Strengthening Governance:** Formalizing the National AMR Committee and its subcommittees with expanded representation from all relevant sectors.
- **Enhancing Awareness and Education:** Implementing continuous public awareness campaigns and integrating AMR education into professional licensing, undergraduate, and school curricula.
- **Reinforcing Surveillance and Research:** Expanding AMR surveillance across human, animal, and environmental sectors, establishing a national AMR reference laboratory, and promoting collaborative research.



- **Improving Infection Prevention and Control (IPC):** Developing and implementing national IPC guidelines, mandating IPC training, and conducting Healthcare-associated infection (HAI) surveillance.
- **Optimizing Antimicrobial Use:** Implementing robust antimicrobial stewardship programs (ASP) in healthcare and in veterinary settings and monitoring antimicrobial consumption.
- **Promoting Innovation and Investment:** Encouraging the development of new diagnostics, vaccines, antimicrobials, addressing health disparities and incorporating artificial intelligence.
- **One Health Approach:** Strengthening surveillance and collaboration across human, animal, and environmental sectors to address the spread of AMR.

The plan sets clear objectives, actionable goals, and measurable indicators to ensure effective implementation and monitoring. Through collaborative efforts across various ministries, authorities, and institutions, the UAE aims to significantly reduce the impact of AMR and safeguard public health.

Previous/current efforts in UAE

Acknowledging the importance of antimicrobial resistance and its impact, MOHAP formed the National AMR committee in 2017, consisting of members from all the concerned sectors and working towards achieving the goals of the plan. The UAE NAP AMR developed NAP AMR in 2019-2023, was based on the global action plan on AMR developed by WHO in 2015. Though its implementation was interrupted by the COVID-19 pandemic, it has achieved a great milestone.

The previous action plan has been thoroughly reviewed and analyzed, uncovering many successful efforts and initiatives that were started and completed. However, we also identified some gaps in implementation and the long-term sustainability of some activities. The 2025-2031 action plan will prioritize addressing these gaps,



advancing the achievements made and finding innovative ways to address this threat.

The mandate from The Ministry of Health and Prevention requiring all facilities in UAE to acquire international accreditation, has been instrumental in ensuring that healthcare facilities have active Infection Prevention and Control programs and implementing antimicrobial stewardship. Currently, 95% of facilities are internationally accredited. AMR surveillance has been robust, governing a large number of facilities, including hospitals, clinics and laboratories. There have been educational activities for the healthcare workers, which were mandatory in some facilities regarding antimicrobial resistance and infection prevention control, however, many other facilities have no mandatory education.

As for public education, annual awareness sessions are executed, although only around world antimicrobial awareness week.

The table below shows the scope of activities carried out and the milestone achievements in the previous term:

Domain	Milestone
Governance	
Establishment of national AMR committee with multisectoral and different authorities' members	Achieved
Subcommittees formation for infection prevention and control, antimicrobial stewardship, MDRO surveillance. Members are from different health authorities and sectors	Achieved
Establishment of AMR and IPC unit/department in MOHAP to oversee all activities with respect to one health approach	Initiated



Strategic plan	
Public awareness	
Implementation of annual public awareness during world antimicrobial awareness week	Achieved every year since 2017 through television, radio, social media and public area posters
Implementation of undergraduate awareness during world antimicrobial awareness week	University students were involved through competition for awareness posters.
Development and publication of yearlong awareness activities for the public through different media types.	Initiated
Development and publication of platform for broadcasting AMR activities	Partially achieved through Ministry of Health and Prevention platform
Undergraduate Education	
Inclusion of educational material in undergraduate schools related to human health, veterinary, agriculture, environmental and related health sciences	Initiated



Healthcare workers and veterinary AMR Education	
Assurance of Linkage of education for human health, veterinary, food agriculture and environmental factors to their license to work	Not achieved
School Education	
Development and implementation of appropriate infection control and antimicrobial resistance education in the schools' curriculum	Achieved
AMR surveillance	
Appointment of focal points for AMR data sharing in each health authority	Achieved
Development of AMR surveillance standardization, capacity building and epidemiological representation	Achieved in representative data as per different Emirates' population and bed numbers
Evaluation of the burden of AMR surveillance	Initiated
Establishment of a national AMR reference laboratory	Initiated
Establishment and publication of AMR surveillance in the veterinary field	Initiated
Establishment and publication of AMR surveillance in agriculture and food chain	Initiated



