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

EPISOUTH PLUS REPORT 4/2012

THE EPISOUTH PLUS PROJECT

PUBLIC HEALTH PREPAREDNESS AND RESPONSE CORE CAPACITY ASSESSMENT

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JUNE 2012

European Commission • Instituto de Salud Carlos III

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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 with the Italian 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) Establishment of a Mediterranean Regional Laboratories Network to facilitate common threats detection in the countries involved (WP4).

2) Promotion of common procedures in Generic Preparedness and Risk Management Plans among the countries involved (WP5).

3) Enhancing Mediterranean Early Warning Systems (EWS) and cross-border Epidemic Intelligence 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) Facilitating IHR implementation 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).

Abbreviations

ECDC	European Centre for Disease Control
EU	European Union
NGO	Non Governmental Organisation
PH	Public Health
PHEIC	Public Health Events of International Concern
PRP	Preparedness and Response Plan
IHR	International Health Regulation (2005)
WHO	World Health Organisation
WP	Work package

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Executive Summary

21 out of the 27 EpiSouth network countries participated in a Public Health Preparedness and Response Core Capacity Assessment. The assessment consisted of a semi-structured questionnaire. For 12 of the participating countries it was completed by a face-to-face interview aimed to enhance the quantity and quality of the information.

The main results are:

Not a single EpiSouth country uses a generic preparedness and response plan to manage possible or real PH events.

Specific plans are available in the majority of the countries, but they are not always responding to the PH risks identified by the region.

Eight countries report to have mixed systems of generic and specific plans. However it seems that the majority of those systems are still driven by specific plans.

Scientific risk assessment, epidemiological intelligence and communication with vulnerable populations have been identified together with evaluation as top priorities for training in the region.

Communication with mass media and the general public seems well established in the region, but the application of new communication technologies might be considered in the future.

Technical communication with neighbouring countries and international agencies seems well established and is in line with the International Health Regulation (2005). However a lack of formalisation of these procedures has been identified by this assessment.

Existing human resources are qualified as insufficient by many EpiSouth member institutions but they seem subject to ineffective use as formal job descriptions are often lacking.

The findings of the needs assessment will be used as basis for future trainings and capacity building sessions, as well as for the planning process of the 2013 simulation exercise. A special focus should be given on the development of generic plans in the region.

Introduction

This survey focuses on the existing institutional capacities and needs related to Public Health events of international concern (PHEIC) in the EpiSouth region, according to the International Health Regulation (IHR) 2005 definitions.

It forms part of the EpiSouth Plus project work package (WP) 5 coordinated by the Instituto de Salud Carlos III (Spain) and the Institut National de Santé Publique (Algeria). This WP aims to strengthen the early response capacity within the EpiSouth region to possible and real health threats through an assessment of core capacities as well as trainings.

In the training needs assessment conducted by EpiSouth in its prior phase (2007-2009), risk assessment, modelling and infectious disease dynamics, epidemic intelligence and advanced data analysis where identified as knowledge gaps. This survey is a logical following step to the previous phase.

EpiSouth members are committed to an ongoing harmonization of technical approaches in order to improve early detection of events and response capacities.

The main objectives of this assessment are:

- Developing a comprehensive map of resources, experiences and capacities at institutional level available in case of a possible or real PH threat within the EpiSouth countries.

- Identifying existing gaps and common training needs of all project partners in order to improve transnational cooperation in situations of PH emergencies.

- Providing input for an upcoming simulation exercise.

The questionnaire covered different areas such as experienced PHEICs and lessons learned management of PHEICs through generic or specific plans, capacities in early detection, risk communication and human resources. The complete questionnaire can be found in annex 1 of this report.

Methods and timetable

A semi-structured questionnaire has been developed based on a literature review conducted in January 2011. This questionnaire has been sent to the EpiSouth WP 5 steering team and expert epidemiologists working in the area of preparedness and response in order to obtain feedback.

The final version of the questionnaire has been decided in late May 2011 and a technical pre-test regarding the compilation of data on the EpiSouth website has been conducted in June 2011.

Data entry started in July 2011 and was possible until October 2011. A preliminary report served as basis for the planning of the first EpiSouth training seminar held in February 2012. At this occasion preliminary results where presented and discussed.

By this time 20 of the 27 EpiSouth member countries had participated and only the data of 8 countries were considered to be exhaustive.

The research work plan has foreseen in-depth interviews and they where conducted during the February 2012 workshop in Madrid in order to review missing information.

Four countries provided additional information on site. All others volunteered to submit additional information via e-mail or to include it directly to the online version of the assessment. By end of

