

# Regional operational framework for implementation of the WHO Global Action Plan on Antimicrobial Resistance

The Global Action Plan on Antimicrobial Resistance was endorsed by WHO Member States during the Sixty-eighth session of the World Health Assembly in May 2015. In resolution WHA68.7, the Health Assembly urges Member States “to have in place, by the Seventieth World Health Assembly, national action plans on antimicrobial resistance that are aligned with the Global Action Plan on Antimicrobial Resistance and with standards and guidelines established by relevant intergovernmental bodies”.

## Essential steps for the preparation of national action plans by countries

1. Establish intersectoral coordinating mechanisms for addressing antimicrobial resistance at the national level.
  - Assign a national focal point (nominated by ministers, with clear terms of reference).
  - Establish and improve capacities of a multisectoral national steering committee for antimicrobial resistance (with clear terms of reference, membership criteria and roles and responsibilities).
  - Establish a technical advisory group on antimicrobial resistance composed of experts from relevant disciplines and sectors with the possibility of establishment of specialized subcommittees where required (with clear terms of reference, membership criteria and roles and responsibilities).
2. Conduct a comprehensive situation assessment of antimicrobial resistance at the country level in order to establish baseline information and inform the development of the national comprehensive plan (including barriers to enforcement of regulations or self-regulation, data on antimicrobial usage and maps of the situation of counterfeit antimicrobials at the country level, identification of non-health uses of critically important antibiotics).

## Global strategic objective

## Intervention

## Time-frame <sup>1</sup>

<b>1. Improve awareness and understanding of antimicrobial resistance through effective communication, education and training</b>	<b>Risk communication</b> <ul style="list-style-type: none"> <li>Develop an evidence-based national communication strategy for antimicrobial resistance as part of the national comprehensive action plan informed by the results of assessment of knowledge and behaviour of the general public, policy makers and health care providers, veterinarians, other animal health service providers and farmers</li> </ul>	Within 2 years
	<ul style="list-style-type: none"> <li>Educate and engage major regional decision-makers in the media sector (editors-in-chief) on antimicrobial resistance</li> </ul>	Within 5 years
	<ul style="list-style-type: none"> <li>Develop joint advocacy materials based on the data (gaps identified) at the country level including the burden of antimicrobial resistance in human and animal health sectors</li> </ul>	Within 5 years
	<b>Education</b> <ul style="list-style-type: none"> <li>Develop curricula on antimicrobial resistance for professionals in the health care, veterinary and agriculture sectors (including infection prevention and control, rational use of antimicrobial medicines, surveillance) and implement pre-service and in-service training</li> </ul>	Within 5 years
	<ul style="list-style-type: none"> <li>Establish an independent source of information on medicine for human and animal health professionals and the general public</li> </ul>	Within 7 years
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<b>2. Strengthen the knowledge and evidence base through surveillance and research</b>	<b>National antimicrobial resistance surveillance system</b> <ul style="list-style-type: none"> <li>Identify or establish a national institution as the national reference centre for antimicrobial resistance with the ability to systematically collect, analyse and report data on antimicrobial use and resistance in order to inform decision-making at national and international levels</li> </ul>	Within 5 years
	<ul style="list-style-type: none"> <li>Establish or strengthen surveillance on antimicrobial resistance in animal health and agriculture sectors</li> </ul>	Within 5 years
	<ul style="list-style-type: none"> <li>Collect and report data on use of antimicrobial agents in human and animal health and agriculture</li> </ul>	Within 5 years
	<ul style="list-style-type: none"> <li>Establish mechanisms for regular sharing of antimicrobial resistance data across human and animal health and environmental sectors at the national, regional and global levels as per global standards</li> </ul>	Within 7 years
	<b>Laboratory capacity</b> <ul style="list-style-type: none"> <li>Designate at least one national reference laboratory for antimicrobial resistance capable of quality assured identification and susceptibility testing and reporting, including on newly emerged resistance</li> </ul>	Within 2 years
	<ul style="list-style-type: none"> <li>Establish an antimicrobial resistance surveillance network integrating all laboratories</li> </ul>	Within 5 years
	<ul style="list-style-type: none"> <li>Involve all the national health laboratories in external quality assurance programmes</li> </ul>	Within 7 years
	<b>Research and development</b> <ul style="list-style-type: none"> <li>Identify operational research priorities for promoting responsible use of antimicrobial medicines, defining improved practices for preventing infection in human and animal health and agricultural practice</li> </ul>	Within 2 years
	<ul style="list-style-type: none"> <li>Identify the possibilities and feasibility of developing novel diagnostic tools for low resource settings</li> </ul>	Within 7 years
	<b>3. Reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures</b>	<b>Community level prevention</b> <ul style="list-style-type: none"> <li>Promote personal hygiene through social mobilization and behaviour change activities</li> </ul>
<ul style="list-style-type: none"> <li>Provide safe and sufficient drinking-water, along with adequate sanitation and hygiene</li> </ul>		Within 7 years
<ul style="list-style-type: none"> <li>Promote vaccination among the communities and health care providers</li> </ul>		Within 7 years
<b>Infection prevention and control in health care settings</b> <ul style="list-style-type: none"> <li>Develop national policies, strategies and plans for health care waste management</li> </ul>		Within 2 years
<ul style="list-style-type: none"> <li>Develop and implement national infection prevention and control programmes</li> </ul>		Within 5 years
<ul style="list-style-type: none"> <li>Establish or strengthen infection prevention and control programmes in health care facilities at all levels with emphasis on tertiary hospitals</li> </ul>		Within 5 years
<ul style="list-style-type: none"> <li>Develop systems for safe collection, storage, transportation and final disposal of health care waste</li> </ul>		Within 7 years
<b>Animal health</b> <ul style="list-style-type: none"> <li>Strengthen animal health and agricultural practices through implementation of the standards published in the terrestrial and aquatic animal health codes of the Organization for Animal Health (OIE) and Codex Alimentarius code of practice to minimize and contain antimicrobial resistance</li> </ul>		Within 5 years
<ul style="list-style-type: none"> <li>Develop recommendations for the use of vaccines as a method of preventing infections in animals and reduction of antimicrobial use</li> </ul>		Within 7 years