Infection Prevention and Control	
Establishment of an IPC-related facility infrastructure as part of hospital standards mandate	Achieved
Development of National infection prevention and control guideline/ manual	Initiated
Capacity building for infection prevention	Achieved
Mandating infection control education in the training required for physicians, nurses, healthcare providers, and food handler	Partially achieved
Development of healthcare associated infection surveillance	Outcome indicators are measured.
Development of infection control and prevention and biosafety in animal Health, agriculture, food safety and environment legislation review, implementation documentation and monitoring	Partially achieved
Antimicrobial stewardship	
Establishment of antimicrobial consumption monitoring in human, veterinary, agriculture and food safety sectors	Initiated
Publish an antimicrobial stewardship committee mandate for healthcare facilities including clinics	Partially achieved
Development of national guidelines for common infections with key performance indicators and related policies to be published and disseminated	Achieved and continuous



Execution of periodic point prevalence for antimicrobial consumption	Initiated
Performance of periodic antimicrobial stewardship self-reporting survey	Not achieved
Publishing mandate for veterinary antimicrobials to be dispensed only by prescription for animals	Achieved
Development of educational activities for linking Human Health to veterinary animal health, and agriculture	Partially achieved
Use of appropriate pesticides and alternatives to antibiotics in agriculture and animal health	Under evaluation
Ensuring food safety through the absence of antimicrobial residue from food	Not achieved
Research and sustainability	
Conduct research activities related to AMR in collaboration with the universities, entities and colleges	Achieved and continuous
Use of rapid diagnostics and effectiveness in treating infections and cost reduction	Not achieved



About this NAP

The 2025–2031 Strategic National Action Plan establishes a comprehensive framework for authorities and ministries across the UAE to intensify efforts in combating antimicrobial resistance (AMR), building upon the achievements of the previous plan. It outlines clear objectives and actionable goals through a multisectoral approach, emphasizing a unified "One Health" strategy that encompasses human health, animal health, agriculture, and the environment. The plan prioritizes several strategic areas, including the enhancement of antimicrobial stewardship programs in both human and animal healthcare settings, systematic monitoring of antimicrobial usage across sectors, and the expansion of integrated surveillance in human, animal, and environmental domains. Furthermore, it underscores the importance of robust governance mechanisms to oversee AMR-related initiatives, and promotes interoperability and timely exchange of data across sectors to support coordinated, evidence-based decision-making.

Current National Action Plan:

Governance:

The National AMR Committee is currently undergoing a formal restructuring process. Lead by MOHAP, the Committee will be expanded to include additional sectors, comprise of ministry of health different Health sectors in the MOHAP and MOCCAIE with all sectors of food, animal, agriculture and environment representatives, ADPHC, DOH, DH, DHA, EHS, SEHA and ADAFSA, other Emirates' municipalities and related colleges and universities. Subcommittees and/or task forces will be formed when required to accelerate the implementation of the actions and related regulations.



The National Committee and subcommittees will operate under the following terms of reference:

1. **Task Allocation:** Assigning roles, responsibilities, and tasks to relevant authorities for the effective implementation of measures to combat antimicrobial resistance.
2. **Implementation Oversight:** Supervising the execution of assigned tasks, policies, regulations, and responsibilities related to antimicrobial resistance.
3. **Program Coordination:** Collaborating with other health programs to ensure alignment with the provisions of the International Health Regulations.
4. **Legislative Recommendations:** Proposing and approving legislation aimed at curbing antimicrobial resistance.
5. **Data Management:** Reviewing collected data and analysis on antimicrobial resistance, and disseminating relevant information to national authorities.
6. **International Submissions:** Securing necessary approvals for submitting data to international organizations upon request.
7. **Research Planning:** Identifying and recommending research priorities in the field of antimicrobial resistance. Recommending AMR research fund allocation.



This national action plan is still based on the last global action plan on antimicrobial resistance by the World Health Organization 2015.

Objective 1: Improve awareness and understanding of antimicrobial resistance through effective communication, education and training. in different settings (human, animals, agriculture and environment):

Objective 2: Strengthen the knowledge and evidence base through surveillance and research

This objective aims to enable decisions to be taken based on robust surveillance. data

Objective 3: Reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures:

The aim is to reduce the need for, and unintentional exposure to, antimicrobials.

A whole-system approach to infection prevention and control (IPC) will be adopted, ensuring, improved diagnostics and treatment in different settings (humans, animals, agriculture and the environment) and improve vaccination coverage.

The objective will be achieved through public engagement and education

Objective 4: Optimize the use of antimicrobial medicines in human and animal health:

The purpose is to optimize the use of antimicrobials, by appropriate prescribing and disposal.

Aim to improve the use of antimicrobials to preserve future effectiveness.



Creating an AMR workforce – this aims to raise awareness among the workforce in human health, animal health and agriculture to improve the optimal use of antimicrobials

Clinical examples include creating clinical decision support, an appropriate system ensuring appropriate prescribing and disposal, in addition to behavioral interventions.

