

REPORTS
The First Symposium of Zoonoses
with international participation

Sarajevo, April 22-23, 2005



Conference report

Mirsada Hukić, president of the Organizers Committee

On the 22nd and the 23rd of April 2005, the Microbiology - and the Society of Infectiology of Bosnia and Herzegovina and the Clinical Centre of the University of Sarajevo, Institute of Science and Development, organised under the auspices of the Academy of Sciences and Arts of Bosnia and Herzegovina, the First International Symposium on Zoonoses with emphasis on Hemorrhagic Fever with Renal syndrome (HFRS), Q-Fever and Brucellosis.

Participants from Slovenia, Croatia, Belgium, Finland, United States of America, Macedonia, Serbia and Montenegro, Kosovo and Bosnia-Herzegovina enjoyed two days of high-level scientific presentations and discussions. There were 77 Institutions as participants of the Symposium.

In the field of HFRS, participants presented data concerning the epizoonotical and epidemiological status of their respective regions and provided a unique total picture of the past and current situation.

Q-Fever and Brucellosis, both re-emerging infections of concern to the entire Balkans region and the respective Public Health systems, were discussed in detail and valuable suggestions and recommendations were brought forward for management, standardisation of sampling and detection and prevention.

The close collaboration between medical doctors of all relevant specialities (microbiology, nephrology, pathology, infectology, epidemiology, etc), veterinarians and scientists thus provided an excellent platform for establishing collaborations and exchange of knowledge. The new ideas concerning treatment, patient management, surveillance for zoonoses and early warning systems that “emerged” from this conference will, no doubt, have a positive impact on future public health efforts in the region.

Sponsored by Bosnalijek, Pharma Swiss, Diamedica and Sedan, this initiative to look over the borders, detect mutual problems and suggest common solutions, was more successful than could be expected and will hopefully become a tradition. In two years time, the Second International Symposium on Zoonoses will be held in Banja Luka.

The main epidemiological characteristics of Hemorrhagic Fever with the renal syndrome in Republic of Serbia

Samardžić Svetomir¹, Nedić Lj², Parlić M², Božović Bojana³, Simović Tatjana⁴, Milić A¹, Stevanović J¹, Gligić Ana³

1 Medical Faculty Priština - Kosovska Mitrovica; 2 Institute of Public Health of Republic of Serbia «Milan Jovanović Batut» Beograd; 3 Institute «Torlak» Beograd; 4 Institute of Public Health Kruševac

Haemorrhagical Fever in Mačva District from 1997. to 2003.

D. Marković¹, N. Sofranić¹, D. Radojičić¹, S. Kuzmanović¹ N. Đurić², N. Mrđen², D. Tadić²

Iph "Vera Blagojević" Sabac¹ ; Mc "Milenko Marin" Loznica²

The management of surveillance of haemorrhagic fever with renal failure syndrome

Goran Pavic¹, Blasko Topalovic², Mirela Omerkic²

Cantonal public health institute Orasje¹ ; Cantonal public health institute Tuzla²

Ophthalmic disorders three years after the acute glaucomatous attack in patient with hemorrhagic fever with renal syndrome

¹Denis Marušić, ²Iva Dekaris, ²Damir Bosnar, ¹Josip Begovac, ³

Alemka Markotić

¹University Hospital for Infectious Diseases „Dr. Fran Mihaljević”, Zagreb, Croatia;

²General Hospital “Sveti Duh” Zagreb, Croatia; ³Institute of Immunology, Zagreb, Croatia

HFRS outbreak and Pumala virus in Croatia in 2002

Lidija Cvetko¹, Alemka Markotić¹, Angelina Plyusnina², Josip Margaletić³, Marica Miletić-Medved⁴, Nenad Turk⁵, Zoran Milas⁵, Tatjana Avšić-Županc⁶, Alexander Plyusnin²

¹Institute of Immunology, Zagreb, Croatia ; ²Haartman Institute, University of Helsinki, Helsinki, Finland ³Faculty of Forestry, University of Zagreb, Zagreb, Croatia

