One health framework in Eastern Mediterranean Region (EMR)

On 12th December 2018, an expert meeting on one health framework for action on emerging zoonotic infections was held in Amman, Jordan. The meeting, organized by the World Health Organization Regional Office for Eastern Mediterranean (WHO EMRO), reviewed the framework in the light of improving efficient and coordinated multisectoral “one health” approach among human health, animal and environment sectors to prevent, detect and respond to emerging zoonotic infection.

Editorial note

Majority of the emerging infectious diseases of humans can be naturally transmitted between animals and humans. Emerging zoonotic diseases, such as avian influenza, Crimean-Congo haemorrhagic fever and MERS-CoV, remain high health threats in the EMR, in addition to endemic of zoonotic diseases including rabies and brucellosis (See Map).

One health means that all relevant sectors and disciplines across human-animal-environment interface are involved to address health in a way that is more effective, efficient and sustainable than might be achieved if not all relevant sectors were engaged.

This expert consultation was participated by 33 officials from health authorities in seven member states in the region, animal sectors, international organization including WHO, FAO, and OIE, as well as academic institutions. During the meeting, the one health framework with seven key components (see table) was reviewed and finalized, and an implementation plan for roll out of the framework for action in EMR was addressed.

In the EMR, Egypt has applied one-health concept to address the highly pathogenic avian influenza A (H5N1) which has been enzootic in Egypt since 2006. Between 2003 and 2017, Egypt experienced recurrent outbreaks of human infections with avian influenza A (H5N1) and since 2015 the country accounted for the highest number of cases in the world. In response to this global health threat, strengthening multi-sectoral collaboration between human and animal sectors at national level have been urged, and FAO, OIE and WHO jointly launched the Four-Way Linking project (4WLP). 4WLP implementation includes establishment of joint risk assessment and reporting, and data and information sharing, and communication mechanisms. The 4WLP Task Force has evolved into an One Health Technical Advisory Group addressing also MERS, rabies and other zoonotic infectious diseases.

At the global level, there have also been efforts by three international organizations (FAO-OIE-WHO) addressing collaboration for effective risk management of zoonotic infectious diseases, and through those efforts “Tripartite Zoonoses Guide (TZG)” and a guide for Joint Risk Assessment (JRA) tool were developed. These standardized guides and operational tools help one health approach which strengthen linkage with existing national plans and initiatives of human health, health security, as well as International Health Regulation (2005). One health approach is being recognized increasingly in the EMR. It calls for country ownership beyond guidance and tools, as well as an understanding of the importance of engagement of multi-sectoral stakeholders/partners for addressing the threats of zoonotic infection at the animal-human interface.

Key components in One-Health Framework

1. Governance and management;
2. Networks and partnerships;
3. One health capacity development;
4. Surveillance, preparedness and response;
5. Communication and advocacy;
6. Operational research
7. Monitoring and evaluation