

# **EPISOUTH PLUS REPORT 5/2012**

# THE EPISOUTH PLUS PROJECT

# THE MEDITERRANEAN REGIONAL LABORATORY NETWORK

Meeting with the WP4 Expert Committee 13 January 2012, Institut Pasteur, Paris, France

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on behalf of the EpiSouth Network

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# THE EPISOUTH NETWORK

# EPISOUTH PROJECT (2006-10)

In occasion of the Year of the Mediterranean (2005), a number of countries that share the Mediterranean ecosystem and therefore have common public health problems, agreed to develop the project "EpiSouth", whose aim was to create a framework of collaboration on epidemiological issues in order to improve communicable diseases surveillance, communication and training in the Mediterranean region and South-East Europe.

The Project "EpiSouth" started in October 2006 with the financial support of the EU DG-SANCO together Italian with the **Ministry** of Health and has been closed in June 2010. As per June 2010, EpiSouth is a Network of 27 countries (9 EU and 17 non-EU countries plus 1 candidate to enlargement country). It is therefore the biggest inter-country collaborative effort in the Mediterranean region.

# EPISOUTH PLUS PROJECT (2010-13)

A new phase of the EpiSouth Network activities has been approved and started on 15 October 2010 and is expected to last until 15 April 2013.

The new phase implies a shift of the Network's activities to a wider approach. Building on the knowledge of regional gaps and needs identified during the first EpiSouth implementation in the fields of Epidemic Intelligence, Vaccine Preventable Diseases and Migrants, Cross Border Emerging Zoonoses and Training in field/applied epidemiology, the new EpiSouth Plus Project aims at contributing to the control of public health threats and other bio-security risks in the Mediterranean region and South-East Europe.

#### **OBJECTIVE AND ORGANIZATION**

The EpiSouth Plus project is aimed at increasing the health security in the Mediterranean area and South-East Europe by enhancing and strengthening the preparedness to common health threats and bio-security risks at national and regional levels in the countries of the EpiSouth Network in the framework of the International Health Regulations (IHR) implementation. The reinforcement of relations of trust in the region is an objective and an instrument in the scope of Project's implementation.

Ensuring a successful response to this challenge requires a solid framework of collaboration and information exchange among the 27 participating Countries. To this purpose, Focal Points from each participating country have been appointed and asked for active involvement and collaboration in the project's activities.

The project is organized in seven Work Packages (WP), jointly co-led by EU and non-EU countries. WP leaders work in strict contact with the corresponding WP Steering Team, while a Steering Committee,

constituted by all WP leaders, and the Project General Assembly, constituted by all participants, are responsible for the general strategic decisions. Finally, an Advisory Board, constituted by representatives of the collaborating institutions and external experts, provide support for the revision of relevant documents and recommendations.

#### **ACTIVITIES**

Apart from three transversal WPs (i.e., WP1-Coordination; WP2-Dissemination; WP3- Evaluation) the project's activities are articulated in four WPs:

- 1) <u>Establishment of a Mediterranean Regional Laboratories Network</u> to facilitate common threats detection in the countries involved (WP4).
- 2) <u>Promotion of common procedures in Generic Preparedness and Risk Management Plans</u> among the countries involved (WP5).
- 3) <u>Enhancing Mediterranean Early Warning Systems (EWS) and cross-border Epidemic Intelligence</u> allowing alerts and Epidemic Intelligence information sharing among EpiSouth countries and developing interoperability with other European EW platform, especially EWRS, as forecast by the current EU legislation (WP6).
- 4) <u>Facilitating IHR implementation</u> through the production of a strategic document, with guidelines based on specific assessments for describing how national plans/legislations can interact with IHR requirements (WP7).

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# Introduction

# - Participants

- Experts were chosen in order that:
  - the concerned geographical area was covered in the best possible way
  - the most recognised experts in the field were asked to participate (Heads of laboratories, representatives of complementary networks)
  - all disciplines were covered (Biosafety, laboratory dengue issues, laboratory West Nile issues, etc.)
- For an optimal interaction between the members of the EpiSouth Plus organisation, other EpiSouth Plus Work package (WP) leaders were invited (WP1, WP3, WP6) as well as a representative of the European Comission (DG SANCO).

#### Remarks:

Due to political tensions between France and Turkey the Turkish participants were not able to join for the meeting.

The Tunisian expert was unable to join due to agenda constraints.

