

Mid-Term Meeting & Technical Workshop on Public Health

December 15th-17th 2015
Institut Pasteur, Paris, France



REPORT



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Summary

The *mid-term meeting and technical workshop on public health* was the opportunity to bring together the leaders of the MediLabSecure work packages and 82 delegates from the partner countries. In addition, 33 representatives from other EU-funded projects and relevant stakeholders were invited to share their expertise.

During this 3-days event, invited speakers shared the latest breakthroughs regarding West Nile virus, as an example of a zoonotic vector-borne disease of concern in the Region, and they gave an overview of the disease epidemiology and surveillance.

Moreover, we took the chance of this gathering of representatives from all sectors of the project to engage in a public health technical workshop on West Nile fever risk assessment with a One Health approach.

At the end of the meeting, parallel sessions within each speciality allowed for in-depth discussions among the participants on technical subjects related to the project aims, tools and outcomes.

This mid-term meeting has resulted in an improved understanding of ongoing and future activities of MediLabSecure, and it will contribute to the fine-tuning of the forthcoming actions within the project.



1. Introduction

The *Mid-Term meeting & technical workshop on Public Health* which took place on 15-17th December 2015 at the Institut Pasteur in Paris gathered representatives from the laboratories and public health (PH) institutions selected to be part of the MediLabSecure network as well as invited experts.

1.1 Objectives of the meeting

This three-days meeting aimed at:

1. Informing participants about the network, its objectives, organisation and activities
2. Offering a networking opportunity to the participants across scientific disciplines and countries
3. Informing participants about other projects relevant to the MediLabSecure scope and foster collaboration between projects
4. Contributing to the roadmap for the subsequent training sessions
5. Conducting the first technical workshop on public health of the project
6. Presenting the travelling exhibition “Vectors and Diseases”

In conclusion, this rendezvous gathered 3 events in one: the project mid-term meeting, the technical workshop in public health, and the exhibition “Vectors and Diseases”. This format was chosen to take advantage of the reunion of more than a hundred delegates of all sectors involved in the project.

1.2 Agenda

The meeting included plenary sessions as well as smaller group discussions (see detailed agenda (Fig1)). The first morning was devoted to the presentations of the achievements of the project as a whole during its first two years. Each sub-network - namely animal virology, human virology, medical entomology and public health- presented in detail their activities so far, as well as their goals for the two upcoming years.

The next session was dedicated to the presentation of partner networks and projects that could be relevant for the network participants.

The experts’ talks’ session started with a presentation of FAO “One Health” activities, followed by more specific talks on West Nile Fever in South and Eastern Europe with information on the disease, vectors, surveillance tools and epidemiological data, as well as a presentation of the US CDC experience with the virus during the past 15 years.

The second day of the meeting was mainly devoted to group work. First, participants of regional groups were confronted with case studies on detection and response to potential public health emergencies.

After that a PH technical workshop took place. Collaborators from ECDC introduced the risk assessment concept and presented the ECDC West Nile Fever risk assessment tool to the audience. Building on this, participants performed a multisectorial exercise on risk assessment also in regional groups, and prepared slides that they presented the next morning to the general audience. To conclude this embedded workshop, the Italian



experience with the integrated surveillance of West Nile Virus was presented as an example of multisectorial collaboration.

Finally, participants were split in four subnetworks to allow for discussions within specialties. The meeting was concluded by presenting the main outcomes of these group sessions and by proposing future orientations and priorities for the network.

The slides for all presentations as well as the reports for the parallel sessions are available in Annex 8 and downloadable in the private area of the website.

AGENDA



MediLabSecure

Tuesday 15/12

08:30	REGISTRATION
09:30	1 Project overview Kathleen Vicloir
09:50	Animal Virology Miguel-Angel Jimenez & Elisa Pérez
10:10	Human Virology Jean-Claude Manuguerra & Camille Escadafal
10:20	Medical Entomology Vincent Robert
10:40	Public Health Silvia Declich & Flavia Riccardo
11:00	BREAK
11:20	2 EDEN & EDENext: ten years of EC-funded research on vectors and vector-borne infections Renaud Lancelot
11:40	VectorNet, a PAN-European network of Medical Entomologists Guy Hendrickx
12:00	MedPET: strengthening institutional capacities and collaboration in Mediterranean and Black Sea Regions to face common public health threats Concha Martin de Pando
12:20	EU CBRN risk mitigation CoE initiative technical tools
12:30	LUNCH & GROUP PHOTO
14:30	3 FAO activities in One Health Béatrice Mouillé
15:00	West Nile virus transmission: from enzootic to epizootic Jordi Figuerola
15:30	BREAK
16:00	West Nile virus changing epidemiology in Europe Sylvie Lecollinet
16:30	Assessment of arbovirus surveillance 15 years after introduction of West Nile virus in the United States Lyle Petersen
17:00	Scientific Advisory Board meeting Meeting restricted to Scientific Advisory Board members
19:30	DINNER

