



HAPIH

**Hrvatska agencija za
poljoprivredu i hranu**

Croatian Agency for Agriculture and Food | L'Agence Croate pour l'Agriculture et l'Alimentation

One Health activities in Croatia

Brigita Hengl

Croatian Agency for Agriculture and Food (HAPIH), Osijek

16th Scientific conference of the Bulgarian Focal Point of EFSA

*16-та научна конференция на Българския контактен център на EFSA
към Център за оценка на риска по хранителната верига, МЗХ*

16th May 2024

Sofia, Bulgaria



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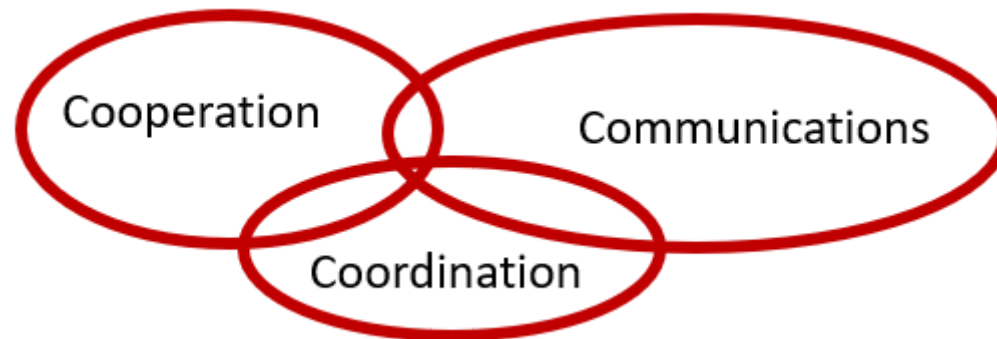
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One Health (OH) – Global level

- 60% of emerging diseases (world level) come from domestic and wild animals
- > 30 new human pathogens discovered in the last 3 decades, as many as 75% of them are of animal origin

PEOPLE, ANIMALS AND THE ENVIRONMENT ARE CLOSELY CONNECTED



Human activities- animal trade, agriculture, animal husbandry, urbanization, industry, fragmentation of habitats, encroachment on wild areas and climate change



Increase risks for the development and spread of new human and animal diseases



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OH Definicija

One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.

It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and inter-dependent.

The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate changes and contributing to sustainable development (OHHLEP, 2022)

The One Health approach includes:

- Antimicrobial resistance (AMR)
- Zoonotic diseases
- Vector-borne diseases
- Food safety and foodborne diseases



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One Health implementation includes:

- Databases and resources (for the purposes of disseminating information and activities in the OH approach)
- Gathering information about existing and future OH research and capacities
- Establishing a model for an integrated One Health surveillance system
- Existence of mechanisms for quick coordination of all involved stakeholders
- Knowledge and understanding of methods of spread and transmission of zoonoses in order to identify them and reduce the risks of their spread

Identification and presentation of the best examples from the practice of the OH approach



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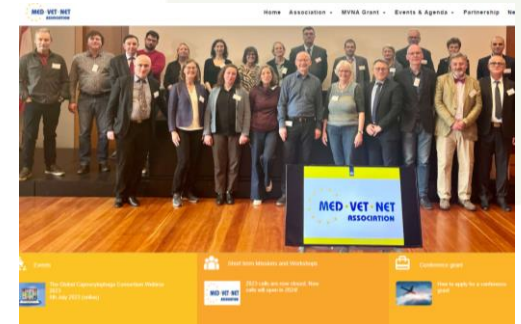


European level

- Strengthen cooperation in the field of OH among research institutions
- Support trainings, especially with increased involvement of EU agencies
- Harmonize approach, methodology and data
- Improve the quality of information intended for policy makers

EU-funded research and innovation programs:
Med-Vet-Net Network of Excellence

<http://www.medvetnet.org/>



One Health European Joint Programme

<https://onehealthejp.eu/>



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One Health cross-agency task force From June 2023

Task: To connect current and future joint working groups and activities

- ✓ **European Food Safety Authority (EFSA)**
initiated the ONE – Health, Environment and Society – Conference
- ✓ **European Environment Agency (EEA)**
- ✓ **European Centre for Disease Prevention and Control (ECDC)**
- ✓ **European Chemicals Agency (ECHA)**
- ✓ **European Medicines Agency (EMA)**