*For the lists of participating institutions see Annexes 2 and 3.* 

# - Objectives of the meeting

The main objective of the Expert committee meeting was to select the laboratories to involve in the Mediterranean regional laboratories network (MRLN).

The secondary objective was to discuss about the organization of the upcoming activities: meeting with the Heads of laboratory of March 2012, first training session of July 2012 and other networking activities.

# 1. Identification of the laboratories

# 1.1. Selection process

The WP4 prepared a short questionnaire to assess the "basic" laboratory capacities and to support the selection of the labs to involve in the MRLN. This questionnaire was sent to the EpiSouth national focal

points (FPs) who forwarded it to the concerned Laboratory(ies) (human and animal fields) of their countries. The aimed laboratories should be national references for Dengue and /or West Nile, or a Virology unit which has the best possible expertise on diagnosis and identification with these pathogens or related viruses if no specific reference laboratory exists in the country.

# 1.2. Overview of the results of the laboratory capacities assessment

The WP4 has sent the questionnaire to the 27 EpiSouth countries. A total number of 29 questionnaires for 20 countries (participation rate: 74%) were received back: 26 'Human labs' and 3 Veterinary labs. Among these 20 countries, five countries have proposed more than one laboratory (veterinary and human).

#### WEST NILE & DENGUE FACILITIES AND IDENTIFICATION CAPACITIES

Within the 26 'Human labs', 12 were National reference labs (NRLs) related to West Nile (WN) and Dengue issues (Arboviruses, Zoonoses, Vector-borne diseases). Two countries identified one additional lab dealing with these issues, but which were not NRL for WN and Dengue issues.

Sixty-two percent of the Human labs (16/26) have Biosafety level 3 (BSL3) practices. Concerning the diagnostic of WN and Dengue, 9 labs over 26 (35%) could provide IgG and IgM serology plus PCR for WN and Dengue and 8 labs over 26 could provide these three techniques either for WN or for Dengue (respectively 35 and 31%).

#### **GENERAL LABORATORY PRACTICES**

Twenty-two labs (85%) have indicated that a quality assurance scheme is in place within their lab, but only 12 labs (46%) have Standard operating procedures (SOPs) in case of Public Health emergency (PHE). As the MRLN would have to support the EpiSouth network in case of PHE, the WP4 would think about sharing SOPs within the MRLN and to discuss about this issue with WP7 (IHR implementation).

Almost all labs (25/26) have declared that a workshop or in-service training has been conducted for the lab staff during the last year.

# 1.3. Selection criteria for the laboratories of the MRLN

The primary selection criterion was the identification of the laboratory(ies) by the NFPs. Secondary criteria were: being the NRL for WN and/or Dengue, and having the most appropriate diagnostic and Biosafety capacities to provide a diagnostic result for these issues (minimal capacity: serology).

#### **DEFINITION OF THE MRLN AND THE ASSOCIATED LABORATORIES**

During this Expert meeting, two groups of laboratories were identified:

- **the MRLN members or 'core group'**: 'Human laboratories' that would participate to all the networking activities (meetings, training, etc.);
- **the associated labs**: laboratories which would not participate to specific "EpiSouth Plus" trainings but that could benefit from some of the networking activities, such as sharing of information: SOPs, methodology documents, list of the contact information of the experts and MRLN members, etc.

# **NOTE ON THE VETERINARY LABORATORIES**

Since there are already many networks for veterinary labs on WN (including OIE), it was decided not to overlap with them. Therefore it was decided to focus on 'Human labs' and maintain links and cooperation with Veterinary labs which will be considered as "associated labs".

#### 1.4. Selected laboratories

•	The	MRLN	"core	group"	is	composed	of	one	Human	lab	from	the	20	following	countries:
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Albania	Greece	Romania
Algeria	Israel	Serbia
Bosnia & Herzegovina	Italy	Slovenia
Bulgaria	Jordan	Spain
Croatia	Kosovo	Tunisia
France	Malta	Turkey

FYROM Palestine

• The associated laboratories are:

One Veterinary lab for the three following countries:

France Serbia Turkey

Other 'Human' associated laboratories from the three following countries:

Italy Greece Serbia

(For the list of the laboratories, see Annex 4)

# 2. Networking activities

# 2.1. Links with other existing networks

# **ENIVD**

Main activities of the <u>European Network for Diagnostics of "Imported" Viral Diseases</u> (ENIVD) were introduced by Matthias Niedrig, responsible of ENIVD.