⁴Institute of Public Health, Slavonski Brod, Croatia ⁵Faculty of Veterinary Medicine, University of Zagreb, Zagreb, Croatia ⁶Institute of Microbiology and Immunology, Medical Faculty, University of Ljubljana, Ljubljana, Slovenia

Influent of climatic factors on the outbreak of epidemic of hemorrhagic fever with renal syndrome

Mirsada Hukić, Enis Osmančević, Denijal Tulumović, Šefkija Muzaferović

1. Institute of microbiology, immunology and parasitology, Clinical Centre of University Sarajevo; 2. Department of Geography, Faculty of Philosophy, University Sarajevo; 3. Clinic of Internal Diseases, Tuzla University Clinical Centre ;4. Department of biology, Faculty of Philosophy, University Sarajevo

Hemorrhagic fever with renal syndrome in Požega Area (review on clinical and laboratory indicators of epidemic HFRS in 2002. at County Hospital Požega)

D. Petković¹, Z. Andrić¹, P. Petrić²

Department of Infectious Diseases, County Hospital Požega¹, Croatia

Department of Dialysis, County Hospital Požega², Croatia

Genetic Analysis of Wild-Type and Human Strains of Hantaviruses Causing Hfrs in Slovenia

Saksida Ana¹, Puterle Ajda¹, Duh Darja¹, Trilar Tomi², Petrovec Miroslav¹, Avšič-Županc Tatjana¹

¹Institute of Microbiology and Immunology, Medical Faculty, Ljubljana

²Slovenian Museum of Natural History



Fatal Chronic Kidney Disease – Balkan Endemic Nephropathy and Hantaviruses

Gligic Ana¹, Kovacevic Z.², Skataric V.², Rabrenovic V.², and Jovanovic D.².

1. Institute of immunology and virology, Belgrade, Serbia and Montenegro,

2. Clinic of nephrology, Military Medical Academy, Belgrade, Serbia and Montenegro.

Early Activation Mechanisms in Lung Fibroblasts Infected with Hantaviruses

¹Cebalo, Ljiljana, ¹Markotic, Alemka, ²Schmaljohn, Connie

¹Institute of Immunology, Zagreb, Croatia; ²U.S. Army Medical Research Institute of Infectious Diseases, Frederick, MD, USA

Renal Pathohistological Findings in Hfrs Patiens in Biopsy and Autopsy Specimens - Experience From Balkan

Dimitrijevic J.(1), Zaki S.(2), Micic S.(1), Radosavljevic R.(1), Brajuskovic G.(6), Cerovic S.(6), Bogdanovic R.(3), Kovacevic Z.(4), Skataric V.(4), Aleksić A.(4) and Gligic A.(5)

Hemorrhagic Fever with Renal Syndrome in Croatia - what are the news and what have we learned?

Ilija Kuzman¹, Ivan Petričević¹, Alemka Markotić²

¹*University Hospital for Infectious Diseases, Zagreb, Croatia;* ²*Institute of Immunology, Zagreb, Croatia*

Hemorrhagic Fever with Renal Syndrome (Hfrs) in Kosova

S. Ahmeti, M. Bajrami, I. Dedushaj, Sh. Dreshaj, Gj. Mulliqi, A. Nura, A. Vishaj

Puumala and Dobrava Viruses Inducement Hemorrhagic Fever with Renal Syndrome - Glomerular Filtration Rate Convalescents Nine to Ten Years after Acute Phase

Denijal Tulumović¹, Enisa Mešić¹, Mirsada Hukić²

¹*Clinic of nephrology, urology, dialysis and kidneys transplantation, University Clinical Center Tuzla;* ²*Department of Microbiology, University Clinical Center Sarajevo, Bosnia and Herzegovina.*

Crimean-Congo Hemorrhagic Fever (CCHF) in Kosova

S. Ahmeti, S. Avdiu, Xh. Demiri, T. Doda, H. Ramadani, L. Ajazi, V. Krasniqi

Emerging and Reemerging Viral Zoonoses

Avšić-Županc Tatjana

Inštitut za mikrobiologijo in imunologijo, Medicinska fakulteta, Ljubljana, Slovenija