Objective 5: Develop UAE specific economic case for sustainable investment that takes account of the needs of the country and to increase investment in new medicines, diagnostic tools, vaccines and other interventions:

This objective includes innovation, supply and access.

It calls on the life sciences sector to prioritize the development of new approaches to diagnose and treat infections, the development of vaccines to prevent infections as well as the development of new antimicrobials.

Health disparities and health inequalities – this aims to improve the information available to identify more specific regions and populations within the UAE where the burden of AMR is greatest. This will help to target future interventions where they will have the greatest impact.

Ensure adequate investments to incorporate artificial intelligence and big data analytics in AMR and ASP.



Objective 6: One Health approach

Strengthened surveillance – Cross-Sector Collaboration for surveillance systems to be further enhanced to collect and analyze data on resistant microorganisms from various sources, including humans, animals, agriculture, and the environment through collaboration between different public health officials’ veterinarians, environmental scientists, agricultural experts, and the private sector. This aims to improve understanding of AMR through the capability to measure, predict and understand how resistant microorganisms spread across and between humans, animals, agriculture and the environment.

Capacity Building: Investing in infrastructure and training for surveillance systems is essential. This includes improving laboratory capabilities, standardizing data management systems, and the skills of personnel involved in surveillance.

Additional objective:

AMR diplomacy

- Prevention and preparedness
- Access and stewardship
- Antimicrobial use in farming
- Standards for manufacturing and waste management



Objective- Governance and infrastructure					
Domain	Activity	Timeline	Responsible Entity	Indicator	Target
Infrastructure organization	Develop a unit/department for AMR in MOHAP	2025	MOHAP Undersecretary office	Unit developed with clear organization structure, mission, vision and values	Well-staffed multidisciplinary unit/section (minimum 2) based on a thorough activity-based calculations, workload and analysis, Staff with expertise in infectious diseases, IPC, One Health, microbiology, and policy development.



	Provide recommendations for mandates and legislations for the ministries to improve AMR	Ongoing	MOHAP & MOCCAE–through the units that would be developed	NA	
	Facility audits to include infrastructure and AMR elements for licensing and relicensing	Partially achieved	MOHAP, DHA, DoH and other authorities	Percentage of licenses issued that had AMR elements audited	More than 95%

Objective 1 - To improve awareness and understanding of antimicrobial resistance through effective communication, education and training:

Domain	Activity	Timeline	Responsible Entity	Indicator	Target
AMR Education for licensing and relicensing of health-related professions in human health, veterinary, food, agriculture and environment sectors	<ul style="list-style-type: none"> Integrate IPC/AMR education into orientation programs and annual competencies and on yearly basis, in all facilities. Develop digital modules with completion tracking. Follow example of EHS to mandate such requirement, on a national level. Logistics to be discussed with MOHAP licensing body again. Communicate with different health authorities on the process of implementing such a requisite 	2027	MOHAP MOCCAE and all related emirate/local agencies and organizations	Percentage of authorities mandating AMR education for licensing	<p>100% compliance</p> <p>All authorities</p>



	<ul style="list-style-type: none">• Contact MOCCAIE for related workers in their field• Survey to check basic information for HCWs• Link IPC/AMR education to licensing software systems				
	Develop curricula for AMR and IPC for postgraduate and specialty programs in humans and veterinary	2028	MOHAP MOE	% of post graduate courses that have introduced AMR curricula	Increase by 10% yearly
	Develop educational courses for IPC and ASP and/or accredited professional certificates for human health professionals	2028	MOHAP	% of facilities that are enrolled in this course	Increase by 10% yearly



	Develop educational courses or use accredited professional certification for IPC and ASP for veterinary professionals	2028	MOCCAIE and all related emirate/local agencies and organizations	% of facilities that are enrolled in this course	Increase by 10% yearly
Proposal for MOE to include IPC& AMR education in the undergraduate universities for health related and veterinary colleges	<ul style="list-style-type: none">• Define the core components of educational material that should be included in different university curricula• Central committee to approve the developed curricula• MOHAP to address MOE• Create a survey to check if this information is included in curricula	2028	MOHAP MOE	Percentage of specialties that have IPC & AMR education	Increase by 5% yearly