Possible fields of interaction with ENIVD network are EQAs (external quality assurances);

It has been said that strong links and collaboration would be important and very relevant, as the two networks have close activities.

#### **BIOSAFETY ASSOCIATIONS**

Ingegerd Kallings, who was President of the European Biosafety association (EBSA) for 2009-2010, briefly introduced the Biosafety associations (BSA) and the possible collaboration with EpiSouth. It has been said that, as Biosafety is a full priority issue more global than Biosafety in the lab, strong links and collaboration with the local and regional BSA will be encouraged.

EBSA will have a breakout session in June 2012 and EpiSouth countries are welcome.

# **OTHER NETWORKS:**

• QUANDHIP (Quality Assurance Exercises and Networking on the Detection of Highly Infectious Pathogens)<sup>1</sup>

A laboratory network 'QUANDHIP', lead by the Robert Koch Institute (RKI, Germany) and working on Biosafety and laboratory support in case of emergency, would be launched in February 2012. It results from the fusion between two existing networks:

- EQaDeBa (European Network for Highly Pathogenic Bacteria / Establishment of Quality Assurances for Detection of Highly Pathogenic Bacteria of Potential Bioterrorism Risk), a P3 laboratory network lead by the RKI (Germany);
- ENP4-Lab (European Network of P4 Laboratories), lead by the INMI, "L. Spallanzani" (Italy).

<sup>&</sup>lt;sup>1</sup> www.rki.de/cln 109/nn 1387302/EN/Content/Prevention/QUANDHIP/QUANDHIP node.html? nnn=true

• **QCMD** (Quality Control for Molecular Diagnostics)<sup>2</sup>

QCMD is a non-profit association located in Glasgow (Scotland) providing EQA for PCR and molecular biology (including for WN). They provide the material and the expertise advice. There is a fee of about 150/200€ to participate and the number of samples is limited.

It will be important to stay aware of meetings from other networks working with the same labs and/or on the same issues and to organize joint meeting (i.e. ECDC and EBSA meeting).

# 2.2. Training

#### PROPOSITION OF A PRELIMINARY DRAFT OF AN AGENDA FOR THE FIRST TRAINING SESSION

A preliminary draft of an agenda for the first training session on Dengue and Biosafety issues was discussed. Possible accreditation of the training will be explored.

#### **IDENTIFICATION AND SELECTION OF THE TRAINEES**

The main criteria concerning the best trainee profile have been established:

- 1. The trainee should be a permanent staff of the lab
- 2. She/he should be an active person working at the bench
- 3. She/he should speak English and/or French easily, or Arabic.
- 4. As possible, she/he could provide training within the lab staff when she/he will come back in his/her lab

A second more detailed questionnaire (that will allow us to go deeper in the assessment and to tailor the best training possible) will be submitted to the concerned Heads of Lab.

# 2.3. Meeting with the Heads of laboratory (8-9 March 2012, Ankara, Turkey)

It has been determined that the Head of the lab who will be invited to this meeting should be, as possible, Head of the lab directly working on WN and Dengue issues.

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<sup>&</sup>lt;sup>2</sup> www.qcmd.org

Depending on the structure of the lab, the Head of lab should be the Head of the most appropriate

section within the laboratory:

1<sup>st</sup>: Head of Arboviruses Unit

If not: 2<sup>nd</sup>: Head of Virology Unit

If not: 3<sup>rd</sup>: Microbiology Unit.

This meeting with the Heads of lab would allow to discuss further capacities and needs of each

lab of the MRLN.

3. Other main issues discussed during the meeting

Documents to share:

WHO Dengue and WN documents

- ECDC "Biorisk management standards"

Identification of ad hoc needs should be done to identify specific financial aids for these

purposes.

It has been discussed that according to the countries, procedures and regulations could

facilitate or prevent the diagnostic of new and/or emerging pathogens (i.e. West Nile and Dengue

in Mediterranean countries). Indeed, some countries do not allow a laboratory to provide other

tests for diseases which are not in a pre-established list or if the clinician did not ask for it.

However, it has been shown for some countries that labs could be aware of the presence of these

pathogens in neighbouring countries, especially thanks to networks they are involved in. Those

networks could provide tests and reveal the presence of some viruses (or other) in the country

and in that sense help to put these pathogens on the national political health agenda.

Another long-term issue would be the identification of a laboratory that could be a

reference for a sub-region, especially for the South-East Europe and Maghreb.

