



One Health in Action: Navigating Challenges and Opportunities in the Eastern Mediterranean

Policy Brief

June, 2024

Introduction

The One Health High Level Expert Panel (OHHLEP) defines One Health as “an integrated, unifying approach that aims to sustainably balance and optimize the health of humans, animals, plants, and ecosystems. It recognizes they are closely linked and interdependent.” This holistic perspective is essential for addressing the complex and interconnected health challenges of our time.

As support for the One Health concept expands, numerous global initiatives have been launched to adopt and promote this approach in addressing health threats. These efforts encourage interdisciplinary collaboration, engaging professionals from multiple sectors to work across traditional institutional divides. This growing global momentum illustrates the potential for the One Health approach to make substantial impacts on public health, animal health, and ecosystem management.

This policy brief pulls insights from the webinar titled “One Health in Action: Navigating Challenges and Opportunities in the Eastern Mediterranean,” organized by the Eastern Mediterranean Public Health Network (EMPHNET), RTI and WHO EMRO as part of their series on One Health. Held on April 2024, the webinar was moderated by Dr. Said Abukhattab, a noted infectious disease epidemiologist from the Institute of Community and Public Health at Birzeit University. The webinar’s panel comprised distinguished experts including Dr. Amina Benyahia from WHO HQ One Health Initiative, Dr. Heba Mahrous, the WHO EMRO One Health focal point, Dr. Mohammad Khashan of the Epidemiological Surveillance Directorate, CDC Jordan, Dr. Baher B. Eldesouki from the Ministry of Health and Population, Egypt, and Dr. S. M. Mursalin, CEO of the Pak One Health Alliance, Pakistan. These experts shared their diverse experiences and they shed light on the challenges they encountered while implementing the One Health approach across the region. They discussed the use and effectiveness of operational tools such as the One Health Joint Plan of Action and the Tripartite Zoonotic Guide, and they explored adaptation strategies for national contexts. Their collective insights form the basis for the practical recommendations detailed in this brief.

The Problem



The Eastern Mediterranean Region (EMR) faces several complex challenges in integrating the One Health approach. Despite its growing acceptance, the region's implementation efforts are hindered by several factors.

Firstly, there is a significant **lack of coordination and communication** among the various sectors involved in One Health, including human health, animal health, and environmental health. This lack of synergy often results in fragmented efforts and duplicated resources, making it difficult to establish a cohesive and effective OH strategy. Political instability further exacerbates these issues, creating an environment where long-term planning and stable governance are challenging to maintain.

Moreover, **the region suffers from under-resourced health systems**, which are not adequately equipped to handle the multifaceted demands of One Health initiatives. This includes insufficient funding, lack of trained personnel, and inadequate infrastructure. The absence of a clear legal framework and policy support also impedes the operationalization of OH principles, as there is no standardized approach to guide national and regional efforts.

Another critical issue is the **limited capacity for early warning and real-time surveillance systems for zoonotic diseases**, which are essential for timely and effective responses to public health threats. This gap highlights the need for robust data-sharing platforms and enhanced multisectoral coordination to improve detection and response capabilities.

The EMR also faces **challenges related to the governance and leadership of OH initiatives**. The region's diverse political and administrative landscapes mean that some countries have made more progress than others in establishing OH frameworks. While some nations have formed national committees for zoonoses and food safety, many still lack clear terms of reference and effective coordination mechanisms.

The Quadripartite Collaboration on One Health

The Quadripartite Collaboration on One Health, or Quadripartite for short, is a strategic alliance formed by four leading global organizations: the Food and Agriculture Organization (FAO), the United Nations Environment Program (UNEP), the World Health Organization (WHO), and the World Organization for Animal Health (WOAH). Established in March 2022, this collaboration aims to bolster global and regional efforts in managing health threats at the intersection of human, animal, plant, and ecosystem health. Central to its mission are the prevention of zoonotic pandemics and the battle against antimicrobial resistance (AMR).

The One Health Joint Plan of Action



The One Health Joint Plan of Action (2022–2026) is a strategic framework developed by the Quadripartite. It aims to address health challenges at the human-animal-plant-environment interface on the global, regional, and national levels. The OH JPA responds to the international call for preventing future pandemics and the sustainability of promoting health through the One Health approach.