April 2012 further three countries provided additional information. Table 1 gives an overview on the participation rate in the two rounds of the survey.
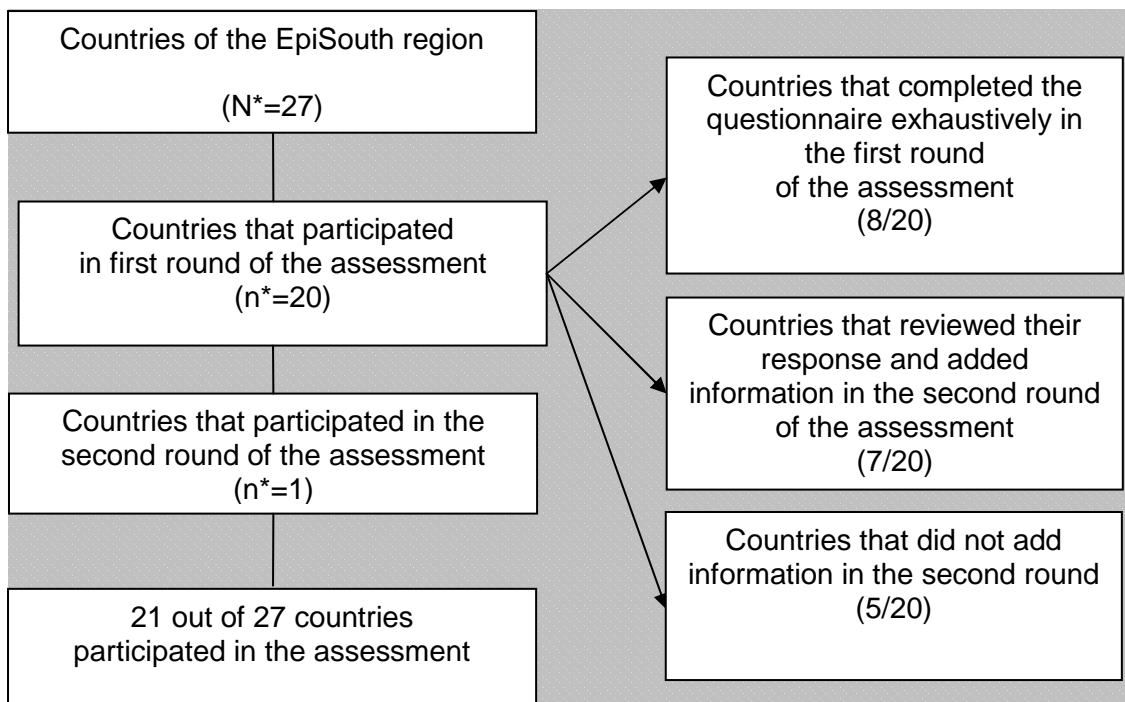
Countries of the EpiSouth region (N*=27)	Countries that completed the questionnaire exhaustively in the first round of the assessment (8/20)
Countries that participated in first round of the assessment (n*=20)	Countries that reviewed their response and added information in the second round of the assessment (7/20)
Countries that participated in the second round of the assessment (n*=1)	Countries that did not add information in the second round (5/20)
21 out of 27 countries participated in the assessment	

Table 1: Participation and response in the two rounds of the assessment.

The enlarged period for data entry has proven to be a valuable investment, as the number of exhaustive responses has been doubled. The given flexibility during the project management of this survey has increased the quantity and quality of collected information and provides a comprehensive mapping of the status quo in the region.

Results

General Information

21 out of 27 countries participated in the EpiSouth PH preparedness and response assessment. One third of the participating countries (7/21) were EU members, two thirds (14/21) from non EU parts of the EpiSouth region including one acceding EU country, four EU candidate countries and 2 potential EU candidates. All geographic regions and continents belonging to EpiSouth were represented in the final sample.

Participants were invited to contact professionals working within national PH institutions or the surveillance system in order to obtain all the information requested. 12/21 countries indicated that they have done so, contacting a range of 2 to 9 experts (mean=3,9; median=3).
One country indicated that the questionnaire was filled out by only one person, while 8 countries did not mention the quantity of experts and institutions involved. Nevertheless it can be claimed that this survey generates an institutional point of view and not only expert opinions.
20 out of 21 participating countries have experienced at least one possible or real PHEIC in any phase of the preparedness plan since 2009. In most of the cases (16/20), it included international cooperation.
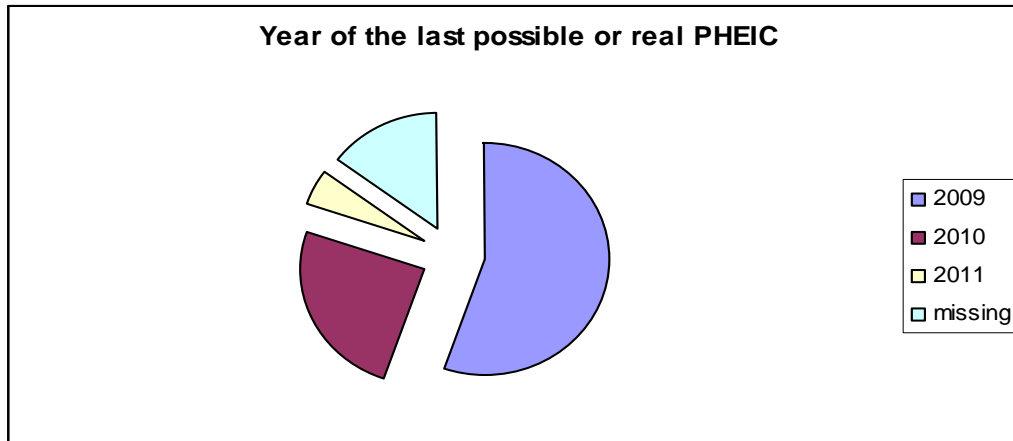
Fig 1: Year of the last real or possible PHEIC experienced by the EpiSouth countries (N=20)

As shown in the fig.1, 11/20 countries experienced their last PHEIC in 2009, 5/20 in 2010 and one country in the first half of 2011. In 19% of the responses (3/20), the year of the experienced PHEIC was not specified.

While the majority of the countries had real experiences with a PHEIC after the implementation of the IHR (2005), only 10 out of 21 countries have participated in a simulation exercise during the last 2 years. The scenarios described indicate that nearly 50% of those countries had participated in the same exercise.

However 19 out of 21 countries indicate that they are motivated to participate in an EpiSouth network simulation exercise in 2013. They, however, identify as a major obstacle the lack of time and the shortage of human resources. Therefore the following mapping of the different core competencies will be of utmost importance for the planning of this simulation exercise.

Training needs

In reference to the experienced PHEICs, countries where asked to identify best practices and weaknesses in order to identify training needs.

Furthermore the countries were also asked to classify their institutional expertise and capacities as well as training needs in areas such as response, information management and communication as well as multisectorial collaboration during a PHEIC.

The overall valorisation (based on a weighting system for the given responses) identifies risk communication with vulnerable groups, scientific risk assessment and epidemiological intelligence as top training priorities.