Wednesday 16/12

09:00	4 Introduction Case studies on risk assessment
09:30	Case studies on detection and response to potential public health emergencies Regional groups
11:30	BREAK
12:00	5 Risk assessment definition, aims and methodology Wim Van Bortel
12:30	How EDC performs risk assessment Laurence Maramba
13:00	LUNCH
14:00	6 Risk Assessment Exercise Part I Regional groups
15:30	BREAK
16:00	Risk Assessment Exercise Part II Regional groups
17:30	END

Thursday 17/12

09:00	7 Group presentations on the multisectorial exercise on Risk Assessment Developing multisectorial integrated surveillance for West Nile Virus: the example of Italy Caterina Rizzo & Paolo Calisiri
11:00	BREAK
11:30	8 Concluding remarks Parallel sessions: discussion within specialties' groups
13:00	LUNCH
14:00	END

Locations

	Auditorium François Jacob
	Hall François Jacob building
	Module espace congrès
	Meeting room F. Jacob 28-01-01C
	Ibis hotel restaurant

Please refer to the group lists (pages 23 - 34 of meeting booklet)

F. Jacob 28-01-01Aa/Ab
F. Jacob 28-01-01B
F. Jacob 28-01-01C
F. Jacob 28-01-01D
F. Jacob 28-01-01E
Ductaux building, room RDC Bas



MediLabSecure

Fig1 : Agenda of the event.



1.3 Participants

The meeting gathered 73 representatives from 18 countries (Table 1). A complete list of participants with contact information can be found in annexes 2 and 3.

	Country	WP2 (Animal virology)	WP3 (Human virology)	WP4 (Medical entomology)	WP5 (Public Health)	Number of participants per country
1	Albania	1	1	1	0	3
2	Algeria	0	1	1	0	2
3	Armenia	1	2	0,5*	0,5	4
4	Bosnia and Herzegovina	1	1	1	1	4
5	Egypt	2	2	0	0	4
6	Georgia	0	2	1	1	4
7	Jordan	2	2	0	0	4
8	Kosovo	1	1	1	1	4
9	Lebanon	2	2	1	0	5
10	Libya	0	0	0	0	0
11	Moldova	2	2	1	1	6
12	Montenegro	1	2	1	1	5
13	Morocco	1	1	1	0	3
14	Palestine	1	1	1	1	4
15	Republic of Macedonia	1	1	1	1	4
16	Serbia	1	1	2	1	5
17	Tunisia	1	2	1	1	5
18	Turkey	1	2	1	0	4
19	Ukraine	1	1	1	0	3
	Number of participants per WP	20	27	16,5	9,5	73

*: indicates that the same participant was representative for both sectors

Table 1 . Participants to the Mid-Term meeting and technical workshop on public health by country and specialty.

Invitations were sent out in August 2015 to 96 representatives from the laboratories and PH institutions selected to be part of the network and to national public health referents. The response rate was 84%. One to two representatives from 50 laboratories attended the event as well as 9 public health referents (attendance rate 84% over 87 respondents). Nine invitations remained unanswered and seven invitees had to decline invitation due to agenda overlap with prior commitments. Nine invitees had to cancel their attendance due



to personal problems or to authorisation issues (visa obtained with delay, no clearance from ministry, last minute invitation to government meeting in country, etc.).

2. Overview of sessions

Session 1: MediLabSecure core activities

- **General presentation of MediLabSecure (WP1).** This coordination and communication working group is led by Kathleen Victoir at Institut Pasteur, with Lobna Gaayeb as project manager
- **Animal virology working group (WP2) working group,** led by Miguel Ángel Jiménez-Clavero at INIA (CISA), with Elisa Pérez as project manager
- **Human virology working group (WP3)** led by Jean-Claude Manuguerra at CIBU (Institut Pasteur) with Camille Escadafal as project Manager
- **Medical entomology working group (WP4)** led by Vincent Robert at MIVEGEC (IRD) with Marie Picard as project manager
- **Public Health working group (WP5)** led by Maria Grazia Dente and Silvia Declich at ISS, with Flavia Riccardo as project manager