Hantaviruses in Western Europe

P. Heyman.

Research Laboratory for Vector-borne Diseases, Queen Astrid Military Hospital, Bruynstraat, B-1120 Brussels, Belgium

Diagnostic of Hemorrhagic Fever with Renal Syndrome

Ivana Matijević, Ljiljana Cebalo, Alemka Markotić

Institute of Immunology, Zagreb, Croatia

Serological Evidence on Presence of Puumala Like and Belgrade/Dobrava Hantaviruses at the Haemorrhagic Fever With Renal Syndrome Suffering Patients on North- Western Bosnia

Golubovic , S¹, Gligic,A²,Bozovic,B³ ,Roganovic,T¹, Surlan,S¹, and Djuricic, B³

1.Clinical Center of Banja Luka, RS/BIH ; 2.Institute of Imunology and Virology

"Torlak " Belgrade,SCG; 3. The Faculty of Veterinary Medicine , University of Belgrade, SCG

Clinical and Epidemiologic Characteristics of Hemorrhagic Fever with Renal Syndrome

Snježana Mehanić, Fikret Pinjo, Jasna Topalović, Vesna Hadžiosmanović, Akif Osmić, Meliha Hadžović

Clinic for Infection disease, Clinical Center of University, Sarajevo

Epizootiology and Epidemiology Characteristics of Hfrs in Former Yugoslavia

Gligic Ana1, Stojanovic R.2, Obradovic M.2 and Samardzic S.3.

1. Institute of immunology and virology, Belgrade, Serbia and Montenegro,

2. Institute of epidemiology, Military Medical Academia, Belgrade, Serbia and Montenegro; 3. Faculty of Medicine, Pristina-Kosovska Mitrovica.

Mitochondrial Factors And Extracellular Matrix Molecules Are Responsible For Apoptosis Caused By Hantaviruses

¹Markotic, Alemka, ¹Cebalo, Ljiljana, ²Schmaljohn, Connie

¹Institute of Immunology, Zagreb, Croatia

²U.S. Army Medical Research Institute of Infectious Diseases, Frederick, MD, USA

Seroprevalence Of Antibodies To Hantaviruses In Patients From The Health Centre Tuzla

Amela Cickusic¹, Nedzada Irijez¹, Eldina Jahic¹, Dzemal Kadusic¹, Vesna Majher¹, Adela Mehicic¹, Azra Sahinbegovic¹, Nermin Sehic¹, Suzana Sarana²
1 University Of Tuzla, Medical Faculty Tuzla; 2 Ucc Sarajevo, Institute For Microbiology, Parazitology And Immunology

HTV posters

Outbreak Of Hemorrhagic Fever With Renal Syndrome In Central Bosnia In 2002.

E. Hadžić, L. Čalkić, N. Muajić, M. Hukić¹, Admir Čalkić²

Department of Infectious Disease Cantonal Hospital Zenica, Department of Microbiology, University Clinical Center Tuzla¹, Bosnalijek², Bosnia and Herzegovina.

Chronic Renal Failure As A Consequence Of Hemorrhagic Fever with Renal Syndrome (Hfrs)

Veselin Skataric, Z. Kovacevic, V. Rabrenovic, D. Jovanovic, K. Obrencevic, A. Gligic.

Military Medical academy, Nephrology Clinic, Virusology Institute Torlak

Hemorrhagic Fever With Renal Syndrome During Pregnancy Resenatation Of Two Patients

Milovan Živković, Svetlana Balać

General Hospital Berane

Haemorragic fever with nephrotic syndrome (Nephroso Nephritis) in the municipality of Konjic form 1984 to 2004 - the extract

Armina Lazarević, Amira Alajbegović-Dzumhur

Opća Bolnica Konjic

Importance Of Ultrasonography In Diagnostic Of Hemorrhagic Fever With Renal Syndrome

Jasna Topalović, Snježana Mehanić, Vesna Hadžiosmanović, Nermina
Bajramović, Meliha Hadžović

Clinic for Infection diseases, Clinical Center of University, Sarajevo

The Clinical Characteristics Hemorrhage Fever With The Kidney Sindrom In Epidemic 2002 Year.