AMR awareness education in schools	Develop a KPI or a process to measure implementation	2028	MOHAP MOE	Percentage of schools that have AMR education in their curriculum	Increase by 10% yearly
Public awareness	<ul style="list-style-type: none">Hotels, Malls and hospital waiting areasPreparation of media material for:<ul style="list-style-type: none">TV/radio spotsPhone waiting time entertainmentSMS messagesPop up advertisement on social mediaEmploy the Infectious disease society and microbiology society to collaborate on this under EMA for reaching the public with	2026 and ongoing	MOHAP	Twice a year	Improve awareness by 5%



	pre/post surveys) to measure the effectiveness of awareness interventions				
Public awareness	Conduct survey with new components for public awareness and compare with previous survey results	2025	MOHAP	Every 3 years	Improve awareness by 10%
	AMR messages in municipalities and farmers' centers yearly activities	2026	MOCCAIE and all related emirate/local agencies and organizations	Twice a year	Improve awareness by 5% of farms and centers receiving education



Objective 2- To strengthen the knowledge and evidence base through surveillance and research

Objective	Activity	Timeline	Responsible Entity	Indicator	Target
Infrastructure organization	<ul style="list-style-type: none">Review of ToR and modify members list of the national surveillance subcommitteeNominate Members from animal healthNominate Members from Dubai municipalityAll health sectors to nominate a lab as reference lab.MOHAP will nominate focal point	2025	MOHAP & All health authorities MOCCAE and all related emirate/local agencies and organizations	New decree with updated ToR and members every 2 years	Updated decree every 2 years
Promote self-governance And capacity building	<ul style="list-style-type: none">Resend the surveillance reporting mandate to all authorities	Ongoing	MOHAP and all health authorities	Number of facilities joining	5% increase yearly in number of facilities joining



	<ul style="list-style-type: none">• Define AMR surveillance guidelines for human, animal, agriculture and environment• Develop AMR surveillance laboratory requirements audit checklist to be circulated to licensing departments.• Ensure all labs are accredited ISO/CAP• Ensure microbiology quality control• Periodic training for microbiologists at laboratories• Develop Regional reference laboratory terms of reference guide• Build reporting capacity for labs through periodic WHONET training		MOCCAE and all related emirate/local agencies and organizations	Number of WHONET workshops conducted and the use of the software	4 sessions per year
--	--	--	---	--	---------------------



Epidemiologic al representation of the surveillance labs	<ul style="list-style-type: none">• Legislation to report all WHO critical organisms to central lab/ in case of outbreak• Self-reporting Survey on AMR lab requirements includes: Questions about crucial microbiological techniques, Results of external quality control, Type of accreditation, Availability of staff trained for WHONET	2028	MOHAP and all health authorities	Create reporting portal, number of surveys submitted	Survey every 3 years
Surveillance informative beyond reporting to GLASS	<ul style="list-style-type: none">• Add fungal infection surveillance• Develop standardized/unified forms for data collection, expanding to include further information on demographics, treatment given and outcomes for epidemiological analysis• Reinforce to have each patient with the same de-identifier so	2028	MOHAP and all health authorities	Percentage of facilities reporting as per the standard of MOHAP	10% increase yearly



	<p>repeated samples can be identified easily</p> <ul style="list-style-type: none">• Report “no growth”• Patient days/ tertiary Vs primary care• Surveillance report of invasive organisms for benchmarking with EARS-Net or other international surveillance systems• Rapid diagnostic information inclusion in the Surveillance• Incentivizing rapid diagnostics through insurance reimbursement especially for larger or more specialized hospitals• Study the possibility of biobanking AMR organisms samples and future gene-sequencing			<p>Percentage reporting no growth from total</p> <p>Percentage of facilities reporting rapid diagnostic results</p>	<p>10% increase yearly</p> <p>10% increase yearly</p>
--	---	--	--	---	---



Surveillance of AMR burden in Human health	<ul style="list-style-type: none">• Surveillance of invasive infections• Surveillance of HAI caused by MDROs thorough mandate from MOHAP• All UAE priority pathogens to be actively archived and shared with respective academic committee membership for expanded national AMR research	2028	MOHAP and all health authorities	Percentage of facilities reporting	10% increase yearly
Establish AMR surveillance in Veterinary field	<ul style="list-style-type: none">• Develop AMR surveillance guidelines in animal	2029	MOCCAIE, related colleges and all related emirate/local agencies and organizations	Document developed	Document published
	<ul style="list-style-type: none">• Develop/Improve reporting of the current compilation of data based on sick animal cultures to include the total number of organisms,	2029	MOCCAIE and all related emirate/local agencies and organizations	Percentage of facilities reporting	5% increase yearly



	<p>type of animal, time frame, and geographic distribution.</p> <ul style="list-style-type: none">• Select Surveillance of priority organisms, sites to be included, results to be included according to lab, method of stratification of the data.• Store and share all major pathogens long term for research• Develop baseline carriage surveillance in the healthy animals				
	<ul style="list-style-type: none">• Collaborate with MOCCA, ADAFSA, QCC and other municipalities for priority organisms. <p>Expanding ADAFSA experience to other Emirates</p> <ul style="list-style-type: none">• long term Storage and sharing of all major pathogens for research	2029	MOCCA and all related emirate/local agencies and organizations	Percentage of facilities reporting,	5% increase yearly



