

# BOOK OF ABSTRACTS

I N T E R N A T I O N A L C O N G R E S S

## PUBLIC HEALTH – ACHIEVEMENTS AND CHALLENGES

October 15-16, 2024

Belgrade

Republic of Serbia

Organized by

**Institute of Public Health of Serbia**

*Dr Milan Jovanović Batut*



ИНСТИТУТ ЗА ЈАВНО ЗДРАВЉЕ СРБИЈЕ  
„Др Милан Јовановић Батут”

Under the auspices of

the Ministry of Health and

the Ministry of Science, Technological Development and Innovation



Република Србија  
МИНИСТАРСТВО ЗДРАВЉА



Република Србија  
МИНИСТАРСТВО НАУКЕ,  
ТЕХНОЛОШКОГ РАЗВОЈА  
И ИНОВАЦИЈА

## Publisher

Institute of Public Health of Serbia *Dr Milan Jovanović Batut*

## Editors

Verica Jovanović  
Milena Vasić  
Jelena Gudelj Rakić  
Biljana Kilibarda  
Olivera Ninković  
Nevena Milošević  
Ivana Grubor

---

The International Congress *Public health – achievements and challenges* has been accredited as continuing education program number No. A-1-1103/24 by the decision of the Health Council of the Republic of Serbia No. 153-02-239/2024-01 from May 27th 2024.

The International Congress *Public health – achievements and challenges*, Belgrade, Serbia, 15/10/2024 - 16/10/2024, LEE/2024/01510 has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®).Editors

---

**Design** Dragan Tadirović / **Printed by** M&G Media Group / **Print run** 300 copies

The publisher is not responsible for the content of the scientific papers and opinions published in the Book of Abstracts. They represent the authors' point of view.

Publication of Book of Abstracts was financially supported by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia

ISBN 978-86-7358-139-2

CIP - Каталогизација у публикацији  
Народна библиотека Србије, Београд  
614(048)

INTERNATIONAL congress Public health – achievements and challenges  
(2024 ; Beograd) Book of Abstracts / International congress Public health  
– achievements and challenges, October 15-16, 2024 Belgrade Republic of  
Serbia ; [editors Verica Jovanović ... [et al.]]. - Belgrade : Institute of Public  
Health of Serbia "Dr Milan Jovanović Batut", 2024 (Belgrade : M&G Media  
group). - 272 str. : ilustr. ; 30 cm

Tiraž 300. - Bibliografija uz pojedine apstrakte. - Registar.

ISBN 978-86-7358-139-2

а) Здравствена заштита -- Апстракти

COBISS.SR-ID 153835785

## HONORRARY COMMITTEE

### Chair

**Minister of health dr Zlatibor Lončar**  
*Ministry of Health, Republic of Serbia*

### Vice chair

**Minister of science, technological development and innovation dr Jelena Begović**  
*Ministry of Science, Technological Development and Innovation, Republic of Serbia*

### Members

**Academician Vladimir Kanjuh**  
*President of the Board for Cardiovascular Pathology of SASA*

**Minister of education prof. dr Slavica Đukić Dejanović**  
*Ministry of Education, Republic of Serbia*

**Dr Miodrag Stanić**  
*Director of the Medical Chamber of Serbia*

**Prof. dr Darija Kisić**  
*Acting director of the Institute of Virology, Vaccines and Sera "Torlak"*

**Prof. dr Ljubica Đukanović**  
*Academy of Medical Sciences of the Serbian Medial Society*

**Prof. dr Nedeljko Radlović**  
*Academy of Medical Sciences of the Serbian Medial Society*

**Prof. dr Nada Dimković**  
*Academy of Medical Sciences of the Serbian Medial Society*

**Prof. dr Negoslav Ostojić**  
*European Centre for Peace and Development*

## SCIENTIFIC COMMITTEE

***Prof. Verica Jovanović, MD, PhD, president, Serbia (reviewer)***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade

***Academician Prof. Milan Nedeljković, MD, PhD, Serbia***

Serbian Academy of Sciences and Arts, Belgrade

***Academician Prof. Radoje Čolović, MD, PhD, Serbia***

Serbian Academy of Sciences and Arts, Belgrade

***Prof. Aleksandar Džakula, MD, PhD, Croatia***

Center for Health Systems, Policies and Diplomacy, University of Zagreb, School of Medicine, Andrija Štampar School of Public Health, Zagreb