Jahić R., Ahmetagić S., Šabović S., Delalić L., Mešanović J.
JZU University Clinic Center Tuzla, The Clinic for Infection Diseases



3 Q fever

Epidemiologic Characteristics Of Q Fever In Croatia

1.Ropac Darko, 2.Mulić Rosanda, 3.Ira Gjenero-Margan, 4.Mladen
Smoljanović, 5.Oskar Lučev,

*1. Institute of Public Health, Split-Dalmatia County, Split; 2. Institute of Naval
Medicine, Croatian Navy, Split, Croatia; 3 Croatian Institute of public Health, Zagreb;
4. Institute of Public Health, Split-Dalmatia County, Split; 5. Primary Health Care,
Zagreb*

Q- Fever In Serbia

Radovan Čekanac, Novica Stajković

Institute of Epidemiology, Military Medecine Academy, Belgrade

Q Fever In Animals In The Regions Around The River Drina

Đurić Bosiljka¹, Laušević D.², Radovanović D.³, Mitrović Novalina⁴,
Marković D.⁵

1) Faculty of Veterinary medicine, Belgrade; 2)Biotechnological Institute, Podgorica

3) Veterinary Inspection, Serbian Ministry of agriculture, forestry and waterpower

4) Srpska Republic Ministry of agriculture, forestry and waterpower

5) Institute for public health, Sabac, Serbia

Laboratory diagnosis of Q fever

Mensura Šeremet ¹, Mirsada Hukić ¹, Nesina Avdagić, ²Zvonka Knežević ¹

¹ *Institut of microbiology, imunology and parazitology*

Clinical Center University of Sarajevo

² *Medical faculty University of Sarajevo*

Q Fever At Cattle-Breeding Farm Prača

Vesna Hadžiosmanović, Snježena Mehanić, Jasna Toplović

Merdina Ferhatović, Meliha Hadžović

Clinic for Infectious Diseases, Clinical Center of University, Sarajevo

Q-fever (Coxiella burnetii) investigations in dairy cows

Branka Vidic, Ružica Ašanin, S. Bobos, D. Bugarski

Scientific Veterinary Institute "Novi Sad"

Nomadic Grazing Of Sheep And Widespread Epidemic Of Q Fever In Republic Of Srpska

Jelena Maric, Violeta Santrac, M. Saric, B. Bjelajac, S. Golubovic, Z. Djeric,

D. Kubelka

Veterinary Institute of RS "Dr Vaso Butozan" Banjaluka: Faculty of Medicine,

Banjaluka; Ministry of Agriculture, Forestry and Waterpower Engineering of RS,

Bijeljina

Q Fever In Human And Veterinary Pathology In Montenegro

B. Andric¹, D. Lausevic², B. Lako³, N. Vucinic¹, B. Dupanovic¹, D. Terzic¹,

N. Draskovic¹

¹ *Clinic for Infectious Disease, Medical Faculty in Podgorica, SCG;* ² *Biotechnical*

Institute, Department of veterinary pathology in Podgorica, SCG; ³ *Military Medical*

Academy in Belgrade, SCG

Q fever poster

Q-fever in Croatia

Ivan Puljiz, Ilija Kuzman, Oktavija Đaković-Rode

Clinic of Infectious diseases «Dr. Fran Mihaljević» Zagreb, Croatia

Cross Reactivity During The Serotesting Of Blood Samples Upon Brucellosis And Q-Fever

Tarik Bajrović

Veterinary Faculty, University of Sarajevo



Q-fever: case report

Emir Halilbasic, Edita Sijercic

JZU UKC Tuzla, Clinic for nephrology, urology, dialysis, and kidney transplantation

Seroprevalence Specific Antibody To Rickettsia In Humans Sera From Different Locality In Serbia

Samardzic S.1, Dasch G.2, Djuricic B.3, Lako B.4, Ristanovic E4, Bozovic B.5, Vukov B.6, Simovic T.7, Milic A.1, Eminovic M.8, Stajkovic N.4,ekanac R.34and Gligic A.5.