Vaccines and vaccination programmes, reporting systems and post-event-surveillance are the areas with best-developed capacities and do not require ongoing training at the moment.

Area with training needs	Total score (points)	Overall ranking	Need for urgent training expressed by EpiSouth countries
Information management			
Hazard identification	49	8th	no urgent training need in the region
Exposure assessment	51	6th	urgent training need expressed by one country
Pre-event surveillance	46	9th	urgent training need expressed by one country
Scientific risk assessment	59	**2nd**	leading urgent training need
Data evaluation	43	10th	urgent training need expressed by one country
Decision process based on evidence	50	7th	urgent training need expressed by one country
Post event surveillance	42	10th	urgent training need expressed by one country
Documentation	48	8th	urgent training need expressed by one country
Epidemiological Intelligence	55	**3rd**	urgent training need in more then one country
Response			
Vaccines and vaccination campaigns	31	12th	no urgent training need in the region
Logistics of quarantine and legal aspects related to isolation	49	8th	urgent training need expressed by one country
Communication			
Reporting systems	39	11th	no urgent training need in the region
Communication among key stake holders	50	7th	urgent training need expressed by one country
Risk communication with media and general public	50	7th	urgent training need expressed by one country
Risk communication with vulnerable groups	61	1st	urgent training need expressed by one country
Structures, processes and multisectoral collaboration			
Command and control structures	53	4th	urgent training need in more than one country
Rapid consultations	52	5th	urgent training need in more than one country
Operation facilities	49	8th	urgent training need expressed by one country

Table 2: Overall valorisation of the training needs as identified by EpiSouth countries.

Scientific risk assessment is not only a topic that scores high in the overall summary of the training needs, but also ranks in first position in terms of urgency. Further issues identified for urgent training include also command and control structures, rapid consultations and epidemiological intelligence. In general, only few countries expressed training needs as being urgent.

Nine countries prioritised comprehensive training on risk communication with vulnerable populations and six countries for hazard identification. Most countries indicated to have good knowledge but still requiring advanced training for some areas. Command and control structures (13/21), rapid consultations, communication with key stake holders and epidemiological intelligence (each 12/21) are the topics asked for.

In reference to the PHEICs experienced by 20 countries since 2009 best practices as well as weaknesses were identified. Those weaknesses might also indicate training needs.
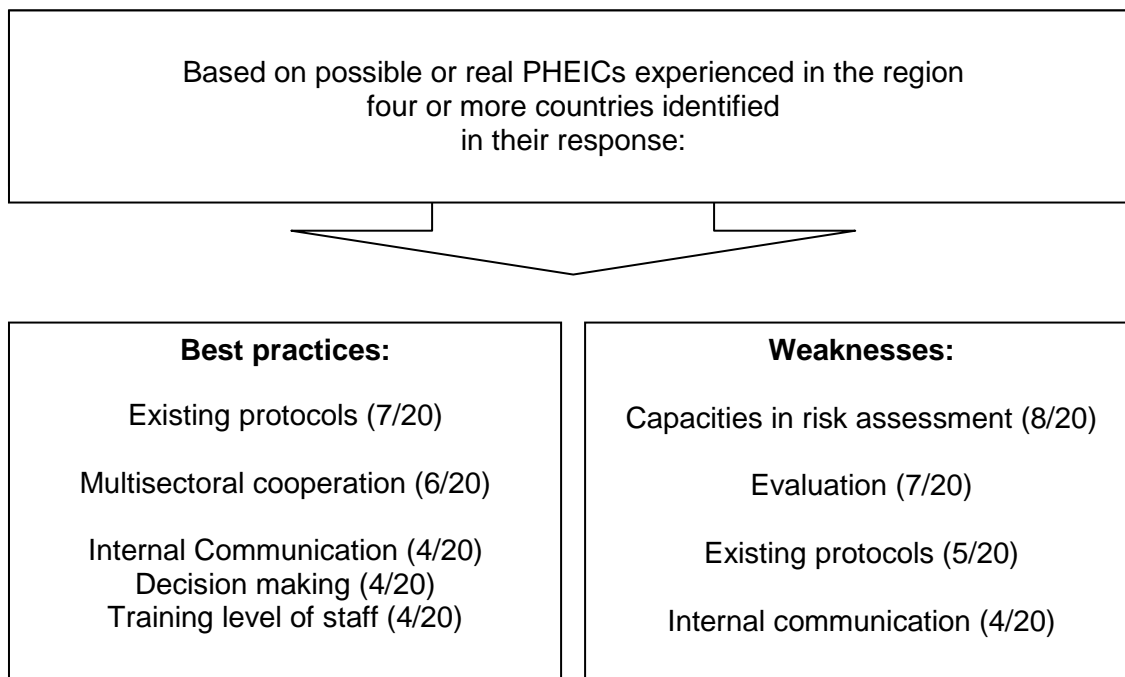
Based on possible or real PHEICs experienced in the region
four or more countries identified
in their response:

Best practices:	Weaknesses:
Existing protocols (7/20)	Capacities in risk assessment (8/20)
Multisectoral cooperation (6/20)	Evaluation (7/20)
Internal Communication (4/20) Decision making (4/20) Training level of staff (4/20)	Existing protocols (5/20) Internal communication (4/20)

Table 3: Best practises and weaknesses identified after a PHEIC of international concern by EpiSouth members.

Existing protocols and internal communication were classified by some countries as strengths, but as weaknesses by other countries. This means that some EpiSouth members could support as tutors other member states within an internal knowledge management process based on collaboration and shared expertise.

Risk assessment has been identified as top priority for training in two different approaches of this survey. As mentioned before it is also the topic with most demand for urgent training due to basic knowledge in some countries.

Evaluation has not been prioritised in the overall needs assessment, but based on the deficits identified in this area during real events it should be included in the list of training priorities too.