The audience was reminded of the selection process carried out to identify and select the laboratories to be part of the MediLabSecure Network. The subnetworks of laboratories (WP2, WP3 and WP4) presented the activities carried out during 2014 and 2015 (workshops and dissemination activities). An overview of upcoming activities was also presented, including the schedule for external quality assessments (EQAs) and next meetings and workshops. The activities carried out by WP5 were also presented: a literature review on integrated surveillance of vector-borne diseases was performed and a questionnaire on this subject matter was sent out to all the laboratories in the network. Results of these activities were presented to the audience as well as the next planned activity which is an in depth analysis of integrated surveillance: the MediLabSecure Situation Analysis (MeSA) study.

Session 2: Partner networks

A number of partner networks have been identified and 3 initiatives funded by EU instruments or by international agencies were presented to the participants to limit overlaps and to set up fruitful collaborations with existing entities.

- **“EDEN & EDEN next: Ten years of ED-funded research on vectors and vector-borne infections”**, presented by Renaud Lancelot. EDEN & EDEN next (Emerging Disease in a changing ENvironment) are two successive projects coordinated by CIRAD and funded by DG-Research on vectors and vector-borne infections. (<http://www.edenext.eu/>)
- **“VectorNet: a PAN-European network of medical entomologists”** was presented by Guy Hendrickx. VectorNET (2014-2018) is an inter-institutional project led by ECDC



& EFSA that started after the emergence of Chikungunya in 2006. It links 21 partners from 14 countries and covers human and animal health areas by mapping vector abundance. The approach for collecting information results from EDEN project. The network expands outside the EU. The main outcomes are consolidated links between human and animal health actors, generation of databases, data sharing and sampling of vectors. All network members have access to the data. http://ecdc.europa.eu/en/activities/diseaseprogrammes/emerging_and_vector_borne_diseases/Pages/VBORNET.aspx

- **“MediPIET: Strengthening institutional capacities and collaboration in Mediterranean and Black Sea Regions to face common public health threats”** was presented by Concha Martin de Pando. The project financed by DG-DEVCO (CBRN CoE Project 36, 2014-2017) involves 18 non-EU countries, all member of the MidLabsecure network, 2 non-EU observer countries and 3 EU countries. Its objective is “enhancing health security in the Mediterranean basin by supporting capacity building for prevention and control of natural or man-made health threats posed by communicable diseases through a sustainable training programme in intervention epidemiology” (<http://medipiet.eu/>) Mrs. Martin de Pando suggested sharing experts and training materials between MediPIET and MediLabSecure. She proposed to set-up twinning experiences or to include international assignments for MediPIET fellows within MediLabSecure activities.

Finally, the EU CBRN CoE initiative supporting MediLabSecure and MediPIET through the instrument contributing to Stability and Peace (IcSP) was presented by Anne-Sophie Lequarre from DG Joint Research Center. She gave an overview of the structure of this initiative and the activities funded by the IcSP, especially related to biological risk and biological threats agents in the same region.

Session 3: Expert talks

The objective of this session was to give an example of activities with a One Health perspective of the Food and Agriculture Organization (FAO) (session 3 part 1), followed by an introduction to West Nile Virus ecology and epidemiology, with an example of surveillance of the disease in a context other than that of the EU (session 3 part 2).

Session 3 part 1

Mrs. Béatrice Mouillé, from FAO, presented various health initiatives of the “Laboratory capacity building and laboratory networking unit” (Lab unit) of the FAO as well as activities in the frame of the tripartite OIE-FAO-WHO following the “one health” strategy.

Session 3 part 2

The session started with results presented by Dr. Jordi Figuerola on the eco-epidemiology of West Nile Virus in Southern Spain. Then, Dr. Sylvie Lecollinet from France presented the activities conducted in the Animal Health Laboratory in Maisons-



Alfort (ANSES) for the surveillance of WNV. She then provided an overview of WNV epidemiology in Europe, stressing the need for a harmonized preparedness plan against WNV disease in Europe and neighbouring countries. To conclude this session, Dr. Lyle Petersen presented the US CDC experience with arbovirus surveillance, with a particular focus on WNV and the challenges encountered in the management of the surveillance network and consequent public health actions.