1.Medical Faculty Pristina-Kosovska Mitrovica, Serbia, 2.CDC, Atlanta USA, 3. Faculty of Veterinary Medicine, Belgrade, 4. Military Medical Academy, Belgrade, 5. Institute of immunology and virology, Belgrade, 6.Center for health care, Zrenjanin, Serbia, 7.Institute for health care Krusevac, 8. Center for health care Tutin, Serbia.

Chronic Fatigue Syndrome after Q Fever a Case Report

D Ledina, I Milas, I Ivic, B Lukšić, A Srzić

Department for infectious diseases, Split University Hospital, Split;

Q- Fever In Belgrade

Ljubic Bozidar, Radmila Dmitrovic, Snezana Radivojevic, Slobodan Stanojevic

Institute of Public Health of Belgrade

Serbian Institute for Veterinary Medicine, Belgrade



Q – fever – clinical course of disease Case review

Horozić M., Ahmetagić S., Mešanović J., Delalić L.

UKC TUZLA Clinic of Infectious diseases

Brucellosis

Monitoring Possibilities Of Brucellosis By Elisa Testing Of Milk

Bradarić Abida¹, Kapetanović Osman.¹, Zahirović Lejla²

Health ministry of Canton Sarajevo – sanitary inspection¹

Cantonal veterinary station Sarajevo²

Efficiency Of Veterinary –Sanitary Measures For Ruminant Brucellosis Control

Mitrović N., Nedic D., Kubelka D., Marković T.

Veterinary Institute of Bijeljina

Seroprevalence of Brucellosis In Ruminants In Republic Of Srpska From 2001 To 2004

Jelena Maric, Novalina Mitrovic, Violeta Santrac, M. Saric, D. Despotovic, D. Nedic, D. Kubelka; Veterinary Institute of Republic Srpska "Dr. Vaso Butozan" Banjaluka; Ministry of Agriculture, Forestry and Waterpower Engineering, Bijeljina; Veterinary Institute of Bijeljina

Dynamic of Specific Antibodies Titers in Patients with Brucellosis

Nurkić M¹, Delibegović Z¹, Kikanović H¹, Numanović F¹, Tihić N¹, Iamamović A¹, Nurkić J¹, Džafić F¹, Sabitović D¹, Hadžihafizbegović S¹, Mešanović J²,
1. University Clinical Center Tuzla, Polyclinic for microbiology, pathology, immunology
and molecular medicine
2. Clinic for Infectious diseases of University clinical center Tuzla.

Current Zoonoses Brucellosis and Q-fever – Epidemiological aspects of hospitalized patients at the Clinic for Infectious Diseases

Drnda A, Pinjo F, Osmić A, Ferhatović M, Jusufi I, Gazibera B.
Clinic for Infectious Diseases, KCU Sarajevo

Investigation Of Sensitivity And Specificity Of Some Serological Methods In Brucellosis Diagnostics

Asanin Ruzica, Vidic Branka, Grgic Z., Matovic K. And Nisavic J.

Distribution Of Brucellosis In Serbia

Radovan Čekanac, Novica Stajković
Institut of Epidemiology, Medical Military Academy, Belgrade

Clinical and lab characteristics of brucellosis in Tuzla Canton

Poljakovic A1, Zahirovic M1, Ahmetagić S1, Horozic M1, Piljic D1, Stojic V1, Petrovic J1, Sinanovic A1.

1 Clinic for infection Disease UKC Tuzla

Human brucellosis in Croatia and at the University Hospital for Infectious Diseases «Dr. Fran Mihaljević» in Zagreb

Balen Topić M, Beus A, Cvetnić Ž, Skuhala T, Desnica B.