Establish AMR surveillance in food	Identify what is being tested in terms of resistant organisms and antimicrobial residue in food Identify the gaps.	2028	MOCCAE and all related emirate/local agencies and organizations	Percentage of facilities reporting	5% increase yearly
	<ul style="list-style-type: none">Review international laws regarding AMR in food	2028	MOCCAE and all related emirate/local agencies and organizations	Percentage of facilities reporting	5% increase yearly
Collaboration with universities for research areas	<ul style="list-style-type: none">Whole genome sequencing of UAE priority organisms or outbreaks to define AMR epidemiology One health study	2029	MOHAP, MOCCAE and all related emirate/local agencies and organizations	Percentage of outbreaks with whole genome sequencing study	5% increase yearly
	List the priority organism for one health (human, animal, food and environment) surveillance	2029	MOHAP, MOCCAE and all related emirate/local agencies and organizations	Percentage of sites collaborating in the data collection	5% increase yearly



Establish national AMR surveillance reference laboratory in	<ul style="list-style-type: none">• Terms of reference for NRL labs to be reviewed• Create a guideline for National reference lab per health authority and the requirements for the AMR surveillance reporting labs.• Develop National reference lab for animal health	2026	MOHAP and all health authorities	Number of authorities with reference laboratories	All health authorities
		2029	MOCCAIE and all related emirate/local agencies and organizations	percentage of sites covered by each authority	5% increase yearly
	Provide technical support and training for the laboratories on reporting of AMR to the national surveillance system	2027	MOHAP	Percentage of sites that are trained	5% increase yearly
	Capacity building for molecular epidemiology for national AMR surveillance, human sector	2028	MOHAP and all authorities	Percentage of sites that report molecular data	5% increase yearly
	Capacity building for high-quality microbiological data for animal and environment	2029	MOCCAIE ADASFA CVRL	Sentinel sites to be chosen for surveillance in	5% increase yearly



Human health and animal health			Municipalities Universities/ colleges and all related emirate/local agencies and organizations	animal and environmental factors	
	Continuing the process of capacity building and complete WHONET training for the selected labs	Ongoing	MOHAP	Percentage of facilities trained	Increase by 5% yearly
	Develop specific location on MOHAP website for AMR research links, needs and publication	2028	MOHAP	Link creation process completion	Link created



Objective 3- To reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures

Objective	Activity	Timeline	Responsible Entity	Indicator	Target
Establish /adopt national IPC guidelines	Develop IPC program on national level and publish on MOHAP website to be circulated to all authorities for dissemination	2026	MOHAP	Document published	A document
Infrastructure	Facility audits to include infrastructure and AMR elements for licensing and relicensing	2027	MOHAP	Mandate with all representatives issued	A document
Capacity building for the personnel in charge of IPC at	Minimum requirement for IPC staffing for secondary and tertiary healthcare facilities is 1 IPC for every 100 beds; however, the IPC program shall be staffed according to hospital size, type of care, population cared	2025	MOHAP and all authorities	Mandate with all representatives issued	A document



hospital/emirate/national levels	for, complexity, level of risk and scope of services.				
	Mandate that professionals working as IPC physicians or practitioners have certain qualification/training in each facility	2027	MOHAP	Mandate with all representatives issued	A document
	Mandate pre-employment basic IPC training for all staff as part of orientation and annually thereafter	2026	MOHAP and all authorities	Mandate with all representatives issued	A document
	Explore the possibility of diploma/master's degrees in universities	2029	MOHAP and universities	Discussion with universities	Initiating a course
IPC in long term care facilities (LTCF)	Prepare or adopt national IPC guidelines for LTCF	2028	MOHAP and all authorities	Inclusion of checklist related to IPC in LTCF in the licensing and relicensing	Inclusion of the checklist



				requirements of these facilities	
Conduct surveillance of HAI	WHO self-reporting survey to develop and mandate to all facilities to submit periodically	2026	MOHAP and all authorities	% facility participated in the survey	Increase facilities involved by 10% per survey
	Mandate to authorities to submit all the data requested related to IPC KPIs to be submitted from each facility regularly. Possible reinforcement with penalties	2026	MOHAP and all authorities	% of facilities that participate in data collection	Increase number of facilities by 5-10% yearly
	Mandate to authorities to submit all the data requested related to MDRO HAI from all facilities regularly.	2028	MOHAP and all authorities	% of facilities that participate in data collection	Increase number of facilities by 5-10% yearly
	Mandate to submit Hand hygiene data by all facilities and reinforcement through respected authority	2027	MOHAP and all authorities	% of facilities that participate in data collection	Increase number of facilities by 5-10% yearly