Management of PH events through preparedness plans within the EpiSouth region

18 out of 21 countries report to have a national policy on PH preparedness (laws, ministerial decisions, executive orders …) while 1 country reports that such a national policy does not exist and 2 countries did not respond.

When asked, what types of preparedness and response plans (PRP) are in use, none of the EpiSouth countries indicated that all PH events are managed by a single generic plan. 52% of the countries (11/21) manage possible PH crisis situations by specific PRPs, while 38% (8/21) indicate to operate with a mixed system combining generic and specific plans.
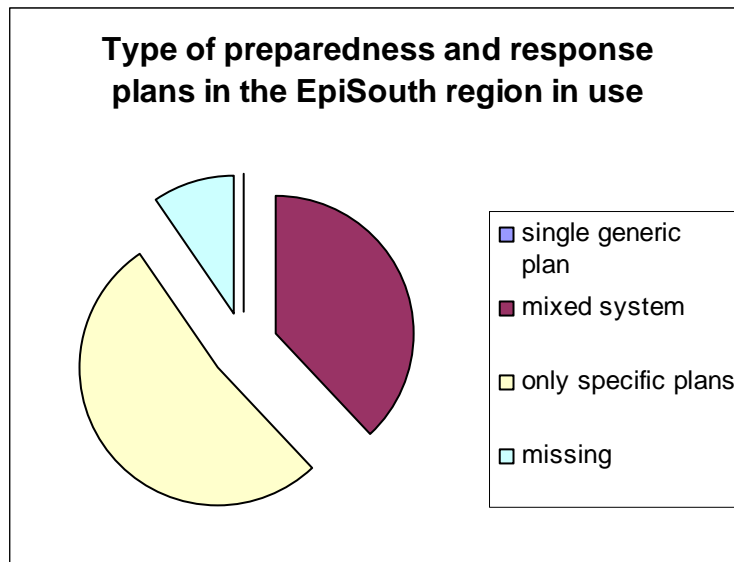
Type of preparedness and response plans in the EpiSouth region in use

Legend:
- single generic plan
- mixed system
- only specific plans
- missing

Fig 2: Regulation of PH events through different types of preparedness and response plans in the EpiSouth region.

6 out of the 8 reported generic plans of mixed systems have been drafted from 2005 till 2009, while one generic PRP has been elaborated before 2005 and for one plan no year of first publication has been indicated. Only 4/8 plans have been updated after their implementation.

Only 3/8 countries with a mixed system perform evaluation, an identified weakness by EpiSouth members in response to PHEICs. This supports the argument for training in this area. 2 out of the 3 countries adapted their PRP outlines after evaluation. Although this numbers are very small, we can conclude that evaluation is a necessary tool for insuring quality improvement of PRPs.

7 out of 8 countries with a mixed system report that their generic plan is linked to PRPs from other ministries and institutions such as the education system, interior ministry or police, food safety and agriculture ministries.

In regard to the description of roles and responsibilities in these plans quite a homogeneous image was presented. Health sector decision-making and command, institutional coordination, management of health data are included in 7/8 generic plans.

Legal supervision, operation of communication platforms and supervision of control activities form part of 6/8 generic plans of mixed systems.

Few countries shared their PRPs with the assessment team, but none of these plans could be considered as generic due to their specific focus, mostly on influenza. That is why a more detailed account and depiction of generic plans and their contents has not been possible.

Eleven PH topics were mentioned to be regulated by specific plans in the EpiSouth region. However out of 31 nominations 20 refer to influenza with 9 specific plans for avian flu and 11 specific plans for pandemic influenza. On the other side 5 PH topics (biological agents, measles, SARS, anthrax and small pox) are only covered through specific plans in one single country. This allows the conclusion that the inventory of specific plans is limited and not responding to many potential threats.

Taking into account the prioritised PH risks with international concern identified as mayor challenges for the EpiSouth region through its member states (fig.3 and table 4), it must be stated that for at least 50% of these priorities no specific plans have been documented in the region.
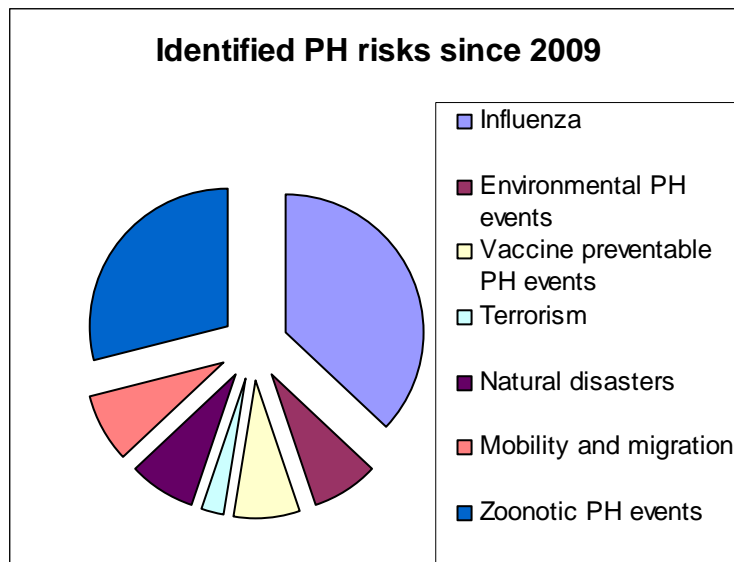
Identified PH risks since 2009

- Influenza
- Environmental PH events
- Vaccine preventable PH events
- Terrorism
- Natural disasters
- Mobility and migration
- Zoonotic PH events

Influenza	Environmental PH events	Vaccine preventable PH events	Terrorism	Natural disasters	Mobility and migration	Zoonotic PH events
14	3	3	1	3	3	11

Fig. 3 and table 4: Identified PH risks with potential international implications that have been identified in EpiSouth member countries since 2009.