***Prof. Aleksandra Knežević, MD, PhD, Serbia (reviewer)***

University of Belgrade, Faculty of Medicine, Institute of Microbiology

***Prof. Čedo Maksimović, PhD, the United Kingdom***

Imperial College London (University), Department of Civil and Environmental Engineering, EWRE, Environmental and Water Resources Engineering Section, London

***Prof. Dragan Laušević, MD, PhD, Montenegro (reviewer)***

Institute for Public Health of Montenegro, Podgorica

***Prof. Dragana Vuković, MD, PhD, Serbia (reviewer)***

University of Belgrade, Faculty of Medicine, Institute of Microbiology, Belgrade

***Prof. Golubinka Boševska, MD, PhD, North Macedonia (reviewer)***

Institute for Public Health of the Republic of North Macedonia, Skopje  
Faculty of Medical Sciences, University Goce Delcev, Štip

***Prof. Ivana Simić Vukomanović, MD, PhD, Serbia (reviewer)***

University of Kragujevac, Faculty of Medical Sciences, Kragujevac  
Institute of Public Health Kragujevac, Kragujevac

***Prof. Krunoslav Capak, MD, PhD, Croatia***

Croatian Institute for Public Health, Zagreb

***Prof. Margherita Ferrante, MD, PhD, Italy (reviewer)***

University of Catania, Environmental and Food Hygiene Laboratories (LIAA), Catania

***Prof. Milena Šantrić Milićević, MD, PhD, Serbia (reviewer)***

University of Belgrade, Faculty of Medicine, Institute for Social Medicine, Belgrade

***Prof. Milena Vasić, DMD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade  
University Business Academy in Novi Sad, Faculty of Dentistry, Pančevo

***Prof. Miloš Maksimović, MD, PhD, Serbia (reviewer)***

University of Belgrade, Faculty of Medicine, Institute of Hygiene and Medical ecology, Belgrade

***Prof. Nađa Vasiljević, MD, PhD, Serbia (reviewer)***

University of Belgrade, Faculty of Medicine, Institute of Hygiene and Medical ecology, Belgrade

***Prof. Snežana Radovanović, MD, PhD, Serbia (reviewer)***

University of Kragujevac, Faculty of Medical Sciences, Department of Social medicine, Kragujevac

***Prof. Tit Albreht, MD, PhD, Slovenia (reviewer)***

National Institute of Public Health Slovenia  
University of Ljubljana, Faculty of Medicine, Ljubljana

***Prof. Vesna Bjegović - Mikanović, MD, PhD, Serbia (reviewer)***

University of Belgrade, Faculty of Medicine, Institute for Social Medicine, Belgrade

***Prof. Vladimir Petrović, MD, PhD, Serbia (reviewer)***

University of Novi Sad, Faculty of Medicine, Novi Sad  
Institute of Public Health of Vojvodina, Novi Sad

***Prof. Mark Katz, MD, PhD, the USA***

WHO Regional Office for Europe

***Prof. Silvia Bino, MD, PhD, Albania (reviewer)***

Institute of Public Health, Tirana  
University of Albania, Faculty of Medicine, Tirana

***Asst. Prof. Maja Stošić, MD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade

***Asst. Prof. Margarita Dodevska, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade

***Aleksandar Medarević, MD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade

***Biljana Kilibarda, DMD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade

***Dragana Jovanović, MD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade

***Dragana Jović, MD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade

***Edita Grego, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia Dr Milan Jovanović Batut

***Goranka Lončarević, MD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade

***Jelena Gudelj Rakić, MD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade

***Jelena Knežević, PhD, Serbia***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade

***Jelena Malogajski MD, PhD, the USA (reviewer)***

Planetary Health Alliance, Bloomberg School of Public Health  
Johns Hopkins University, Washington DC

