

EpiSouth Project: selection of zoonoses of priority for the countries involved in the Network

R. Vorou¹, K. Mellou¹, G. Dougas¹, K. Gkolfinopoulou¹, D. Papamichail¹, T. Papadimitriou¹, I.N.Pierroutsakos¹, M.G. Dente², M. Fabiani² and S. Declich² on behalf of the EpiSouth Network and the WP8 Steering Team*

¹ Hellenic Center for Diseases Control and Prevention (HCDCP), Athens, Greece, ² Italian National Institute of Health (ISS), National Centre for Epidemiology, Surveillance and Health Promotion, Rome, Italy.

*1. **AbouAlazem Shermine**, Egypt - Ministry of Health and Population

2. **Al Amour Yaser**, Syria - Ministry of Health

3. **Ali Eman**, Egypt - Ministry of Health and Population

4. **Bejaoui Mondher**, Tunisia - Ministère de la Santé Publique

5. **Bino Silvia**, Albania - Institute of Public Health

6. **Haddadin Raja Saleh**, Jordan - Ministry of Health

7. **Hussein Seif Eddin Saleh**, Jordan - Ministry of Health

8. **Kakrriqi Eduard**, Albania - Institute of Public Health

9. **Kalakouta Olga**, Cyprus - Ministry of Health

10. **Kalaveshi Arijana**, Kosovo UNSCR 1244 -National Institute for Public Health

11. **Karadzovski Zarko**, FYROM - Former Yugoslav Republic of Macedonia -

Institute for Health Protection

12. **Karim Mahmoud**, Syria - Ministry of Health

13. **Milenkovik Zvonko**, FYROM - Former Yugoslav Republic of Macedonia -

Clinic for Infectious Diseases

14. **Ramadani Naser**, Kosovo UNSCR 1244 - National Institute for Public Health

BACKGROUND

EpiSouth project is aiming at creating a framework of collaboration on epidemiological issues in the area of the Mediterranean and the Balkans. The participating countries are presented in Table 1. The Work Package 8 of the project, "Epidemiology and preparedness to cross-border emerging zoonoses", shall provide a platform for the communication of human (HPH) and veterinary public health (VPH) officials of the participating countries to improve surveillance of emerging zoonoses. Five zoonoses of priority were identified to initially focus the WP8 activities. The methodology for the selection as well as its results, are presented.

Table 1. Countries participating in the EpiSouth project

EpiSouth Project
Albania
Algeria
Palestinian Authority
Bosnia-Herzegovina
Bulgaria
Cyprus
Croatia
Egypt
Spain
France
Greece
Israel
Italy
Jordan
Kosovo
Libanon
FYROM
Malta
Marocco
Montenegro
Romania
Serbia
Slovenia
Syria
Tunisia (In progress)
Turkey

METHODS

A questionnaire was developed, concerning a number of zoonoses of possible interest to the countries participating in the project. For each zoonosis, the questionnaire included questions on the following indices, defining emergence of zoonoses: 1) increased incidence in humans 2) spread of the disease in novel geographic areas 3) detection of the pathogen in novel animal species. Additionally, questions were included regarding: 1) possible absence of surveillance systems in the participating countries and 2) necessity for improvement of intersectoral collaboration. The eligibility criterion for the selection among the zoonoses of the ones that would be considered as priorities was "three or more countries providing a positive answer for the corresponding zoonosis and the corresponding question". The zoonoses with at least four eligibility criteria were selected.

RESULTS

Table 2. Selection criteria (*) for priority zoonoses

Question (Index)	Increased incidence in humans	Surveillance system not available	Novel geographical areas in endemic countries	Novel animal species in endemic countries	Necessity for improvement of collaboration between HPH ¹ and VPH ² in endemic countries
ZOOONOSES					
Brucellosis	√		√	√	√
Campylobacteriosis	√	√			√
Crimean Congo Haemorrhagic Fever		√			√
Tickborne Encephalitis		√			√
Echinococcosis	√				√
Rickettsioses		√			√
Hantavirus infection		√			
Leishmaniasis	√		√	√	√
Listeriosis		√			√
Malaria		√			
Tb caused by Mycob. Bovis		√			√
Rabies		√	√	√	√
Trichinellosis		√			√
VTEC infection		√			√

(*) The Selection criterion, indicated as √, is: "three or more countries provided a positive answer for the corresponding pathogen and the corresponding question (index)" ¹Human Public Health ²Veterinary Public Health

Twenty one countries filled in the questionnaire. Brucellosis and rabies fulfilled four criteria, leishmaniasis five and campylobacteriosis three (Table 2). However, the latter was included in the zoonoses priority list to provide an incentive for improving its surveillance, given the lack of diagnostic facilities, both in the European and in the Non-EU countries. In addition, because of the recent climate changes indicating the public health importance of vector-borne infections, the West Nile Virus disease was also included.

CONCLUSIONS

The zoonoses selected cover a wide spectrum of diseases and are the basis on which the platform of communication and collaboration between HPH and VPH officials will be activated in order to enhance surveillance and control of cross-border emerging zoonoses in the Mediterranean Basin. They will serve as a guide in the identification of as many officials and infrastructures as possible, and they will pose the background for the subsequent expansion of the project to numerous pathogens that will be monitored in the EpiSouth area.