IPC research national research agenda	Letters to universities to find opportunities for research in IPC in facilities Conduct local study on clinical impact of HAI /AMR	2027	MOHAP Health authorities Colleges and universities	Number of studies per year	1 study every year
Biosafety & Biosecurity laws in the veterinary world, agriculture and food safety	Ensure all elements of IPC are covered in the mandates and regulations related to biosafety in veterinary, agriculture, environment and food safety fields	2027	MOCCAE and all related emirate/local agencies and organizations	Number of regulations reviewed	>50% of regulations reviewed
	Develop national infection control program/ policies in animal health and husbandry. With monitoring tool for implementation	2027	MOCCAE and all related emirate/local agencies and organizations	Number of facilities participate in the monitoring tools	Increase number of facilities by 5% yearly



Objective 4- To optimize the use of antimicrobial medicines in human and in animal health

Objective	Activity	Timeline	Responsible Entity	Indicator	Target
Infrastructure organization	<ul style="list-style-type: none">Update TOR and modify members list of the national ASP subcommitteeMembers from animal health (add-hock)Members from public health awareness (add-hock)	2026	MOHAP	New decree with updated ToR and members every 2 years	Decree updated every 2 years
	Establish the role of Emirati Drug Establishment (EDE) in ASP	2026	MOHAP EDE	EDE role in AMR agreed	Publish EDE role
	<ul style="list-style-type: none">Develop a committee for animal health and agriculture	2027	MOCAE and all related emirate/local agencies and organizations	Decree issued	Decree issued



Antimicrobial dispensing in Human health	<ul style="list-style-type: none">Report monitoring system for antimicrobials dispensed without prescription in animal health(e.g. random sampling, pharmacy audit, etc.)	2027	MOHAP and all authorities	Mark the level of the current practice	Report received by MOHAP
	<ul style="list-style-type: none">Monitor dispense without prescription process	2028	MOHAP and all authorities	% of antimicrobials dispensed <u>without</u> prescription out of the prescriptions reviewed	In less than 20% and to reduce by 5% annually
Antimicrobial dispensing in Animal health	<ul style="list-style-type: none">Develop a monitoring system for antimicrobials dispensed without prescription in animal health (e.g. random sampling pharmacy audit, etc.)	2027	MOCCA and all related emirate/local agencies and organizations	Monitoring system for antimicrobials dispensed without	Mark the level of the current practice



				prescription is developed	
	<ul style="list-style-type: none">Pilot the dispense without prescription monitoring process	2028	MOCCAIE and all related emirate/local agencies and organizations	% of antimicrobials dispensed <u>without</u> prescription out of the prescriptions reviewed	Reduce by 5% annually
Promote self-governance	<ul style="list-style-type: none">ASP mandate in pipelineAll JCI accredited hospitals should have ASP	2027	MOHAP and health authorities	Mandate developed and published	The document developed and published
	<p>Survey for ASP core component</p> <ul style="list-style-type: none">Implementation will be sent out to all facilities to be repeated after 2-3 years	2027	MOHAP and health authorities	A survey conducted every 3 years	%facilities participating to increase by 10% each time.



Legislation of ASP to be a requirement in licensing standards of hospitals	<ul style="list-style-type: none">Propose protected time for stewardship activityPropose the possibility of a mandatory digital course for ASP fundamental to all physicians and pharmacist.	2028	MOHAP and all authorities	Mandate to include protected time in job description of clinical pharmacist and all ASP committee members Mandate to include ASP training	Circular issued
	<ul style="list-style-type: none">Related guidelines are established and disseminatedOlder guidelines reviewed and updated if required	Ongoing	MOHAP and all authorities	Number of guidelines per year	2 guidelines per year



ASP in outpatient clinics	<ul style="list-style-type: none">Survey on Antibiotic consumption (Augmentin, Azithromycin, ceftriaxone) distributed awaiting replayNational antibiotic consumption committee will monitor Abx consumption			Consumption calculation, increase number of facilities reporting	Increase by 5% every year
	<ul style="list-style-type: none">Involve community pharmacies in data collectionAntibiotic prescription platform proposal	2029	MOHAP and all authorities	% of private pharmacy groups involved	Increase by 5% every year
	<ul style="list-style-type: none">Evidence of enforcement of the law of antibiotic dispensing	2026	MOHAP and all authorities	% of private pharmacy groups involved Reports on violations	Increase by 5% every year
	<ul style="list-style-type: none">Develop unified electronic prescription linked to platform for	2029	MOHAP and all authorities	% of facilities linked to the platform	Increase by 5% every year