Session 4: Case studies

Participants were invited to discuss in groups a clinical study in 5 steps set in a small geographic area. The scenario started with an outbreak of wild bird mortality followed by a case of neurological disease in horses. Then virological and serological data about active surveillance in wild birds and mosquitoes were presented and discussed. Finally, the epidemiological situation led to a human case of febrile disease. During this exercise, participants were put into situation and the information was provided gradually, encouraging participants to discuss possible links between cases, possible aetiologies on the basis of the epidemiological data available and appropriate diagnostic protocols and procedures, all from a one Health perspective.

Facilitators had the responsibility to guide participants through the exercise while setting the pace for its completion in the most optimized manner (timing and discussions). The content of this exercise had been discussed with the facilitators ahead of the session in order to harmonize as much as possible the discussions within the different groups. The regional groups' distribution with participants and facilitators is summarized in table 2 and detailed in Annex 4.

Groups	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7
Participants	9	8	10	11	11	14	12
Facilitators	3	3	4	3	2	3	2
Countries	Moldova, Ukraine	Armenia, Georgia	Algeria, Morocco, Tunisia	Egypt, Lebanon	Albania, Bosnia- Herzegovina, Kosovo	Montenegro, Serbia, R. Macedonia	Palestine, Turkey, Jordan

Table 2 . Regional groups for Clinical cases exercise

This exercise had 4 main objectives:

- Build on what was learned during the training sessions of animal virology, human virology and medical entomology as well as during the previous day expert talks
 - Understand the importance of choosing the proper sample and best diagnostic method during suspicion of an arbovirus infection
 - Understand the limitations of each laboratory method
 - Discuss case definitions



- Discuss diagnostic rationale
- Interpret laboratory data in context of epidemiological data in order to make recommendations for public health action
- Encourage multi-sectoral collaboration and exchange
- Stimulate interactions between various actors (virologists, veterinarians, entomologists and public health authorities) from the same country and within the regions.
- Bring participants to understand the importance of their own role and that of the other disciplines to achieve an accurate understanding of the disease situation in the area (integrated surveillance of the disease)

At the end of the exercise, participants were asked to fill in an evaluation sheet (Annex 5). Participants' opinions on the exercise (56 anonymous sheets collected, 68% response rate) are reflected in figure 2. Overall, participants were satisfied with the exercise