<sup>1</sup> Starting from the date of finalization of the national action plan.

Global strategic objective	Intervention	Time-frame
<b>4. Optimize the use of antimicrobial medicines in human and animal health</b>	<p><b>Access to quality antimicrobial medicines</b></p> <ul style="list-style-type: none"> <li>• Develop and enforce legislation and regulations on prescription and dispensing of medicine including antibiotics (self-regulation by professional associations) informed by identification of barriers</li> <li>• Strengthen pharmaceutical supply chain (procurement, supply and management systems)</li> <li>• Establish or strengthen mechanisms for registration of antimicrobial medicines within relevant national authorities according to global standards (e.g. International Cooperation on Harmonisation of Technical Requirements for Registration of Veterinary Medicinal Products)</li> <li>• Establish national mechanisms (e.g. market surveillance) for identification and report on sub-standard/falsified/counterfeit medicines and link with the global mechanisms</li> <li>• Develop and enforce regulations to control promotional practices by industry</li> <li>• Develop and implement evidence-based standard treatment guidelines to guide stewardship programmes in human health</li> <li>• Establish mechanisms for implementation of WHO Good Governance for Medicines programme</li> <li>• Develop and implement a national and institutional essential medicine list guided by the WHO Model List of Essential Medicines</li> </ul> <p><b>Animal health sector</b></p> <ul style="list-style-type: none"> <li>• Identify and consider banning non-health use of critically important antibiotics for humans in the animal sector</li> <li>• Promote the prudent use of antimicrobials and legalize the distribution and dispensing of antimicrobials by prescription, carried out by accredited veterinary professionals</li> <li>• Adopt policies on the use of antimicrobial agents in terrestrial and aquatic animals and agriculture, including: implementation of Codex Alimentarius and OIE intergovernmental standards and guidelines such as the List of Antimicrobials of Veterinary Importance as well as WHO/OIE guidance on the use of critically important antibiotics; phasing out of the use of antibiotics for animal growth promotion and crop protection in the absence of risk analysis; and reduction in nontherapeutic use of antimicrobial medicines in animal health</li> </ul>	<p>Within 7 years</p> <p>Within 7 years</p> <p>Within 5 years</p> <p>Within 7 years</p> <p>Within 7 years</p> <p>Within 7 years</p> <p>Within 5 years</p> <p>Within 5 years</p> <p>Within 7 years</p> <p>Within 7 years</p> <p>Within 7 years</p>
<b>5. Develop the economic case for sustainable investment that takes account of the needs of all countries, and increase investment in new medicines, diagnostic tools, vaccines and other interventions</b>	<ul style="list-style-type: none"> <li>• Conduct research to identify the economic burden due to antimicrobial resistance at the national level (to use as advocacy material)</li> <li>• Assess the investment needs for implementation of the national action plan on research and development</li> <li>• Assess the investment needs for sustainable animal husbandry systems and agriculture with improved hygiene and biosecurity practices aimed at reducing antimicrobial use (and antimicrobial resistance) in different animal production settings</li> <li>• Consider and establish procedures for participation in international collaborative research to support the development of new medicines, diagnostic tools and vaccines through strengthen the national ethical committees</li> <li>• Identify operational research priorities, taking into account the need for promoting responsible use of antimicrobial medicines, defining improved practices for preventing infection in human and animal health and agricultural practice</li> <li>• Identify the possibilities and feasibility of developing novel diagnostic approaches for low resource settings</li> </ul>	<p>Within 2 years</p> <p>Within 5 years</p> <p>Within 7 years</p> <p>Within 5 years</p> <p>Within 5 years</p> <p>Within 7 years</p>

This regional operational framework was developed by the WHO Regional Office for the Eastern Mediterranean in consultation with Member States. It aims to provide countries of the Eastern Mediterranean Region with an operational basis for planning and implementing national action plans on antimicrobial resistance. It identifies the steps in preparing national action plans on antimicrobial resistance, and provides prioritized interventions and key resources for countries to use in developing their plans.



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