	dispensing under MOHAP and authorities				
	<ul style="list-style-type: none"> Link of antibiotic prescription to insurance.Link insurance approval of antibiotic to national guidelines 	2027	MOHAP and all authorities	% of antimicrobial prescriptions that are linked	Increase by 5% yearly
ASP in hospitals	<ul style="list-style-type: none"> Surgical prophylaxis UTI, IAI and CSSTI Pediatrics RTI and UTI RTI adults Sepsis CNS Infections GI infections Endocarditis Gynecological infections and STDs Bone and joints infection <p>New guidelines roll out decided by ASP subcommittee for adults and pediatrics</p>	ongoing	MOHAP and all authorities	number of guidelines published	% achieved from plan



	National guidelines for use and implementation of rapid diagnostics	2026	ASP subcommittee task force	Guideline Developed	Guidelines published
	Encourage use of rapid diagnostics in facilities with either high specialization or with high use of antibiotics	2025 and ongoing	MOHAP and all authorities	% of large facilities use rapid diagnostics	Increase by 5% yearly
Antimicrobial consumption in Human health	Conduct point prevalence in a representative sample and compare to previous PP	Periodically every 3-4 years	MOHAP and all authorities	% Of facilities participating. Reduction in HAI, reserve antimicrobial use reduction	5 % change every time
	<ul style="list-style-type: none">Circular mandating antimicrobial consumption data Submission yearly	2026	MOHAP, MOCCAIE and all authorities	Number of facilities submitting data	Increase by 5% yearly



Surveillance of ABX use in humans and animals	• Meeting with CMO's and authority proposal and a forum during WAAW 2026	2026	MOHAP and all authorities	70% attendance	Meeting executed
	• Develop list of ASP focal point at hospitals	2026	MOHAP and all authorities	Number of facilities submitting	Increase by 5% yearly
	• Monitoring Abx consumption through E-claim	2027	MOHAP and all authorities	Number of antimicrobials/diagnoses monitored	Increase by 5% yearly
National follow up on antimicrobial stewardship activities and results	Survey based on international recommendations for Implementing ASP	2025 every 3-4 years	MOHAP and all authorities	number of facilities submitting survey	Increase by 5% yearly
	Develop a framework to increase capability of different laboratory investigations in animal health, such as antimicrobial susceptibility testing	2029	MOCCA and all Animal/food/agriculture/environment authorities	Framework developed and needs identified	Achieve 50% of need and increase by 5% annually



National circular for antimicrobial residue in food, animal feed and the environment	Mandate to monitor antimicrobials residue	2027	MOCCAE and all related emirate/local agencies and organizations	Number of facilities submitting survey	Increase by 5% yearly
AMS annual event for sharing experience	Sharing experience between facilities and creating an award for best project proposal.	2026	ASP subcommittee	Number of facilities involved	Increase by 5% yearly
	Develop a system to improve the dispensing of antimicrobials from private pharmacies. In humans	2026	MOHAP and all authorities	Dispensing antimicrobials without prescription monitoring system	Increase by 5% yearly



	Develop a system to improve the monitoring and dispensing of antimicrobials from pharmacies in veterinary medicine and farming	2027	MOCCAЕ and all related emirate/local agencies and organizations	% facilities audited	Increase by 5% yearly
Animal health guidelines	Develop guidelines with monitoring tool for specific infectious diseases in different animal categories	2028	MOCCAЕ and all related emirate/local agencies and organizations	Number of guidelines	1-2 per year



Objective 5- To develop the economic case for sustainable investment

Objective	Activity	Timeline	Responsible Entity	Indicator	Target
Improve visibility of the work of the committee and provide a platform for broadcasting all the activities of the different axes of the AMR NAP	Create the AMR section as part of MOHAP website and MOCCAIE website as a platform for networking and dissemination of all information and activities related to AMR	2027	MOHAP & MOCCAIE	Section created and data uploaded	Data updates periodically
	Develop AMR dashboard on human and animal level	2031		AMR dashboard developed	Dashboard created and updated regularly
Enhance safe disposal of antimicrobial agents	Initiate program for safe disposal of antimicrobial agents in community thought Safe Disposal initiatives	2028	MOHAP & health authorities MOCCAIE and all related emirate/local agencies and organizations	Program developed with facilities and public involvement	% facilities involved



Objective 6- One Health approach

Objective	Activity	Timeline	Responsible Entity	Indicator	Target
Create Comprehensive one health committee with National Action Plan for combatting AMR	Appoint different members from MOCCA, ADAFSA and municipalities representing all emirates and representatives from veterinary, plant food and environment fields, in addition to universities and some human health representation	2026	MOCCA/ MOHAP	Circular/ decree published meeting minutes	Published decree/ circular Minimum 2 per year
Data sharing and epidemiological analysis	Create data sharing platform/ guideline for One Health AMR analysis	2029	MOCCA/ MOHAP and all related emirate/local agencies and organizations	Circular/ decree	Published decree/ circular