6. Task force focal points and alternates (as of 15 June 2023)

Agency	Primary focal point	Alternate
ECDC	Tamas Bakonyi tamas.bakonyi@ecdc.europa.eu	Ole Heuer
ECHA	Wim de Coen wim.decoen@echa.europa.eu	Andrea Altieri
EFSA	Stef Bronzwaer stef.bronzwaer@efsa.europa.eu	Carlos Das Neves
EEA	Dario Piselli dario.piselli@eea.europa.eu	Ian Marnane
EMA	Ana Vidal ana.vidal@ema.europa.eu	Ralf Herold



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Still needs improvements:

- One Health terminology
- Understanding the meaning of the OH approach
- Inclusion of certain scientific disciplines in OH research
- Designing policies and their implementation
- Possibilities of accessing and sharing data among different institutions and associations



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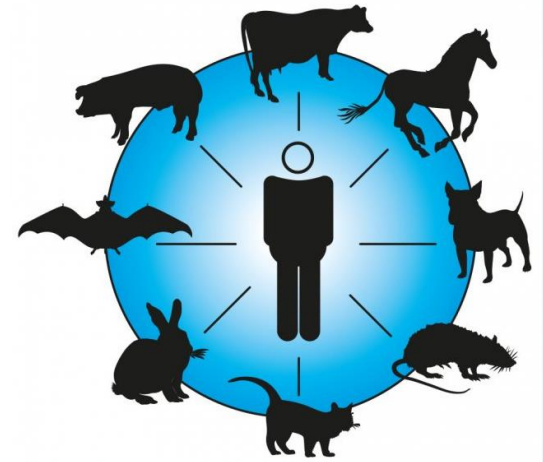
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One Health in the Republic of Croatia

Working group for zoonoses
(HAH – CSH HAPIH), 2014-2019.



Scope of work:

- Researching the source and discovering the way zoonotic infections spread to humans
- Collection and analysis of data on the extent of occurrence of zoonotic agents and drug-resistant bacteria and monitoring of the use of drugs and other agents in veterinary and human medicine
- Conducting epidemiological (epizootiological) research
- Providing information and advice on the prevention and control of zoonoses
- Interstate cooperation and involvement in research programs (eg Mediterranean Zoonoses Control Program (MZCP) of the World Health Organization).



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Expert committee for animal health

Consists of 31 members.

Funding
decision from
9th March 2023

Representatives of:

- Ministry of Agriculture, Veterinary and Food Safety Directorate (11)
- Croatian Veterinary Chamber (1)
- Veterinary faculty, Zagreb (8)
- Croatian Veterinary Institute (8)
- Ministry of Health and Croatian Public Health Institute (1)
- Croatian State Inspectorate (1)
- Croatian Agency for Agriculture and Food (1)



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Legislative framework:

EU animal health legislation (Regulation (EU) 2016/429) is implemented in Croatia by the National Animal Health Act - it provides for the appointment of an Expert Group for Animal Health (subgroup for zoonoses)



The task of the Expert committee for animal health is:

- develop national control measures/recommendations for zoonoses that are EU listed diseases
- to propose a national list of diseases that are not currently on the list of diseases of the European Union, but are of special importance for Croatia
- other activities necessary to control animal diseases



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One Health subgroup of the EFSA AHAW Network

September 2022

- improving the collaboration between animal health and public health on non-foodborne zoonotic (NFZ) and potential zoonotic (PZ) issues
- work on the coordinated One Health surveillance system for cross-border, NFZ and PZ pathogens in animals and the environment that threaten the Union.
- participating in a prioritisation exercise in which the pathogens on which the coordinated surveillance should focus will be identified,
 - participating in the design of the surveillance strategies to be applied
 - regularly reviewing the surveillance priorities and strategies
 - support in the EU4HEALTH program

Representatives from Croatia:

HAPIH – 2 members

Croatian Veterinary Institute (HVI) – 2 members

Croatian Institute of Public Health (HZJZ) – 1 member

(recommendation that one representative be an expert in environmental issues)



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Coordinated surveillance system under the One Health approach for cross-border pathogens that threaten the Union - options for sustainable surveillance strategies for priority pathogens