Bottom of Form Human brucellosis: an overview

I.Curic, I.Kuzman, M.Ostojic, S.Puvacic, S.Curic,
B.Vidovic

Clinical Hospital Mostar Department for infectious diseases



Microbiological diagnosis of brucellosis: modern approaches and Serbian experiences

Ristanovic Elizabeta, Lako Branislav,

Institute for Microbiology, Military Medical Academy, Belgrade, Serbia and Montenegro

Zoonosis In Infectious Practica

Dautović-Krkić S. Lukovac E. Mostarac N. Hadžović M. Gazibera B. and Muratović P.

Clinic for Infectious Diseases, Clinical and University Center of Sarajevo, B&H

Presentation, Diagnosis And Treatment Of Acute Brucella Meningitis (a case report)

*Dragan Mikić, *Milomir Đokić, °Branislav Lako, *Milomir Milanović

**Clinic for infectious and tropical diseases and °Institute of microbiology and parasitology. Military Medical Academy. Belgrade, Serbia and Montenegro.*

Clinical And Epidemiological Characteristics Of Brucellosis In Patients Treated During The 2002-2004 Period

Snježana Mehanić, Fikret Pinjo, Vesna Hadžiosmanović, Jasna Topalović, Merdina Ferhatović, Meliha Hadžović

Clinic for Infectious Diseases, Clinical Center of University, Sarajevo

Brucellosis Foci Never Before Detected In The Area Of Belgrade

Ljubic Bozidar, Radmila Dmitrovic, Vera Babic- Dunjic, Tijana Relic,

Snezana Radivojevic, Slobodan Stanojevic, Dragica Vojinovic,

Jadranka Zutic

Institute of Public Health of Belgrade, Serbian Institute for Veterinary Medicine, Belgrade

Brucellosis In The Republic Of Macedonia-Clinical Experiences

Bosilkovski M, Krteva Lj, Caparoska S, Dimzova m, Sopova Z.

Klinika za infektivni bolesti i febrilni sostojbi Skopje, R. Makedonija

Brucella Melitensis Biotip 3 – Description Of An Epidemic

Violeta Santrač, Jelena Marić, Sonja Nikolić, Sonja Radojičić, D. Sando,

D.Kubelka

Veterinary Institute of Republic of Srpska «Dr. Vaso Butozan» Banjaluka

Brucellosis in the municipality of Konjic - the extract

1.A. Lazarević, 2.N. Derviškadić, 1. A. Alajbegovic-Dzumhur 1. Opća Bolnica Konjic; 2. RMC Mostar

Brucellosis in Herzegovina

Obradović Zarema ¹, Derviškadić Nazif ²

1. *Public Health Institute, Mostar*

2. *Department of infectious diseases of RMC "Dr.Safet Mujić" in Mostar*

Brucellosis – posters

Spondylodiscitis as a rare manifestation of brucellosis

Vesna Turkulov, Nadežda Madle-Samardžija, Grozdana Čanak, Radoslava

Doder, Jovan Vukadinov, Siniša Sević

Clinic for Infectious Diseases, Clinical centre Novi Sad

Brucellosis- case report

Zahirovic M1, Poljakovic A1 Horozic M1 , Hadzic E2, Piljic D1 , Stojic V1 ,
Petrovic J1 , Sinanovic A1 .

1 Clinic for Infection Diseases; 2 Clinic for Internal Diseases

Brucellosis as a protracted febrile illness- case report

T. Skuhala, A. Beus, B. Desnica, M. Balen Topić

Clinic for Infectious diseases «Dr. Fran Mihaljević» Zagreb, Croatia

Zoonose – posters

Zoonoses: The vet - profession of a high risk

R. Velić

Department of epizootiology, Veterinary faculty, University of Sarajevo



Farmyard manure as transmitter of zoonoses

Zarema Obradović¹, Taib Šarić²

1. *Public Health Institute Mostar; 2. Faculty for agriculture Sarajevo*

Zoonoses In The Postwar B&H

Important Common-Health Problem

E. Bektaš , Z. Smajlagić

Javna ustanova «Dom zdravlja sa poliklinikom» VISOKO

Zoonotic agents as biological weapons

Ristanovic Elizabeta, Lako Branislav

Institute for Microbiology, Military Medical Academy, Belgrade, Serbia and Montenegro