This synthesis is based on a total of 43 nominations by 19/21 countries. Each country was invited to report a maximum of 3 health threats identified in the past years. Two countries reported no PH risk, 6 countries only one PH event and 2 countries only two PH risks with possible transnational implications.

Influenza was the most often reported PH risk (including various specifications that are not outlined in this report). Zoonotic PH events include food borne risks (2/11) and vector borne risks (9/11) with West Nile Virus (5/11) as the leading risk identified in this category.

Beside this two leading groups of identified PH risks, 4 further PH events have been identified to a lesser extend: environmental PH risks (water pollution, cholera and legionella), vaccine preventable PH risks (measles, polio), disasters (floods, chemical or nuclear incidents) and health of migrants and mobile populations. Terrorism has only been mentioned by one country. 4 nominations could not be classified. This summary of PH priorities in the EpiSouth region should be taken into consideration for when drafting new single generic PRPs.

Assessment of the PH Preparedness and Response

13 different items have been asked for in the survey in order to develop a comprehensive map of the PH preparedness and response in the region. All of them are presented in table 5.

Assessment of PH Preparedness and Response	The following items are:			
	available	not available	not sure	no response
Vulnerable populations identified	13	7	0	1
Hazard maps developed at national and/or regional level	9	10	1	1
Non PH systems detecting unusual events	14	4	2	1
Sindromic or mortality surveillance to detect unusual PH events	16	3	1	1
Screening system for rumours from informal sources	13	6	1	1
Formal coordination of communication with neighbouring countries	12	4	3	2
Formal coordination of communication with other countries and international bodies and agencies	18	2	0	1
Standardized protocol for a quick start to investigate an unusual PHEIC	11	9	0	1
Standardized operating procedures for laboratories	18	2	1	0
Description of a national laboratory network	18	2	1	0
International cooperation of laboratories foreseen	18	0	3	0
Special PH department for collecting, handling and processing environmental samples	18	1	2	0

Table 5: General overview on the state of art of the PH preparedness and response in the EpiSouth region (N=21).

Hazard maps, standardized investigation protocols for a quick start in order to analyse an unusual PHEIC, formal coordination with neighbouring countries, determination of potential vulnerable populations and systematic rumour screening are the activities that exist to a lesser extent in the EpiSouth region. These topics should also be integrated in upcoming seminars.

Issues related to laboratories seem to be the best developed ones in the area, but might suffer in effectiveness due to the lack of standardized investigation protocols.
Screening of rumours from informal sources could play a central role during a PHEIC as the new mass communication tools allow the spreading of such rumours in real-time. The issue should be discussed in detail within EpiSouth, as the real number of rumour systems might be even lower.

Most reported descriptions refer to a reaction of the PH system to rumours without supporting an early detection of those, which would allow a preventive counteraction by the PH system. Rumour screening should also follow the rules of systematic and evidence-based investigation and might be linked to institutions specialised in media and discourse studies.

Communication

Communication during a PHEIC includes technical and/or political communication within and among countries of the region, international communication as outlined by the IHR (2005) and, last but not least, communication with the general population and/or media.

EpiSouth countries report well established communication with neighbouring countries, other EU/EFTA states, the Maghreb Union, WHO (including IHR focal points of other states), ECDC, the MEDICS network, CDC, other UN agencies (UNICEF, UNDP, UNFPA), OIE and FAO. Of course EpiSouth with its website plays a central role and some members also referred to EPIS as a supporting tool.

National communication management is in all EpiSouth participating countries a task operated by the Ministry of Health and its agencies. In many cases it is linked with other governmental departments like central governmental communication units, Prime Ministers offices or different ministries.

It seems worth mentioning that international communication seems to be perceived as a technical communication of PH experts with WHO and other IHR focal points. However, a more detailed discussion on the communication management and its links with politics seems useful for upcoming EpiSouth seminars.

In reference to the communication with the general public it has to be mentioned that 18 out of 21 countries report formal links with media. Classical communication tools (press release, press conference, communication via traditional media such as radio and television) have a universal coverage in the EpiSouth region. Hotline services could only be performed by 13 countries, and also communication via mobile phones, either through SMS services or web 2.0 communication strategies (like Twitter, Facebook…), are only available in two thirds of the countries.

As mentioned, only 13 countries have identified potential vulnerable populations and only 8 countries have communication protocols in use that might reach populations with limited access to media, such as non-native speakers, disabled persons, elderly and other difficult to reach populations. This might indicate a lack in effectiveness in communicating a PHEIC.

Television (14/21), press releases (9/21) and press conferences (7/21) have been identified by the participating countries of the assessment as the most effective tools for communication, but due to a changing communication culture in a globalized world these results should be discussed carefully with communication experts and new communication tools should be taken into consideration.

Human Resources

Human resources are a critical issue in any PH emergency situation. The economic crisis probably will hinder an expansion of available staff, and therefore sustainable resource planning should be considered as a central element of PH preparedness and response.

As can be seen in fig. 4, there is a lack of formal job descriptions in many EpiSouth countries, which makes it hard to evaluate the level of available resources or to define needs.

