



ISWAVLD 2023

International Symposium of the World
Association of Veterinary Laboratory
Diagnosticians

29 JUNE-1 JULY
2023
Congress Centre
Lyon

*Towards
the veterinary
diagnostics
of the
future*

Main topic :

Preparedness for Arbovirus and Zoonotic Infections with a One Health Approach: The Development and Implementation of Multisectoral Risk Assessment Exercises

MANUGUERRA J.¹, NETWORK M.¹

¹ Institut Pasteur, Paris, France

The past decades have witnessed an increase of infectious epidemics due to the disruption of the human-animal-environment interface, globalisation of movements (trade, animals, and humans), climate change, multiplication of industrial farms with high animal density and rapid urbanization close to wildlife that offer new opportunities for the emergence and spread of diseases.

This is particularly true for vector-borne pathogens that are transmitted by mosquitoes and ticks. Dengue, Zika, Yellow Fever, West Nile (WN) and Rift Valley Fever (RVF) and Crimean-Congo Haemorrhagic Fever (CCHF) are only few of the (re-)emerging vector-borne diseases (VBDs) that hit our societies in the last decades and their prevalence and distribution is changing due to global and climate changes.

The MediLabSecure project (MLS), funded by the EU, aims to strengthen a network of laboratories and health institutions to prevent VBDs in 22 countries around the Mediterranean, Black Sea and Sahel regions. Enhancing preparedness and response capacities to vector-borne diseases by promoting a One Health approach is the core of MLS.

MLS conducted a series of exercises on risk assessment (RA) for RVF (in 2017 in Tunis), WN (in 2015 in Paris) and CCHF (in 2016 in Belgrade). The goal was to strengthen surveillance capacities of beneficiaries, through multi-sectoral/integrated RA exercises and fostering collaboration between human, animal and environmental health sectors. Participants, which included laboratory personnel from human and veterinary sectors, entomologists, and public health (PH) officials from Ministries of Health or Institutes of PH, were invited to attend the event.

The exercises were designed in coordination with the MLS working group and the subject-matter experts of the European Centre for Disease Prevention and Control (ECDC) and of the Italian Animal Health Institute "Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise (IZSAM)." The exercises were developed relying on the following existing 3 RA methodology and guidance documents. These tools and documents were developed by subject-matter experts and were in line with the pathogens and methodological priorities identified by the MLS countries.

A total of 159 participants from the 19 non-EU countries of the MLS network took part in the three exercises: 73 participants in the WNV, 42 in the CCHF, and 44 in the RVF exercise.

The participants assessed the multisectoral approach as valuable in analysing comprehensively the situation by having access to information and knowledge provided by each of the sectors involved. Sharing of information and discussion facilitated reaching a consensus on the level of risk in each country.

Increasing awareness of intersectoral priorities, including cross-border ones, through MRA is relevant to reduce gaps due to unavailability of shared data and information. Given that six out of the ten threats to global health listed by WHO are occurring at the human-animal-environmental interfaces, comprehensive regional RA with a One Health approach made by national authorities can be a relevant added value for the global health security.