European Food Safety Authority (EFSA)

Prioritisation of zoonotic diseases for coordinated surveillance systems under the One Health approach for cross-border pathogens that threaten the Union

European Food Safety Authority (EFSA), John Berezowski, Katinka de Balogh, Fernanda C. Dórea, Simon Rüegg, Alessandro Broglia, Andrea Gervelmeyer and Lisa Kohnle



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Prioritisation exercise: list of 50 diseases

CP-g-22-04.01 Direct grants to Member States' authorities: setting up a coordinated surveillance system under the One Health approach for cross-border pathogens that threaten the Union

List of 50 diseases

Please indicate **25 diseases** from this list (**by inserting 'X's in the right column of the table**) that you consider of least relevance for your country in terms of implementing surveillance:

Disease	To be removed from the list Please insert exactly 25 'X's
Anthrax	
Brucellosis	
Chikungunya fever	
COVID-19	
Crimean-Congo haemorrhagic fever (CCHF)	
Cryptosporidiosis	
Eastern equine encephalitis (EEE)	
Ebola virus disease	
Echinococcosis	



Removed in full agreement by all participating countries:

1. Omsk haemorrhagic fever
2. Powassan virus infection
3. Scrub typhus
4. Thogoto virus infection
5. Wesselsbron virus infection

Distribute 100 points between 4 criteria depending on the importance of the monitoring priority



Criteria
Likelihood of introduction/ (re-)emergence
Epidemic potential
Conditions for establishment
Severity of harm



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- Answer a set of **10 questions for each disease** from the list of 45 diseases (established through task 1) by filling in a questionnaire
- Reach out to relevant stakeholders and/or disease experts

- Take into account **scientific evidence, expert knowledge and country-specific situation**

➔ **One questionnaire per country**

Crimean-Congo haemorrhagic fever (CCHF)									
Criteria	Sub-criteria	Questions	Answers						
Likelihood of introduction/ (re-)emergence	Proximity to the country	Where has the disease been reported or suspected (in humans and/or animals) in relation to your country in the last 5 years?	Please choose from the drop-down list:						
	Pathways of introduction	Which pathways do you consider of concern for the introduction of the disease into your country?	Please select "Yes" or "No" for each of the pathways:						
	Drivers of (re-)emergence	Which drivers do you consider of concern for the (re-) emergence of the disease in your country?	Please select "Yes" or "No" for each of the drivers:						
Likelihood of human-to-human transmission		What is the likelihood of transmission of the disease between humans?	Please choose from the drop-down list:						

Provided answer options:

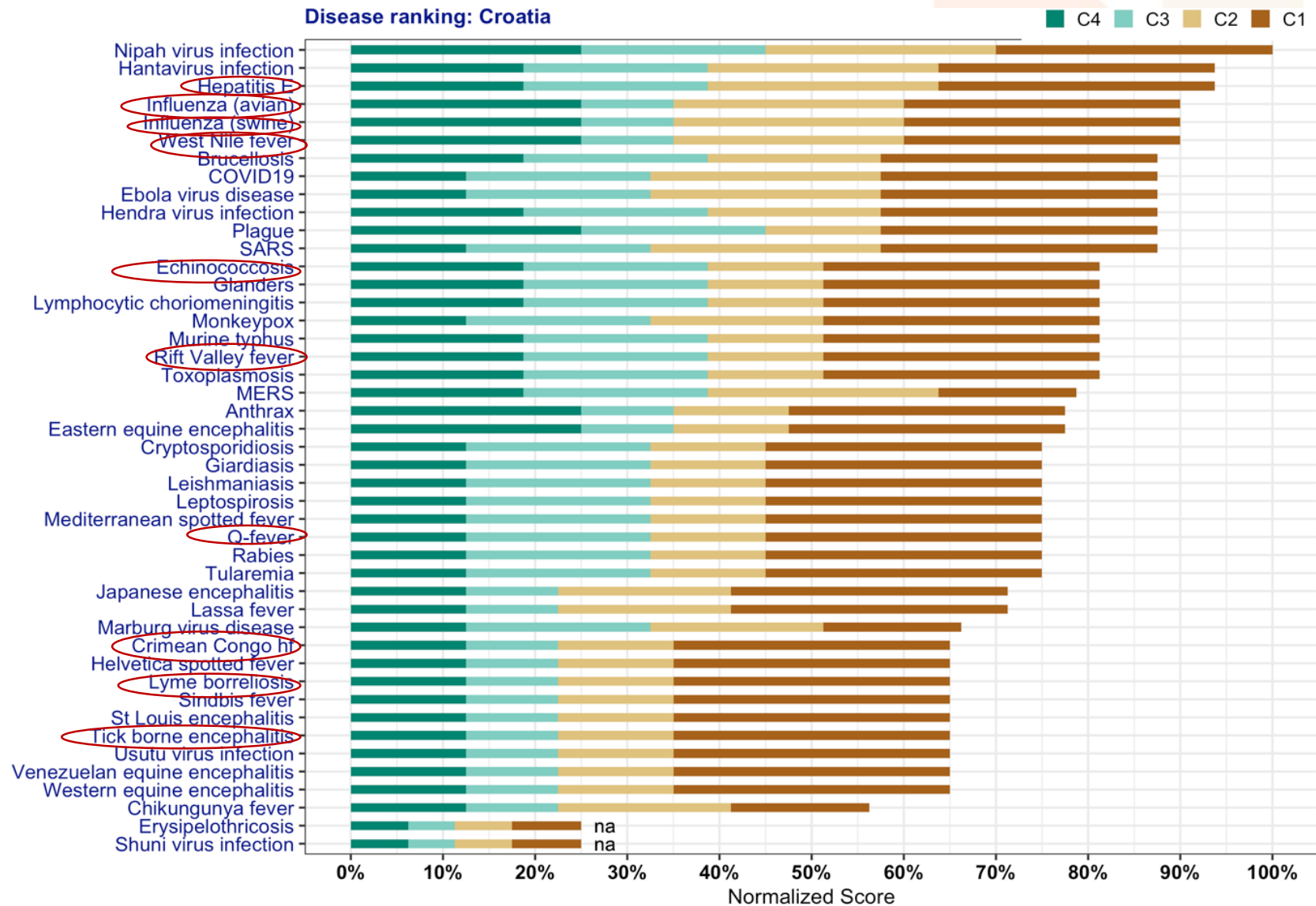
In the country	In your country
At the country border	In neighbouring Member States (inside the EU)
At the EU border	In neighbouring third countries (outside the EU)
Outside the EU	In any other third country not bordering with the EU
Globally absent	Not reported or suspected anywhere (apart from laboratories) in the last 5 yrs

Provided answer options:

No human-to-human transmission	No human-to-human transmission reported or suspected
Low	Transmission generally sporadic and not resulting in outbreaks
Medium	Transmission generally moderate and occasionally resulting in small-scale/focalised
High	Transmission generally high and often resulting in large-scale outbreaks

**Deadline
04/11**

Disease ranking: Croatia



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EFSA role during project

- **data model and the applicable business rules.**
- tailor the data model to your needs - the **surveillance cards** (each EC)
- **data visualisation in the dashboards**
- country's **Focal Point** in the nomination process



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Establishment of a coordinated disease surveillance system (in Croatia) in accordance with the OH approach



Objective:

- to include all relevant national stakeholders in the adoption of control plans for infectious diseases that are transmitted to humans from animals and/or the environment
- Approach species monitoring for selected diseases in a new way (additional vector, pets)



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Institutions – participants in the project

Croatian Agency for Agriculture and Food (HAPIH)- Project coordinator –
COO

Affiliated entities - AE:

Ministry of Agriculture (MO)

Croatian Veterinary Institute (HVI)

Faculty of Veterinary Medicine (VF)

Croatian Institute of Public Health (HZJZ)



Duration of the project

3 years

Started 1st January 2024

End 31st December 2026.

