One Health Scientific Conference

“Strengthening One Health implementation for the prevention and control of arbovirus infections in the Mediterranean and Sahel Regions”

26-27 November 2018

Istituto Superiore di Sanità (ISS), Rome, Italy

Venue: Roma Scout Center

WORKING REPORT

This report aims mainly at summing up the main outcomes of the Conference and at underlining their main impact on the future strategies and activities of MLS Network.

The Scientific Conference aimed at strengthening One Health implementation for the prevention and control of arbovirus infections in the Mediterranean and Sahel Regions through the coordination and collaboration between human and veterinarian public health officers.

The Conference is an event of the International One Health Day, initiated in 2016 by the One Health Commission, the One Health Platform, and the One Health Initiative Team to engage as many individuals as possible from as many arenas as possible in One Health education and awareness events and to generate an inspiring array of projects worldwide.
The Conference has been organised by the Italian National Institute for Health (Istituto Superiore di Sanità) with the support of IZSAM - Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise “G. Caporale”.

Public health authorities from human and animal health sectors of 22 countries were invited (Albania, Algeria, Armenia, Bosnia and Herzegovina, Burkina Faso, Egypt, FYR of Macedonia, Georgia, Jordan, Kosovo, Lebanon, Libya, Mali, Mauritania, Montenegro, Morocco, Niger, Palestine, Senegal, Serbia, Tunisia, Turkey) together with experts and representatives of EC and other Institutions.

Finally, 43 participants took part in the Conference from 17 non-EU countries plus France, Spain and Italy.

i) The Conference started with a framing session on **One Health strategies, added value and examples of benefits** of the integrated surveillance of the arbovirus infections (see for details the experts’ presentations).

In this session, the **critical issues and stakeholders** to be considered were presented and discussed, in particular the followings were addressed:

- the changes in **climate and environment in the Mediterranean and Sahel regions** and their potential impact on entomological surveillance;

- the opportunities and governance of One Health and the added value of **One Health Surveillance** for early warning;

- the relevance of contextualising the One Health implementation in the **framework of institutional and networking initiatives** (e.g. WHO, OIE and FAO Tripartite Agreement; the Mediterranean Animal Health Network-REMESA).

ii) the Medilabsecure Strategic Document was presented to the participants and, in particular, its **recommendations to enhance One Health** for prevention and control of arbovirus infections were discussed:

- Assessing the National/Local Situations (with studies, sharing of lessons learned, collaborations etc.) and identifying priority areas for multi-sectoral efforts;

- Enhancing competences and awareness of intersectoral collaboration and facilitating data and information sharing (considering Risk assessments & Risk Communication);

- Facilitating operationalisation of One Health strategies (**Describe and assess integrated surveillance systems; Evaluate added value of integrated systems; Provide an evidence based “business case”; Promote intersectoral databases**;

1 This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and ICI Advisory opinion on the Kosovo declaration of independence.
Promote harmonisation of surveillance systems and their interaction; Networking and regional strategies in synergy with international strategies).

The draft of the Strategic Document will be integrated with comments raised during the discussion and the revised version will be published as ISTISAN Document.

iii) The countries’ representatives have presented national and cross-border strategies, lessons learned and main needs and gaps.

The national epidemiological situation and surveillance systems of the following arboviruses were considered: CCHFV; CHKV; DENV; RVFV; WNV; YFV; ZKV.

The priority arboviruses in the MLS Region reported by the participants are CCHFV, WNV, DENV and YFV. RVFV, CHKV and ZKV should be also considered.

Here below, in Table 1, the surveillance systems available per geographic area and in Table 2 the level of integration, as per information provided by the participants’ presentations.

<table>
<thead>
<tr>
<th>Disease</th>
<th>Human</th>
<th>Animals</th>
<th>Vectors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SURV</td>
<td>eDB</td>
<td>SURV</td>
</tr>
<tr>
<td>CCHFV</td>
<td>XXX</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DENV</td>
<td>XXX</td>
<td>XX</td>
<td>X</td>
</tr>
<tr>
<td>WNV</td>
<td>XXX</td>
<td>XXX</td>
<td>XX</td>
</tr>
<tr>
<td>YFV</td>
<td>XXX</td>
<td>XX</td>
<td>X</td>
</tr>
</tbody>
</table>

X – Balkan/Black Sea; X – North Africa/ME; X - Sahel
In Table 3 and Table 4 the main national gaps and needs provided by the participants’ presentations are reported.

<table>
<thead>
<tr>
<th>Disease</th>
<th>POLICY (e.g. availability of national laws; strategy etc.)</th>
<th>INSTITUTIONAL (e.g. availability of formal agreements between sectors; SOP coordination body etc.)</th>
<th>DATA COLLECTION (e.g. availability of SOP; integrated database etc.)</th>
<th>DATA ANALYSIS (e.g. availability of common SOP; integrated database; inter-sectoral risk assessments etc.)</th>
<th>DISSEMINATION (e.g. availability of integrated bulletins, newsletters, reports etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCHFV</td>
<td>XX</td>
<td>XX</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>DENV</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>WNV</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>YFV</td>
<td>XX</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X – Balkan/Black Sea; X – North Africa/ME; X - Sahel

Table 3 - Main gaps

- **national strategy for prevention and control of arboviruses**
- **multi-disciplinary integrated surveillance plans**
- **working procedures between the institutions involved with standard operating procedures**
- **rapid communication between health authorities, local authorities and international agencies**
- **knowledge and awareness among medical and veterinary societies**
- **cross border collaboration**
Table 4 - Main needs

| ✔ entomological surveillance & mapping for vectors (mosquitos & ticks) |
| ✔ links to changes in the environment |
| ✔ surveillance for early detection and response and event based surveillance with veterinary system |
| ✔ Strengthen the network of laboratories especially at the local level |
| ✔ shared database & regular data sharing between relevant sectors |
| ✔ intersectoral risk assessment |
| ✔ Develop georeferencing tools |

iv) The EU CBRN Centre of Excellence representatives presented the Initiative and discuss the support to the MediLabSecure.

v) the way forward

On the basis of MLS Strategic Document conclusions and recommendations, main outcomes from the countries’ presentations and points raised during the discussion, relevant aspects to be considered in the future developments of MLS activities are synthetized in Table 5 and Table 6.

Table 5
The way forward: involved sectors

- Human and Animal Public Health
- Human Virology Lab
- Animal Virology Lab
- Medical Entomology Lab
- Environmental characterization & analysis
Hand in hand with the Scientific Conference, the “Workshop on surveillance of emerging arboviruses in the Mediterranean region under a One Health approach” was organized in mid-December, and hosted by IZSAM - Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise “G. Caporale”, in Teramo (Italy).

The workshop represented an opportunity for the countries belonging to the MediLabSecure Network and those to join it, to undertake an in-depth gap analysis and training need assessment to support the implementation of integrated surveillance systems and to target more properly future training efforts.

The outcomes of the Conference and the Workshop will help in the definition of future strategies and actions to enhance the prevention and control of arbovirus infections in the Regions of MLS countries.