Only 8 out of 21 countries have such descriptions, 8 don't have them and 3 are not sure about their existence. Not only has to be read this result in context of the available resources, but also

within the effectiveness of plans whose quality might suffer when human resources are not well defined.
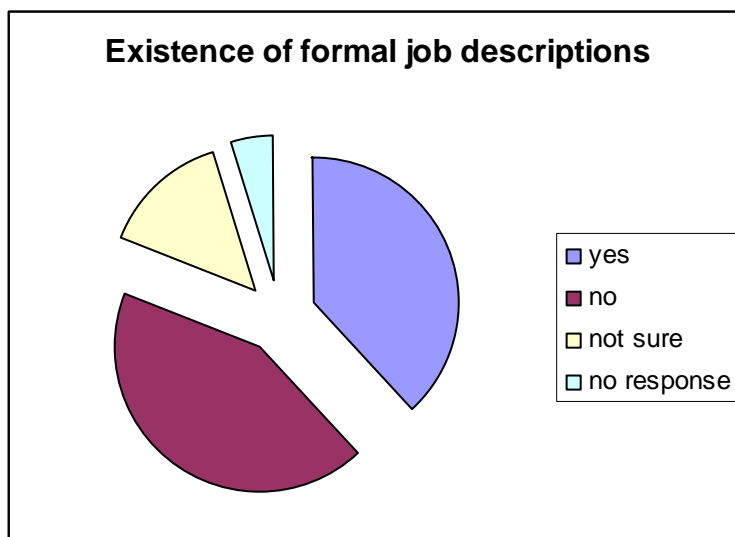
Existence of formal job descriptions

- yes
- no
- not sure
- no response

Fig 4: Analysis of the existence of formal job descriptions for all personal involved in the countries response to a PHEIC.
PH coordination on a 24/7 basis is available in 15 countries. Thirteen countries report also to have epidemiologists on such a basis. General PH medical technicians and nuclear safety experts are available all the time in 9 countries.

The question regarding human resources was actually the most commented one, as several countries indicated that the table did lack completeness as IT-professions, laboratory staff, and statisticians were not included in the overview. Table 6 provides an overall insight on human resources for the region.

Resources available for the following positions in case of a PHEIC	24 hours a day/ 7 days per week	8 hours a day/ 5 days per week	Less then 8 hours a day/5 days per week	Does not exist/no resources available
Public Health Crisis Coordinator	15	5	0	1
Public Health medical technicians	9	10	0	2
Epidemiologists	13	8	0	0
Communication experts	6	9	3	2
Veterinarians	7	12	0	2
Chemists	6	13	0	1
Expert for toxic incidents	8	8	1	3
Experts for nuclear incidents	9	5	5	2
Agricultural experts	3	13	1	2
Sociologists	2	12	1	5
Psychologists	2	14	0	4
Lawyers	3	14	0	3
Others (IT-Experts…)	5	0	0	9

Table 6: Overview on available human resources in the EpiSouth countries (N=21).

In order to generalize this overview, the assessment team valorised the answers with a scoring system. Table 7 summarizes the obtained points for each profession available in the EpiSouth region and includes a ranking.

Profession	Total score (points)	Rank
Public Health Crisis Coordinator	104	**1st**
Public Health medical technicians	82	**3rd**
Epidemiologists	102	**2nd**
Communication experts	64	8th
Veterinarians	76	4th
Chemists	74	5th
Expert for toxic incidents	70	7th
Experts for nuclear incidents	72	6th
Agricultural experts	56	10th
Sociologists	44	12th
Psychologists	50	11th
Lawyers	57	9th
Other professions	21	13th

Table 7: Overall scoring and ranking of the availability of professionals in case of a PHEIC in the EpiSouth region.

Implications of the results for future actions of EpiSouth

The Public Health Preparedness and Response Core Capacity Assessment of the EpiSouth network pretends to draft a comprehensive map of resources, experiences and capacities at institutional level in situations of occurrence of a possible PHEIC within the EpiSouth countries.

This mapping shows that most of the countries have experienced such a possible or real PHEIC since 2009. In many cases influenza might determine the perception of risks and planned measures quite extensively. More attention should also be given other PH risks like zoonotic events including West Nile virus), environmental risks, vaccine preventable health events or migration and mobility.

It seems recommendable that the simulation exercise does not consider influenza as health event of the scenario. By choosing another PH event, EpiSouth involved countries will be able to test out their existing PRPs.

Migration and mobility is often discussed in other contexts of PH. Therefore EpiSouth might consider discussing this topic with such networks. At a national level, the preparedness and response system might establish contacts to stakeholders offering support to mobile populations.

All results should be read and interpreted carefully and self-critically. Given answers to open questions indicate a broad variety of defining terms and concepts of surveillance and epidemiological intelligence. Regarding some aspects (like rumour screening and communication) to other areas of expertise should be outreached.

The mapping of human resources might not only indicate which professions are more available than others, but also illustrate what scientific perspectives still might be missed within epidemiological intelligence.

Evaluation seems to be a crucial point for PRPs. It has been identified as a missed opportunity during past PHEICs.

Like this assessment, evaluation should not be seen as a test of a countries performance, but rather as a learning experience. Training for evaluators of the simulation exercise and of evaluation in general might be one key aspect for the simulation exercise to be a success.

Not all EpiSouth members participated in this assessment. Nevertheless a broad diversity of participating countries has been reached. As nearly one third of participants experienced problems in submitting the data via the online tool, the simulation exercise must consider a reasonable mix of communication tools. Nevertheless, the EpiSouth Internet platform will be the central point of communication.

The most important implication of this assessment is the absence of single generic plans in the region. Many mixed systems still seem to be primarily driven by specific plans. And the existing specific plans do not respond to a wide variety of PH risks.

The results of this assessment should first of all be considered as a basis for developing single generic plans in the EpiSouth region. In the best possible case, many countries might use the upcoming simulation exercise to test out preliminary drafts of their single generic plans.

Annex: Questionnaire

1. This assessment will be completed by qualitative semi-structured interviews of about 45 minutes to explore certain aspects of the survey in depth.
Would you be willing to answer more questions in a short telephone interview?
☐ yes
☐ not sure, please ask again at a later moment
☐ no

2. If "yes": Could you please suggest us the best option (possible workdays and time) to carry out the interview.
Field for text (max. 200 characters)

B. Professional details and public health preparedness background

3. Please, provide the following information:

3.1 Country:

3.2 First Name:

3.3 Last Name:

3.4 Organisation/Institution:

3.5 Level/Position:

3.6 Address:

3.7 E-mail:

3.8 Telephone:

3.9 Website:

3.10 Additional information:

4. Did you have a professional experience of a possible or real Public Health Event of international Concern (PHEIC) that involved the application of any phase of a preparedness plan since 2009?