	Directive to ensure all pathogens are stored for genomic analysis studies with university committee partners				
Awareness for farmers, veterinary, food and environment	Organize the AMR awareness committee to target different sectors	2028	MOHAP/ all health authorities, MOCCAIE and all related emirate/local agencies and organizations	Committee created	Committee created with ToR
	Present a detailed report about the applied biosafety laws that are applied in UAE in veterinary, agriculture, environment and food safety fields and the identified gaps if any	2026	MOCCAIE/ ADAFSA and municipalities and all related emirate/local agencies and organizations	% facilities audited for Laws implementation	Increase number of facilities by 5% yearly
	To review the laws related to antimicrobial use in animals that are available in UAE laws	2027	MOCCAIE/ ADAFSA, municipalities and all related	perform situation analysis of the legislations and	% of KPI targets achieved



			emirate/local agencies and organizations	control of Antibiotic use in veterinary/ food/ agriculture world and develop KPIs to improve gaps	
	Review the list of pesticides accepted in the country and check what agents are being used	2027	MOCCAE/ ADAFSA, municipalities and all related emirate/local agencies and organizations	Facilities audit for list of pesticides used	Increase number of facilities by 5% yearly
	Present the results of antimicrobial residue in food to ASP committee	2028	MOCCAE/ ADAFSA, municipalities and all related emirate/local	Random sampling for antibiotics residue	Increase number of items by 5% yearly



			agencies and organizations		
Establish inter-ministerial communication regarding AMR and IPC	Incorporate IPC in one health approach	2029	MOCCAE/ ADAFSA and municipalities/ All related emirate/local agencies and organizations/ MOHAP	advice	
One health research	Initiate research for resistance pattern among different areas, like human, animal, agriculture and environment with universities	2028	MOHAP /MOCCAE/ ADAFSA / municipalities/ Universities / All related emirate/local agencies and organizations	A study initiated	Study completed and data analyzed



Objective- AMR diplomacy

Objective	Activity	Timeline	Responsible Entity	Indicator	Target
Regional & international collaboration	Foster collaboration among GCC member states to develop unified strategies, share expertise, and implement joint initiatives aimed at combating antimicrobial resistance (AMR).	Ongoing	MOHAP	Number of participants Involved in guidelines and research	1-2 per year



References:

1. National Strategy and Action Plan for Combatting Antimicrobial Resistance (NAP-AMR) | Ministry of Health and Prevention - UAE -2019-2024
2. Global burden of bacterial antimicrobial resistance 1990–2021: a systematic analysis with forecasts to 2050, GBD 2021 Antimicrobial Resistance Collaborators, Lancet 2024; 404: 1199–226 Published Online September 16, 2024 [https://doi.org/10.1016/S0140-6736\(24\)01867-1](https://doi.org/10.1016/S0140-6736(24)01867-1)
3. Confronting antimicrobial resistance 2024 to 2029, UK 5-year action plan for antimicrobial resistance 2024 to 2029, Updated 8 May 2024
4. Kingdom of Saudi Arabia: Second antimicrobial resistance action plan 2022-2025, 5 October 2023
5. Global burden of bacterial antimicrobial resistance 1990-2021: a systematic analysis with forecasts to 20250, GBD 2021 antimicrobial resistance collaborators, volume 404, issue 10459, P 119901226, September 28, 2024
6. https://www.who.int/teams/surveillance-prevention-control-AMR/nap-amr-implementation-handbook?utm_source=chatgpt.com
7. https://leap.unep.org/en/countries/ae/national-legislation/national-strategy-and-action-plan-combating-antimicrobial?utm_source=chatgpt.com
8. https://openknowledge.fao.org/items/d919cbe3-77d0-4116-a543-6d4b179e7a09?utm_source=chatgpt.com
9. https://www.thelancet.com/journals/langlo/article/PIIS2214-109X%2823%2900019-0/fulltext?utm_source=chatgpt.com
10. <https://new.amrcountryprogress.org/country/united-arab-emirates/>



11. <https://www.who.int/teams/surveillance-prevention-control-AMR/national-action-plan-monitoring-evaluation/library-of-national-action-plans>
12. <https://www.ecdc.europa.eu/en/publications-data/directory-guidance-prevention-and-control/antimicrobial-resistance-strategies>
13. <https://www.cdc.gov/antimicrobial-resistance/programs/AR-actions-events.html>