***Jelena Milić, MD, PhD, Serbia***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade

***Katarina Boričić, MD, PhD, Serbia***

Institute of Public Health of Serbia Dr Milan Jovanović Batut, Belgrade

***Luca Rosi, PhD, Italy***

Italian National Institute of Health, Rome

***Ljiljana Pavlović, MD, PHD, Serbia (reviewer)***

Institute of Public Health of Serbia *Dr Milan Jovanović Batut*, Belgrade

***Milena Kanazir, MD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia *Dr Milan Jovanović Batut*, Belgrade

***Milica Vučurović, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia *Dr Milan Jovanović Batut*, Belgrade

***Mitra Drakulović, MD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia *Dr Milan Jovanović Batut*, Belgrade

***Olivera Ninković, MD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia *Dr Milan Jovanović Batut*, Belgrade

***Vesna Karadžić, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia *Dr Milan Jovanović Batut*, Belgrade

***Vesna Korać, DMD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia *Dr Milan Jovanović Batut*, Belgrade

***Zoran Milosavljević, MD, PhD, Serbia (reviewer)***

Institute of Public Health of Serbia *Dr Milan Jovanović Batut*, Belgrade

***Manila Bonciani, PhD, Italy (reviewer)***

Meyer Children's Hospital IRCCS, Florence

***Klaudia Habl, MSc, Austria***

Austrian National Public Health Institute, Vienna

## ORGANIZING COMMITTEE

***Nevena Milošević, co-chair***

***Tamara Tomašević, co-chair***

***Mirjana Tošić***

***Ivana Grubor***

***Marija Bulatović***

***Milica Salaški***

***Larisa Vujnović***

***Svetlana Vrga***

***Biljana Šuša***

***Jelena Ivković***

***Maja Garić***

***Miroslav Gajić***

# COMMUNICABLE DISESES

## DECADE OF PROGRESS: DECLINING TRICHINELLOSIS RATES IN SERBIA AND THE ROLE OF THE NATIONAL REFERENCE LABORATORY IN CONTROL AND RESEARCH

Ivana Mitić,<sup>1</sup> Saša Vasilev,<sup>1</sup> Sofija Glamoclija,<sup>1</sup> Ljiljana Sabljic,<sup>1</sup> Dragana Plavša,<sup>2</sup> Ljiljana Sofronić-Milosavljević,<sup>1</sup> Alisa Gruden-Movsesijan,<sup>1</sup>

<sup>1</sup>University of Belgrade, Institute for the Application of Nuclear Energy - INEP, National Reference Laboratory for Trichinellosis NRLT-INEP, Belgrade, Serbia

<sup>2</sup>Institute of Public Health of Serbia Dr Milan Jovanovic Batut, Belgrade, Serbia

DOI: 10.5937/BatutPHCO24127M

Trichinellosis, a mandatory reportable disease, remains a persistent zoonosis in Serbia due to regulatory violations, inadequate pork inspection, and insufficient awareness of health risks. Nonetheless, epidemiological data from the past decade (2014-2023) show a significant downward trend in *Trichinella* infection among the population, with the number of cases in the last five years being three times lower than in the previous five years. Over this ten-year period (except 2021) there have been 489 trichinellosis cases. Among these, 26% of serum samples were analyzed by the NRLT-INEP, with 113 (90%) confirmed positive for anti-*Trichinella* antibodies. Serum samples were also sent to NRLT-INEP for confirmatory testing using Western blot (Wb) when routine enzyme-linked immunosorbent assay (ELISA) or indirect immunofluorescence assay (IFA) tests failed to provide an unequivocal result. During this period, Wb was performed in 14 cases (11%) due to discrepancies between IFA and ELISA results. In addition to its role in definitive serodiagnosis of *Trichinella* infection for patients, the NRLT has made several national contributions by evaluating the immune response in the first recognized trichinellosis outbreak in Serbia caused by *Trichinella britovi*; showing that specific anti-*Trichinella spiralis* antibodies can persist in individuals for 13 and 18 years after infection; monitoring humoral and cellular immune responses to both the SARS-CoV-2 virus and *Trichinella spiralis* in patients with trichinellosis during the COVID-19 pandemic; demonstrating that applying the One Health concept in Serbia has improved infection control and reduced disease incidence in humans. Internationally, the NRLT collaborates with EU reference laboratories, participating in follow-up investigations of trichinellosis cases and in workshops and PT schemes organized by EURLP, ISS in Rome, Italy. Funded by Ministry of Science, Technological Development and Innovation, Republic of Serbia, Co. No. 451-03-47/2023-01/200019)

**Keywords:** *Trichinella*, trichinellosis, control, research, Serbia