☐ yes, once   ☐ yes, more than once   ☐ no
                                                                     (if no: go to question 6)

5. If "yes": Please, provide the information below

5.1 When was the last one?

Year: ☐ 2009 ☐ 2010   ☐ 2011

5.2 Brief description of the PH event:

5.3 Position you held at that time:

5.4 Was any international cooperation involved in the event?

☐ yes ☐ no ☐ unknown

5.5 Which two of the following elements would you identify as "best practice" of your countries response to the PH event?

☐ Existing protocols
☐ Capacities in risk assessment
☐ Definition of the risk
☐ Internal communication and coordination
☐ Multisectoral communication and coordination
☐ International communication and coordination
☐ Decision making
☐ Training level of involved persons and institutions
☐ Reports
☐ Evaluation
☐ Others

5.6 Which two of the following elements of your countries response to the Public Health event showed weaknesses and indicated need for training?

☐ Existing protocols
☐ Capacities in risk assessment
☐ Definition of the risk
☐ Internal communication and coordination
☐ Multisectoral communication and coordination
☐ International communication and coordination
☐ Decision-making
☐ Training level of involved persons and institutions
☐ Reports
☐ Evaluation
☐ Others

C. Management of PHEIC

6. Does a national policy on PH preparedness and response (laws, ministerial decisions, executive orders, …) for PHEIC exist?

☐ yes ☐ no ☐ unknown

7. Are PH events only regulated by a generic plan or also by specific plans? Please choose one of the following options:

☐ In my country there is one generic preparedness and response plan (PRP) that covers all PH events
☐ In my country there is a generic plan as well as specific plans for specific PH events
☐ In my country there are only specific plans in order to regulate specific PH events

If option 1 or 2: go to questions "8"
If option 3: go directly to question "9"

8. Please provide the year of the generic plan's first publication:

8.1 Please provide the year the generic plan's last update:

8.2 Are regular evaluations of the generic plan performed?

☐ yes ☐ no ☐ unknown

8.3 If "yes": Has your generic plan been changed after such an evaluation?

☐ yes   ☐ no   ☐ unknown

8.4 If "yes": Please specify briefly this changes and adjustments.

8.5 Has this generic plan been linked to PRP from other ministries and institutions?

☐ yes   ☐ no   ☐ unknown

8.6 If "yes": Which one?

8.7 Does the PRP describe the following roles, functions and responsibilities?

Health sector decision making and command	☐ yes ☐ no ☐ unknown
Institutional coordination	☐ yes ☐ no ☐ unknown
Management of health data information	☐ yes ☐ no ☐ unknown
Operation of communication platforms	☐ yes ☐ no ☐ unknown
Legal supervision	☐ yes ☐ no ☐ unknown
Supervision of control activities	☐ yes ☐ no ☐ unknown

8.8 Could you provide your generic plan as an attachment?

☐ yes   ☐ no   ☐ Please, attach your document

8.9 Is there a chart describing the communication flow between actors involved in case of PHEIC? (If yes, please provide it as an attachment)

☐ yes, already included in the generic plan
☐ yes, separate document
☐ no
☐ Please, attach your document

9. Please indicate for which PHEIC (such as avian flue, influenza…) specific preparedness and response plans[1] exist in your country and indicate the year of the last update:

Health event covered by the specific plan	Year of last update

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[1] It is a Plan which describes detection, risk assessment, communications and response activities to be carried out during a Public Health alert in a generic manner that can be adapted to any risk health situation.

<u>D. Assessment of PH Preparedness & Response</u>

<u>General overview at national level</u>

10. Which 3 major PH risks with potential international implications have been identified in your country since 2009?

10.1

10.2

10.3

11. Are there any vulnerable populations identified in regard to these PH risks?

☐ yes   ☐ no   ☐ unknown

12. Are hazard maps[2] at national and/or regional level developed?

☐ yes   ☐ no   ☐ unknown

<u>Capacity of early detection of an event</u>

13. Are there non public health systems for detecting unusual events that might alert about a potential PHEIC?

☐ yes   ☐ no   ☐ unknown

14. If "yes": Please indicate within which sectors or institutions these systems are implemented.

15. Is there a system implemented for early detection of unspecific events that might lead to a PHEIC such as sindromic or mortality surveillance?

☐ yes   ☐ no   ☐ unknown

16. If "yes": Please indicate the type of system and health events covered.

17. Is there in your country a screening system for rumours coming from non-formal information sources in order to confirm or reject "suspicious" PH events?

☐ yes   ☐ no   ☐ unknown

18. Is there a formal coordination with other ministries, universities or research units aimed to evaluate information sources at national level?

☐ yes   ☐ no   ☐ unknown

19. Are there formal coordination mechanisms for PH risk communication with neighbouring countries?

☐ yes   ☐ no   ☐ unknown

20. If "yes", please list the countries:

21. Are there formal coordination mechanisms with other countries or international bodies and agencies?

☐ yes   ☐ no   ☐ unknown

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[2] Maps indicating specific risks that may affect public health for instance: toxic production plants, industries, nuclear, or others.

22. If "yes", please indicate countries, bodies and agencies:

Capacity in the country to identify the causes of major Public Health events

23. Is there a standardized investigation protocol for a quick start to investigate unusual PHEIC?

☐ yes ☐ no   ☐ unknown

24. Which institution is responsible to activate process of investigation?

Laboratory capacity

25. Are there standard operating procedures describing the handling of human or animal samples (collection, storage, transport)?

