The Second Multi-Hazard Early Warning Conference (MHEWC-II)

Early Warning and Early Action towards Sustainable, Resilient and Inclusive Societies

13-14 May 2019, WMO Headquarters, Geneva, Switzerland

Side Event 5 Concept Note

Side event title:	*Health and biological hazards*
Date, time and venue:	*Tuesday, 14 May 2019, 13:00 to 14:00, Salle C1*
Co-leads:	*World Health Organization (WHO) &* Food and Agricultural Organization of the United Nations *(FAO)*
Other contributing partners:	World Meteorological Organization (WMO)

Main side event objectives:

1) To highlight the value and use of multi-hazard early warning systems (MHEWS) for public and animal health and the role of the health sector and animal health sector in all facets of MHEWS (e.g., risk monitoring, assessment, leadership in risk communication, and community engagement, emergency preparedness).
2) To share experience and requirements for effective and efficient early warning systems (EWS) for outbreaks and epidemics resulting from biological hazards at global, regional and national levels.
3) To advocate for the inclusion and application of biological hazards and health hazards (e.g., epidemics and pandemics, hazardous air quality, and extreme temperatures) in MHEWS.
4) To apply the "One Health"[1] approach in response to outbreaks starting from risk monitoring and risk assessment to early warning, prevention, preparedness, response and recovery activities.

Expected outcomes:

- Recommendations for strengthening the integration of One Health and biological hazards in MHEWS.
- Increased understanding of key issues, opportunities, and requirements for early warning of One Health and biological hazards.
- Appreciation of the vital role of the health sector in all aspects of EWS including risk monitoring, assessment, communication and emergency preparedness and response.
- The health dimensions of EWS are addressed from a risk perspective (not just hazards).

[1] One Health. https://www.who.int/features/qa/one-health/en/. [Accessed on 2 April 2019].

Key messages:

- MHEWS can help prevent an extensive range of acute and slow onset health impacts that can result from lack of preparedness for extreme weather events and other environmental emergencies. For example, death and injury in floods; storms and extreme temperatures; disease outbreaks triggered by failing water and sanitation systems; intoxications from exposure to chemical, radiological, or hazardous air quality compromise vital organs; droughts can have devastating nutritional impacts particularly on children; and the mental health impacts from all shocks and stresses cannot be underestimated.
- To date, biological and health hazards have largely been separated from the development of MHEWS, despite the significant emergencies and impacts posed by epidemics and hazardous environmental conditions. Integration of information systems which manage both disaster and health risks can markedly improve national preparedness and response efforts to save lives.
- The health and animal health sectors are major users of early warnings for a range of natural, biological, and technological hazards, and can uniquely contribute to MHEWS by providing disease related expertise, vulnerability information, and systems for risk monitoring and communication.
- A common and better understanding of prevention, preparedness, response and recovery needs to biological hazards and events can benefit from scientific advances to forecast biological risks (i.e., waterborne, foodborne; airborne; vector-borne; body fluid-borne diseases; etc.), informed by lessons learned from previous outbreaks and understanding of predisposing human, animal and environmental factors.
- Sharing of high quality early warning data collected by different sectors (i.e., human health, animal health, environment sector, etc.), will improve early action as well as knowledge exchange, programmes and competencies.
- A "One Health" approach ensures dynamic interaction between animal and health sectors to manage zoonotic diseases, such as Rift Valley fever, including cost sharing between and among the involved sectors for early warning, early detection, prevention and control of outbreaks and epidemics.
- Applications of early warning, such as strengthening forecast-based financing, can assist health and animal health sectors to prepare for emergencies.

Moderator:

- **Ms Carolyn Rodrigues-Birkett**, Director, FAO Liaison Office with the United Nations at Geneva

Speakers:

- Implementing MHEWS from a health perspective
  Ms Prof Virginia Murray, Public Health Consultant in Global Disaster Risk Reduction, Public Health England (PHE), UK

- Priorities in early warning and preparedness for health risks from extreme heat
  Ms Dr Joy Shumake-Guillemot, WHO/WMO Joint Office for Climate and Health

- Early Warning of Zoonotic Diseases in the One Health Context
  Mr Dr Babatunde Olowokure, Chief, HQ/MAP Data Management Analytics & Products, WHO
  Mr Dr Julio Pinto, Animal Health Officer, FAO
  Ms Dr Lina Mur, Veterinary Epidemiologist, OIE