The OH JPA provides a structured approach for collective action, offering policy and legislative advice and technical assistance to help countries set national targets and develop One Health legislation and programs. It identifies synergies among existing global and regional One Health initiatives and supports better coordination. Additionally, the plan aims to optimize resource use across sectors, disciplines, and stakeholders to enhance One Health implementation.

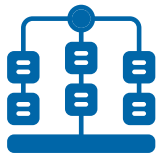
The OH JPA is built around six interdependent action tracks:

- **Enhancing One Health capacities:** Strengthening health systems through improved multisectoral collaboration, communication, capacity building, and coordination.
- **Reducing risks from zoonotic epidemics and pandemics:** Minimizing the risks of zoonotic disease emergence and spillover by adopting preventive measures and enhancing surveillance, early warning, and response systems.
- **Controlling endemic zoonotic, neglected tropical, and vector-borne diseases:** Supporting countries in implementing community-centric, risk-based solutions to reduce the burden of these diseases.
- **Strengthening food safety:** Enhancing the assessment, management, and communication of food safety risks along the entire food supply chain.
- **Curbing antimicrobial resistance (AMR):** Promoting responsible and prudent use of antimicrobials to preserve their efficacy and ensure equitable access to necessary treatments for humans, animals, and plants.
- **Integrating the environment into One Health:** Addressing environmental degradation by protecting and restoring biodiversity and ecosystems to support the health of people, animals, plants, and ecosystems, and underpin sustainable development.

Guided by principles such as systematic thinking, advocacy, public-private partnerships, good governance, and the integration of traditional knowledge, the OH JPA aims to create resilient health systems capable of effectively preventing, predicting, detecting, and responding to health threats. By adopting these principles and implementing the six action tracks, the plan contributes to sustainable development and improved health outcomes for humans, animals, plants, and the environment.

Examples from the Region:

The implementation of the One Health approach in Eastern Mediterranean Region (EMR) countries has seen significant progress through various initiatives aimed at strengthening multisectoral coordination, developing national frameworks, and enhancing workforce capabilities. Countries such as Jordan, Egypt, Iraq, Sudan, Tunisia, Qatar, UAE, and Somalia have established multisectoral coordination mechanisms, including One Health



hubs, committees, and working groups. National frameworks, operational plans, and roadmaps have been developed, supported by programs like the IHR-PVS National Bridging Program in Jordan, Morocco, Somalia, Bahrain, and Lebanon, and national consultation workshops in Egypt, Sudan, Somalia, Lebanon, Yemen, Bahrain, Qatar, and Iraq.

Prioritization of One Health threats has been a key focus, with the CDC One Health Zoonotic Disease Prioritization (OHZDP) process being implemented in Jordan, Sudan, Somalia, and the UAE. Workforce development has also been a critical area, with efforts including joint risk assessments in countries such as Jordan, Egypt, Pakistan, Afghanistan, Qatar, Sudan, UAE, Tunisia, Morocco, and Libya, as well as outbreak investigations of foodborne diseases. The development of One Health curricula in Jordan and Egypt, the establishment of the One Health Field Epidemiology Training Program (OHFETP) by EMPHNET in Egypt, and the adoption of the Tripartite Zoonoses Guide (TZG) further demonstrate the region's commitment to building a robust One Health workforce.

A closer look on **Jordan** shows that significant strides have been made in integrating disease surveillance systems. The Jordan Center for Disease Control has developed a comprehensive One Health surveillance system that combines data from multiple sectors, including human, animal, and environmental health. This system supports real-time data analysis and visualization, enabling effective monitoring and response to health threats. Through mapping and gap analysis of national communicable disease surveillance systems, Jordan has established a data hub using data warehouse technologies to enhance data integration and decision-making processes. These initiatives underscore Jordan's commitment to a coordinated and comprehensive One Health approach.