☐ yes ☐ no   ☐ unknown

26. Is there a description of the national laboratory network explaining where to refer samples according to the test which needs to be performed?

☐ yes ☐ no   ☐ unknown

27. Is it foreseen that in particular situations international laboratories are consulted?

☐ yes ☐ no   ☐ unknown

28. Are there specific PH departments for collecting, handling and processing environmental samples?

☐ yes ☐ no   ☐ unknown

E. Risk Communication

29. Which institutions are responsible for coordinating communication?

29.1 Communication to the general public at national level:

29.2 International communication:

30. Are formal operational links[3] between the coordinating institutions and national media in place?

☐ yes ☐ no   ☐ unknown

31. Are there international coordination mechanisms established for risk communication?

☐ yes ☐ no   ☐ unknown

32. Which of the following communication tools are used in your country in order to inform the general public?

Press release	☐ yes ☐ no	☐ unknown	
Press conference	☐ yes ☐ no	☐ unknown	
Information via internet	☐ yes ☐ no	☐ unknown	
Information via radio	☐ yes ☐ no	☐ unknown	
Information via television	☐ yes ☐ no	☐ unknown	
Hotline services	☐ yes ☐ no	☐ unknown	
Information via mobile telephone	☐ yes ☐ no	☐ unknown	
Web 2.0 communication (twitter,)	☐ yes ☐ no	☐ unknown	
Others (please, specify)			

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[3] Formal operacional links: coordination mechanisms established in the preparedness and response plan

33. Which two of the mentioned tools would you consider as most efficient for PH event communication in your country?

☐ Press release
☐ Press conference
☐ Information via internet
☐ Information via radio
☐ Information via television
☐ Hotline services
☐ Information via mobile telephone
☐ Web 2.0 communication (twitter,)
Others (please, specify)

34. Are communication protocols for populations with limited or no access to mass media during PH crises (such as non-native speakers, disabled persons, elderly and other difficult to reach populations) available in your country?

☐ yes ☐ no   ☐ unknown

F. Human Resources

35. What human resources are available for each area of expertise in case of PHEIC in your country?

Resources available for the following positions in case of a PHEIC	24 hours a day/ 7 days per week	8 hours a day/ 5 days per week	less then 8 hours a day/ 5 days per week	does not exist/ no resources available
Public Health Crisis Coordinator	☐	☐	☐	☐
Public Health medical technicians	☐	☐	☐	☐
Epidemiologists	☐	☐	☐	☐
Communication experts	☐	☐	☐	☐
Veterinarians	☐	☐	☐	☐
Chemists	☐	☐	☐	☐
Expert for toxic incidents	☐	☐	☐	☐
Experts for nuclear incidents	☐	☐	☐	☐
Agricultural experts	☐	☐	☐	☐
Sociologists	☐	☐	☐	☐
Psychologists	☐	☐	☐	☐
Lawyers	☐	☐	☐	☐
Others (please, specify):	☐	☐	☐	☐

36. Do written job descriptions exist for all these positions?

☐ yes ☐ no   ☐ unknown

37. How do you perceive your country's human resources?

☐ exhaustive   ☐ adequate   ☐ insufficient

38. Did your country ask for human resources from other countries or international institutions in the past during a PHEIC?

☐ yes ☐ no   ☐ unknown

39. If "yes", please provide the following basic information:

39.1 Year:

39.2 Public Health:

39.3 Institutions or countries that provided resources:

G. Assessment of Training Needs

40. Please indicate the institutional knowledge and need for training about the following areas.

Please describe your institutions experience, knowledge and need for training within the following areas:	good experience, no need for training	intermediate knowledge, need for advanced training	basic know-ledge, need for comprehen-sive but not urgent training	basic know-ledge, need for urgent training
Information management				
Hazard identification	☐	☐	☐	☐
Exposure assessment	☐	☐	☐	☐
Pre-event surveillance	☐	☐	☐	☐
Scientific risk assessment	☐	☐	☐	☐
Data evaluation	☐	☐	☐	☐
Decision process based on evidence	☐	☐	☐	☐
Post event surveillance	☐	☐	☐	☐
Documentation	☐	☐	☐	☐
Epidemiological Intelligence	☐	☐	☐	☐
Response				
Vacines and vacination campaigns	☐	☐	☐	☐
Logistics of quarantine and legal aspects related to isolation	☐	☐	☐	☐
Communication				
Reporting systems	☐	☐	☐	☐
Communication among key stake holders	☐	☐	☐	☐
Risk communication with media and the general public	☐	☐	☐	☐
Risk communication with vulnerable groups	☐	☐	☐	☐
Structures, processes and multisectoral collaboration				
Command and control structures	☐	☐	☐	☐
Rapid consultations	☐	☐	☐	☐
Operation facilities	☐	☐	☐	☐
Others? Which?				
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

41. Has your country conducted a simulation exercise for testing communication and response capacities in regard to PHEIC within the last 2 years?

☐ yes ☐ no ☐ unknown

42. If "yes": Could you shortly summarize the exercise and the lessons learned?

42.1 Public Health event:

42.2 Scenario:

42.3 Lessons learned:

43. Would you like to participate to a PHEIC simulation exercise?

☐ yes ☐ no   ☐ not sure

44. Do you see obstacles that might hinder your participation in a simulation exercise?

☐ yes ☐ no   ☐ unknown

45. If "yes": Could you please indicate these problems?

J. Further information

46. In order to reply to all of these questions you might have contacted other public health experts, civil servants and professionals from different areas. Please indicate the following information regarding these people.

Position held by the person providing information	Area of expertise	Affiliation/Institution

47. Any other comment regarding your national PH preparedness and response plan

48. Any general recommendations for upcoming trainings and capacity buildings of EpiSouth Plus?

Please, do not forget to attach plans requested in questions 8.8 & 8.9

Once again thanks for your kind cooperation!