Soluble Fas And Transforming Growth Factor Beta-2 In Acute Viral And Bacterial Zoonoses Infections

¹Mateja Janković, ¹Alemka Markotić, ¹Ljiljana Cebalo, ²Oktavija Đaković Rode, ²Ivan Puljiz, ³Danica Ramljak,

¹*Institute of Immunology, Zagreb, Croatia*, ²*University Clinic for Infectious Diseases, Zagreb, Croatia*, ³*National Cancer Institute at Frederick, Frederick, MD; USA*.

Zoonosis In Tuzla Canton – Always A Current Problem

Ahmetagić S¹, Topalović B², Mešanović J¹, Šabović S¹, Pavić G³.

¹*JZU UKC Tuzla Clinic for infectious diseases*; ²*Institute for Public Health of Tuzla Canton*; ³*Institute for Public Health of Posavski Canton*

Viral And Bacterial Zoonosis In Forestry Workers

¹Marica Miletić-Medved, ²Alemka Markotić, ³Oktavija Rode, ²Ivana Matijević, ²Lidija Cvetko, ⁴Josip Margaletić, ⁵Heikki Henttonen

¹*Institute of Public Health, Slavonski Brod, Croatia*; ²*Institute of Immunology, Zagreb, Croatia*; ³*University Clinic for Infectious Diseases "Dr. Fran Mihaljević", Zagreb, Croatia*; ⁴*Faculty of Forestry, University of Zagreb, Zagreb, Croatia*; ⁵*Finnish Forest Research Institute, Vantaa Research Centre, Vantaa, Finland*

Small Rodents And The Forest Ecosystem In Croatia

Josip Margaletić

Faculty of Forestry, Zagreb, Croatia



Conclusions

1. Zoonosis are still actual problem in Bosnia and Herzegovina, as well in South-east countries in Europe, important for human and veterinary medicine, as well for the economy and biosafety of the countries.
2. There were noticed different approach to the prevention, diagnostics and therapy of zoonoses.
3. For the resolution of these problems it is recommended close cooperation of scientists and workers – investigators from human as well veterinary medicine and the governmental institutions (including all levels protection).
4. It is recommended creation of a Permanent body for zoonoses in B&H, with the representatives of human and veterinary medicine, organized by the sectors of different diseases (hemorrhagic fever, brucellosis, Q-faver, rabies, trichinellosis and so far (under the experts principle)

5. The main goal of this body for zoonoses in B&H is to bring the protocols and the procedures for diagnostics, therapy and prevention of zoonoses and to create the laboratories which will work on all the territory on B&H.
6. It is a need to organize the referent centres for zoonoses and equip the laboratories with biosafety levels 3.
7. To carry out a registration of the farms and to mark all animals due to control the moving of animals.
8. To promote a work of veterinary, sanitary and public health inspection.
9. The institutions and individuals from veterinary and human medicine should be included in continuing education of population.
10. It is necessary to include in the Mediterranean program of zoonoses.
11. To apply the international standards in the control of zoonoses in a people as well in animals (monitoring)
12. To create a regular and extraordinary system of reporting about zoonoses between the competent services in human and veterinary medicine, as well with the new database on zoonosis in neighboring countries.
13. To make the maps with the regions in which zoonoses are existing.
14. It is necessary to advance the scientific-research work in area of zoonoses. A special attention should be directed to the isolation and identification the new or the old changed of pathogens which presumably circulating on the region of B&H. To study a presence – persistence of sequelae after the past diseases of hemorrhagic fever with the kidney syndrome. To promote and develop diagnostic procedures of zoonoses to be efficient in practice.
15. To organize symposiums every second year and congress of zoonoses every fourth year.