Project budget – in Euro



Institution	Whole sum	Co-financing (80 %)
HAPIH	153.935,11	123.148,08
MA	13.634,86	10.907,87
HVI	461.964,1	369.571,27
HZJZ	88.598,46	70.878,76
VF	156.829,75	125.463,79
	874.962,28	699.969,77



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Work packages (WP)

WP1 - Management and Coordination

WP2 - Integrated surveillance system - Vectors and environment

WP3 - Integrated surveillance system - Farm animals

WP4 - Integrated surveillance system - Wild animals

WP5 - Small companion animals

WP6 - Sustainability - Nomination of the National One Health group

WP7 – Dissemination - Promotion activities related to education, networking and public awareness

WP8 – Evaluation - Creation of national database

CROOH
CROATIA ONE HEALTH



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Project plan – very basic

Disease	Sample	Patogen	Analytical approach	Number of samples (yearly)
Swine Influenza	animals/wild animals	swine influenza virus	Serological & molecular approach	33
West Nile Fever	mosquitoes / animals / wild animals/ pets	West Nile virus	Elisa IgG, IgM; VN	1070
Echinococcosis	wild animals/ pets	Echinococcus granulosus	Serological & molecular approach	660
Tick-borne Encephalitis	ticks/animals/wildlife/ pets	TBE virus	Elisa, VN	2202
Hepatitis E	animals/wildlife/ pets	hepatitis E virus	Elisa	451
Rift Valley Fever	Ticks and mosquitoes/animals/wildlife	Rift Valley Fever virus		220
Q-Fever	dust and dirt on a goat and sheep farm/animals/wildlife/ pets	Coxiella burnetii	Elisa	528
Lyme disease	ticks/animals/wildlife/ pets	Borrelia burgdorferi	Elisa	1470
Crimean-Congo haemorrhagic fever	ticks/animals/wildlife/ pets	CCHF virus	Elisa	2044



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Area (NUTS3 level)

HRVATSKA - NUTS level 3



For WNF

HR031-HR037 only



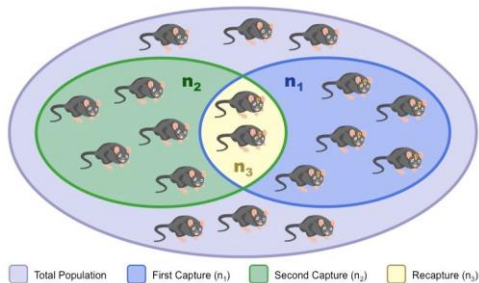
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Project activity flow



Sampling



Data validation



Data base



Risk assessment



Risk management



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Project impact



- enable capacity building at the national level
- OH national body – permanent (cooperation of the most important institutions in the country in the control of pathogens that threaten human and animal health)
- a single database - compatible with the EFSA database so that data can be shared and compared with the results of other European countries
- connecting and applying human, animal and environmental protocols at a point or step where multiple outcomes can be obtained (save time and money, early warning)
- risk assessment at the national level & establish a priority list of diseases
- direct benefit - national institutions in public health and veterinary public health, such as the Ministry of Agriculture, Ministry of Health, HAPIH, HVI, VF, and EU-level institutions such as EFSA and ECDC, resulting in better health protection for EU citizens



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WHO support: Evidence-informed policy-making for One Health (OH-EVI) in Croatia

creation of a document the Evidence Briefs for Policy (EBP) on the benefits of the One Health system and its implementation

Croatian Institute for Public Health - lead beneficiary

Partners:

- Ministry of Agriculture, Ministry of Health, Ministry of Economy, Entrepreneurship and Crafts
- Clinic for Infectious Diseases Dr. Fran Mihaljević
- Croatian Veterinary Institute
- Faculty of Veterinary Medicine
- State Hydrometeorological Institute
- Croatian Agency for Agriculture and Food



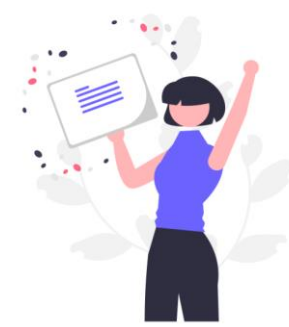
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Conclusion



- the legislative framework is missing
- there is a lack of operational instructions that would clearly state who, when and how to communicate with whom
- lack of funds for work (excursions to the field, analytical actions, sending samples...)
- the initiative to act on the basis of OH in HR comes from experts - "bottom up" approach
- ways should be found to facilitate the introduction of functioning on the principle of OH, before it becomes necessary (in case of an epidemic) and with political skill to establish it earlier

**LATER
IS TOO
LATE.**



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ONE HEALTH - it is a journey, not a destination



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Thank you for your attention!

Благодаря ви за вниманието!

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