



Establishment of networks of human and animal virology laboratories and medical entomology

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Outline

- Origins and aims of the MediLabSecure project
- Overview of activities
- Focus on the Public Health Work-Package
- Who could be our Contact Points?



Network for the Control of Public Health Threats in the Mediterranean Region and South East Europe

Set up of a Mediterranean Laboratory Network

priorities : Biosafety, West Nile and Dengue







4 Year Program
 2014-2017



19 Target countries

Albania, Algeria, Armenia, Bosnia and Herzegovina, Egypt, Georgia, Jordan, Kosovo, Lebanon, Libya, Moldova, Montenegro, Morocco, Palestine, Serbia, The former Yugoslav Republic of Macedonia, Tunisia, Turkey, Ukraine.

• 4 Partner Institutions





Institut de recherche pour le développement





General Objective

- Create a framework for collaboration to improve surveillance and monitoring of emerging vector borne viral diseases (arboviruses).
- **Provide training** for public health experts in participating countries to increase the communicable disease control in the Mediterranean and Black Sea region.
- Promote knowledge development and transfer of biosafety best laboratory practices

Specific work

- First cluster for awareness, risk assessment, monitoring and control of emerging or re-emerging viruses with vector transmission.
 - Interaction of several work packages, one for human health, one for animal health, one for entomology and one for public health reinforcement.
 - Promote integrated surveillance (animal, human, entomological)
- Second cluster for awareness, monitoring and control of emerging respiratory viruses
- Capacity building of national laboratories in preparedness and response to emerging zoonotic viruses and respiratory viruses.



Focus of the current phase

Zoonotic viruses transmitted by **mosquitoes** with an **existing identified or potential risk** in the region:

West Nile, Dengue, Chikungunya, Yellow Fever, Rift valley fever

Focus on the Public Health Work-Package

General objective

To facilitate the integration of surveillance, risk assessment and early case detection **across the different project's areas of activity:** animal virology, human virology and medical entomology and the national surveillance system (NSS) for communicable diseases.



FAO. 2013. World Livestock 2013 - Changing disease landscapes. Rome.

Specific objectives

- Assessing the national level of integration of surveillance systems and describing how the exchange of information is organized between data flows in the Project's Areas of activities and the national surveillance system (NSS) for communicable diseases.
- Identifying formal procedures and informal processes in depth in selected countries.
- Identifying success stories in establishing a functional integration of surveillance in the region.



Criteria to describe existing levels of integration between human/animal/entomological surveillance for a specific exposure

Level of integration	Sublevels of integration	Criteria
Policy and institutional level	Policy level	 Existence of a National policy addressing integrated surveillance for this specific exposure Existence of a policy addressing integrated surveillance for this specific exposure at subnational level
	Institutional level	 Existence of agreements among the institutions involved in human/animal/entomological surveillance for the specific exposure, Existence of a coordination mechanisms among the institutions involved, Existence of identified focal points for each of human/animal/entomological surveillance for the specific exposure
Data collection and analysis level	Interoperability mechanisms at data collection level	 Existence of integrated data collection tools Existence of activation mechanisms of human surveillance based on signals from animal/entomological surveillance Other interoperability mechanisms at data collection level
	Interoperability mechanisms at data analysis level	 Presence of DB exchange/merging/other mechanisms to facilitate joint analysis among sectors. Performance of joint/integrated data analysis among the different surveillance sectors Other interoperability mechanisms at data analysis level
Dissemination level	-	1. Existence of joint result dissemination mechanisms (e.g. bulletins, reports, papers, media reports, websites)

Literature Review (ongoing)

- **Task:** assessing the level of integration between the animal virology, human virology and medical entomology entities with the central national surveillance system. In order to do this, there is the need to clearly define what is integrated surveillance in the field of arboviral diseases. Criteria are needed to describe and define this integration in a consistent way.
- Study question: Which criteria can be used to define integrated surveillance (human, animal, entomological) in the field of autochthonous vector borne viral diseases in countries of the Mediterranean, Black sea and EU regions?
- **General Aim:** To identify criteria able to consistently describe integrated surveillance of autochthonous arboviral diseases to be used for studies in the context of MediLabSecure WP5.

• Specific objectives:

- To analyse studies describing existing surveillance systems of autochthonous vector borne viral diseases, including systems successfully integrating human, animal virology and/or medical entomology surveillance.
- To identify those elements that should be present in order to defined a surveillance system as "integrated"

Literature Review (ongoing)

- Given the specificity of integrated surveillance activities to the different pathogens, there is a need to define the search strategy of this review in a way to analyse surveillance integration by disease. There is therefore the need to identify which VBD should be considered in this review on the basis of those most relevant to the geographical area of interest of the MediLabSecure Project.
- The following viral vector borne diseases have caused autochthonous cases (endemic/sporadic) in the EU, Mediterranean and Black Sea regions: West Nile Virus, Chickungunya, Dengue, Rift Valley Fever, Crimean Congo Haemorrhagic Fever, Tick Borne Encephalitis.
- As the current priority of the MediLabSecure Project has been narrowed down to mosquito transmitted VBD, this review will consider the following diseases: WNV, Chickungunya, Dengue and RVF.

Survey (ongoing)

- Based on the criteria shown three questions with conditional branching to maximum two «child questions» were inserted in a wider survey.
- The survey was circulated among national focal points in laboratories of animal and human virology and of medical entomology in the countries involved in the project.

 Now the same questions should be sent to public health officials to complete the study

Who should we contact?

Public Health officials at national level (MoH/IPH) personally involved in the surveillance of vector-borne diseases.

Able to comment on:

Policy and Institutional level

Data collection and analysis level

Dissemination level

- Existence of a **National policy** addressing integrated surveillance for each disease
- Existence of a coordination mechanisms among the institutions involved
- Existence of integrated data collection tools
- Presence of DB exchange/merging/other mechanisms to facilitate joint analysis among sectors.
- Performance of joint/integrated data analysis among the different surveillance sectors

• Existence of joint result dissemination mechanisms (e.g. bulletins, reports, papers, media reports, websites ...)





Thank you

We will ask you if we need advice on the appropriate contact person in your country,

thanks for your help!