As this kind of sub-regional reference lab means long-lasting commitment, especially at a

national level, it would need a consensus at national and regional level and funding.

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# **Conclusion and wrap-up**

- One laboratory (for human samples) per country (20 countries respondent) has been chosen to be part of the MRLN and to be involved in trainings. The associated laboratories would also be involved in networking activities, but not in trainings.
- The head of each selected laboratory (most appropriate section of the lab) will be invited to the "Meeting of the Heads of laboratory" in Ankara, on the 8<sup>th</sup> and 9<sup>th</sup> of March 2012.
- A representative of ENIVD and of EBSA and/or local BSA for Turkey will be invited to the Meeting of the Heads of Lab.

# **Annexes**

# **ANNEX 1: Agenda of the Meeting of the Expert Committee**

# Meeting of the Expert Committee 13 January 2012, Institut Pasteur, Paris

# Agenda for the Wp 4 Experts Meeting 09.15 - 09.30 Arrival of the participants 09.30 - 09.50 Welcome by the Head of the International Division - IP 09.50 - 10.30 Round table - Presentation of participants 10.30 - 11.00 Presentation of the context Presentation of EpiSouth Plus Presentation of the Work Package 4 Presentation of the results of the Laboratory capacities assessment 11.00 - 11.15 Coffee break 11.15 - 13.00 Identification of participating laboratories Procedure to select the Laboratories of the MRLN For each country: Results for the Laborator(ies) identified by the NFPs and selection of the reference laboratories that will be member of the MRLN 13.00 - 14.30 Lunch 14.30 - 16.00 Discussion on implementation of network actions for the participating laboratories **Network activities** Actions and tools Training Contents and Organisation of the training Identification of selection criteria for trainees 16.00 - 16.15 Coffee Break

16.15 - 17.15 Discussion on the Meeting with the Heads of Laboratory

Main issues Contents 17.15 - 17.30 Conclusion and wrap-up

# **ANNEX 2: Institutions of the experts**

# LIST OF THE INSTITUTION OF THE EXPERTS FOR THE EPISOUTH PLUS WP4

Ankara University, Faculty of Veterinary Medicine - Department of Virology (Turkey): Veterinary, West Nile

**Aristotle University of Thessaloniki, Medical School** - A'Department of Microbiology National Centre for Arboviruses and Haemorrhagic Fever viruses (Greece): Arboviruses

**ECDC** (Sweden): Arboviruses, Emerging and Vector-borne Diseases (EVD)

ECDC (Sweden): Biosafety, Microbiology

Institut Pasteur - Molecular interactions Flavivirus-Host Unit (France): Arboviruses

**Institut Pasteur** - CIBU (Urgent Response to Biological Threats) (France): Biosafety, ENIVD, WHO

Institut Pasteur de Tunis (Tunisie): West Nile

Instituto de Salud Carlos III - National Center of Microbiologia (Spain): Arboviruses, EuroWestNile project, ENIVD

Swedish Institute for Communicable Disease Control (Sweden): EBSA - Biosafety

Refik Saydam National Public Health Agency - Virology Department (Turkey): West Nile,
Dengue

**Refik Saydam National Public Health Agency** - Communicable Diseases Research Department (Turkey): Biosafety

Robert Koch Institut (Germany): Arboviruses - ENIVD network

# **ANNEX 3: Participating Institutions**

# PARTICIPANTS TO THE EXPERT MEETING (13/01/2012)

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ECDC (Sweden)

Executive Agency for Health and Consumers EC (Luxembourg)

Institut national de Veille Sanitaire (France)

Institut Pasteur (France)

Institut Pasteur - CIBU (France)

Institut Pasteur - Molecular interactions Flavivirus-Host Unit (France)

Istituto Superiore di Sanita (Italy)

Ministry of Health (Tunisia)

National Center of Microbiologia Instituto de Salud Carlos III (Spain)

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Robert Koch-Institut (Germany)

Swedish Institute for Communicable Disease Control (Sweden)

# **ANNEX 4: Laboratories of the MRLN**

# **EPISOUTH PLUS - WORK PACKAGE 4**Mediterranean Regional Laboratory Network

# INVOLVED LABORATORIES







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# **ALGERIA**

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# **Croatian National Institute of Public Health**

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National Reference Centre for ArboViruses and Hemorrhagic Fever Viruses

Aristotle University of Thessaloniki (AUOT)

A' Department of Microbiology - Medical School - AUOT

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