In **Egypt**, efforts to strengthen governance and leadership mechanisms for the One Health approach have been notable. Egypt's journey began with its participation in international joint activities, such as the International Ministerial Conference for Avian Pandemic Influenza in 2008. The formation of the Four-Way Link in 2011, supported by the WHO and FAO, brought together epidemiologists and lab experts from the Ministry of Health and Population and the Ministry of Agriculture and Land Reclamation. This collaboration was later expanded into the One Health Technical Advisory Group, endorsed in 2018, which included the Ministry of Environment and addressed a broader range of zoonotic diseases and antimicrobial resistance.

In November 2022, Egypt drafted a national strategy for One Health, starting with a national strategic framework followed by a national operational plan. This strategic framework, endorsed in April 2023, outlines a five-year plan focusing on improving capacities, controlling zoonotic and vector-borne diseases, ensuring food and water safety, curbing antimicrobial resistance, and integrating environmental health into One Health. The governance structure includes a ministerial committee, a Supreme Coordination Committee, and four technical working groups. Additionally, Egypt has developed a One Health research prioritization agenda and is finalizing a risk communication strategy for antimicrobial resistance.

In **Pakistan**, the One Health approach has been promoted through strong collaboration with national and provincial governments. Recently, Pakistan completed a project on One Health event-based surveillance, supported by Rockefeller and Ending Pandemics. This project aimed to develop early

detection systems, verify information, and generate evidence for joint action. As part of this initiative, Pakistan developed ICT solutions to encourage sectoral collaboration for early warning systems and implemented One Health guidelines, tools, and training programs for key stakeholders. The project included training of trainers workshops at both federal and provincial levels and created a dashboard for integrated data surveillance. Despite challenges in aligning surveillance systems and data sharing across departments, Pakistan successfully established intersectoral coordination committees and trained public health, veterinary, and vector-borne disease program managers and field staff. These efforts have led to the development of a model for intersectoral coordination and have showcased Pakistan's commitment to advancing the One Health approach at both national and international levels.

Recommendations



Promote and support the implementation of the One Health Joint Plan of Action at the country level:

To advance the One Health approach, it is essential to promote and support the implementation of the One Health Joint Plan of Action (OH JPA) across all countries in the EMR. This involves fostering multisectoral coordination mechanisms, developing national frameworks, and operational plans, and ensuring comprehensive surveillance systems are in place. The commitment of the Quadripartite to advocate for and assist in the execution of these plans is crucial.

Generate and share science and evidence for the implementation of the One Health approach:

Generating robust scientific evidence and facilitating its dissemination are crucial for the effective implementation of One Health strategies. This entails encouraging research, data integration, real-time analysis, and the sharing of best practices to inform policy decisions and operational actions. Strengthening the scientific knowledge base will help in addressing health threats at the human-animal-environment interface.

Maintain political engagement and advocacy for One Health in a post-pandemic world:

Sustained political engagement and advocacy are vital for maintaining momentum in One Health initiatives. Governments and stakeholders must prioritize One Health, advocating for integrated approaches to health that address human, animal, and environmental health challenges in a coordinated manner. Ensuring One Health remains a key component of the global health agenda is essential for long-term success.

Strengthen core support to the Secretariat, including through sustained funding, to ensure the sound delivery of the Quadripartite priorities:

Ensuring the Quadripartite Secretariat has robust support and sustained funding is critical for the effective delivery of One Health initiatives. This support will enable the Secretariat to provide essential guidance, resources, and coordination to enhance the resilience and efficacy of health systems throughout the EMR. Sustained funding and resource mobilization are necessary to uphold the Secretariat's operations and the broader goals of the One Health Joint Plan of Action.

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GHDJEMPHNET: Working Together for Better Health

The Eastern Mediterranean Public Health Network (EMPHNET) is a regional network that focuses on strengthening public health systems in the Eastern Mediterranean Region (EMR) and beyond. EMPHNET works in partnership with ministries of health, non-government organizations, international agencies, private sector, and relevant institutions from the region and the globe to promote public health and applied epidemiology. To advance the work of EMPHNET, Global Health Development (GHD) was initiated to build coordination mechanisms with partners and collaborators. Together, GHDJEMPHNET is dedicated to serving the region by supporting efforts to promote public health policies, strategic planning, sustainable financing, resource mobilization, public health programs, and other related areas.

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