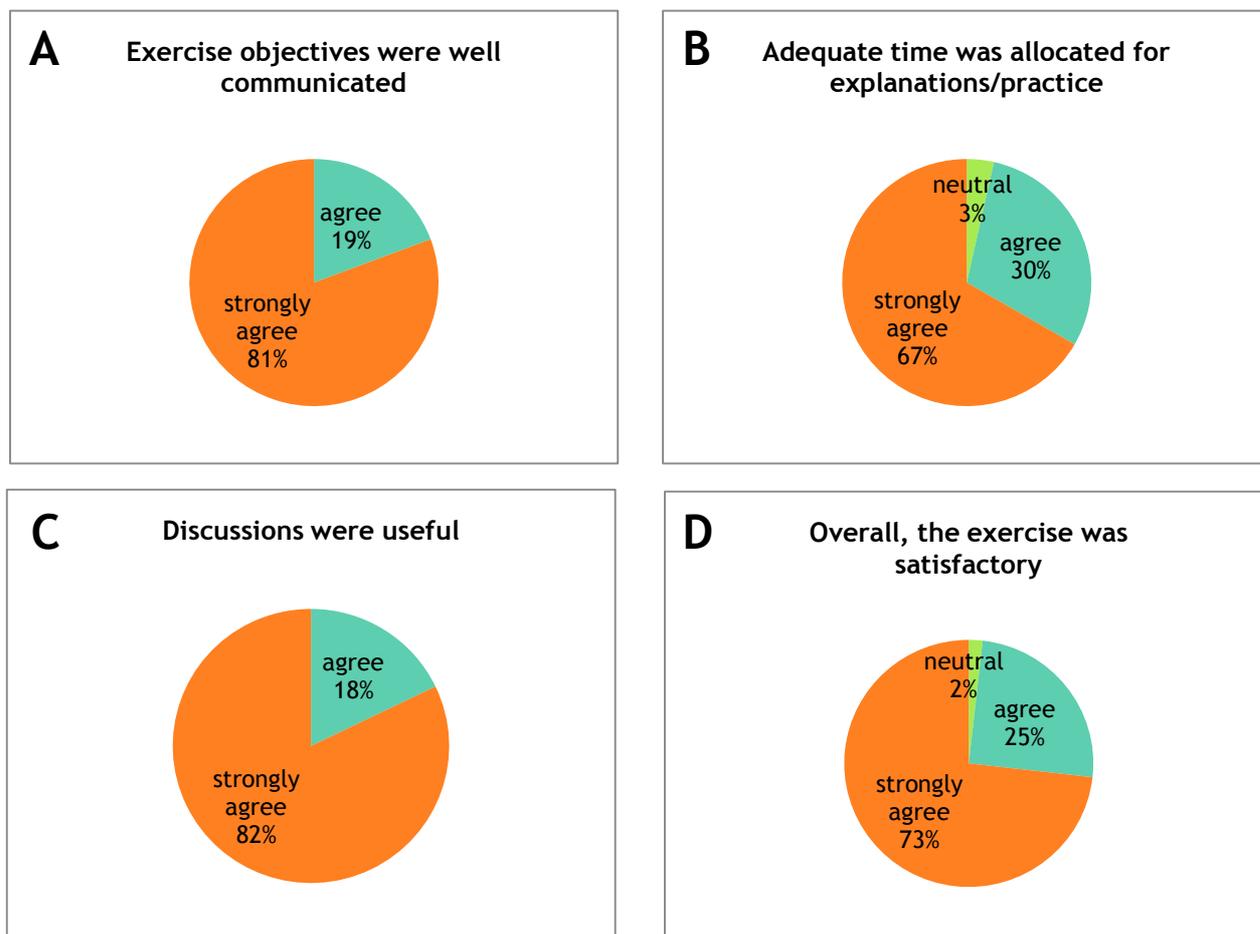




Figure 2: Proportions of answers (strongly agree/agree/ neutral/disagree/strongly disagree) provided on questions statements: A: “Exercise objectives well communicated”; B: “Adequate time was allocated for explanations/practic”; C:”discussions were useful”; D:”Overall, the exercise was satisfactory”.

Also, the participants were asked to respond to open-ended questions about aspects they liked about the exercise and aspects to improve.

As strengths, participants mentioned:

- The discussion, team work and experience sharing generated by the exercise
- The inter-sectorial communication and the fostering of integration of disciplines to solve a common problem
- The design of scenario (clear, realistic, applicable to the field)
- The exercise made them learn new aspects related to the virus and the disease
- The introduction to the exercise and the enthusiasm of facilitators
- The fact that they got to learn about strengths and difficulties of other countries and labs

As points to improve, participants mentioned:

- The need for more exercises
- The need for more time
- They would have liked to discuss more the decision making
- They would have liked to discuss more the control measures (activities such as use of insecticides and repellents), need to go beyond the surveillance programs
- They would have liked if the financial and kind of laboratory equipment aspects would have been included in the design: for example, proposing 2 scenarios: one laboratory with limited resources and another laboratory that is well-equipped
- The need to replicate the exercise with other pathogens (for example Dengue)
- Some participants asked for more complex cases, that would include mixed infections with even more pathogens
- Include regional exercises (take into account different climatic and geographical conditions in the area covered by the network)
- Some participants asked for more support material (images from real situations, maps, videos, etc.)
- Some participants proposed that the groups would be mixed (mixing participants from different countries)

Sessions 5, 6 and 7: Technical workshop on Public Health

These sessions were dedicated to the “technical workshop on Public Health”. First, an introduction on Risk Assessment was given by Dr. Wim Van Bortel from ECDC, followed by a more specific talk from Dr. Laurence Marrama on how ECDC performs risk assessment and an overview of the West Nile virus risk assessment tool. After this, participants were split in groups to conduct the “multisectorial exercise on risk assessment”, followed by a restitution of the regional profiles regarding integrated surveillance of West Nile Fever.



A detailed report of “Technical Workshop on Public Health” can be found in Annex 6.

Session 8: Parallel Sessions

Four parallel sessions were held, one for each subnetwork. This was the occasion to discuss the past and future activities of the project as a whole as well as those of the subnetworks. Reports for these sessions are available in Annex 7.

3. Vectors and Diseases travelling exhibition

In parallel to the event, the exhibition ‘Vectors and Diseases’ was set up at the Institut Pasteur. This exhibition that was devised and produced by IRD with the support of the MediLabSecure project, displays a broad range of vectors and also discusses the research conducted by scientists to gain better knowledge of them in order to organise control. A booklet compiling the exhibition panels has been printed and distributed to all the participants (figure 4). The exhibition can be accessed online at: http://medilabsecure.com/resources_exhibition.html



Figure 3: Moments of the mid-term meeting and technical workshop on Public Health