



Moderator: **Ludovico Sepe** BfR Ann Lindberg
Representative of the SIMEX coordinating Institutes,
SVA











## SimEx – an introduction

### **Ann Lindberg**

One Health EJP Final Meeting

Paris, 11-12 September 2023

## One Health EJP **GA 773830**

https://onehealthejp.eu/

**FOODBORNE ZOONOSES** 

**ANTIMICROBIAL RESISTANCE** 

**EMERGING THREATS** 

**INTEGRATIVE ACTIVITIES** 



2018-2023



**HORIZON 2020** 50% CO-FUNDED € 90 MILLION



**44 PARTNERS ACROSS EUROPE** 





















































































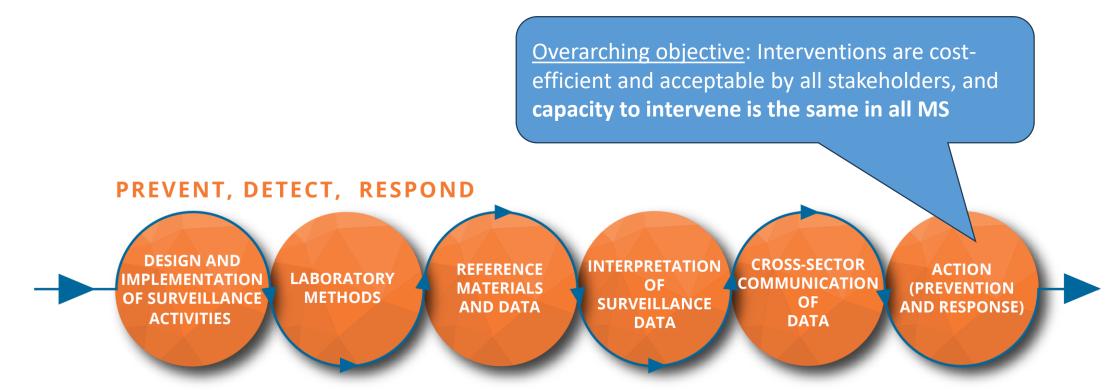






## Link to the Strategic Research Agenda

**Vision: A European surveillance community** 



#### **Objective WP4**

• To strengthen .... prevention, preparedness, detection and response of the EU to foodborne and other emerging threats across human-animal-environmental sectors.



More details: Strategic Research Agenda

## Timeline conceptualisation

- October 2018: 2<sup>nd</sup> call (for selection)
  - IA 2.4: Sharing best intervention practic exercises
  - December 2018: Little interest in IA 2.4
- March 2019: Contact with ECDC
- October 2020: Ambition presented to PMOPOC
- February 2021, budget and work plan for 2022 underway.
- Project initiated in Sep 2021 and concluded in December 2022

- National level
- Hazard of high relevance
- Test joint OH response
- Capabilities and tools developed within the OHEJP
- Build on ECDC manual for simulation exercises



## Aim and objectives

To practice the One Health capability, capacity and interoperability of authorities in public health, animal

health and food safety to work together.

#### Focus areas

- Knowledge and understanding of roles and responsibilities
- Data sharing (WGS)

Own objectives!

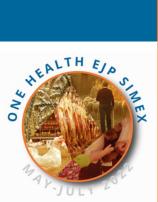
Communication

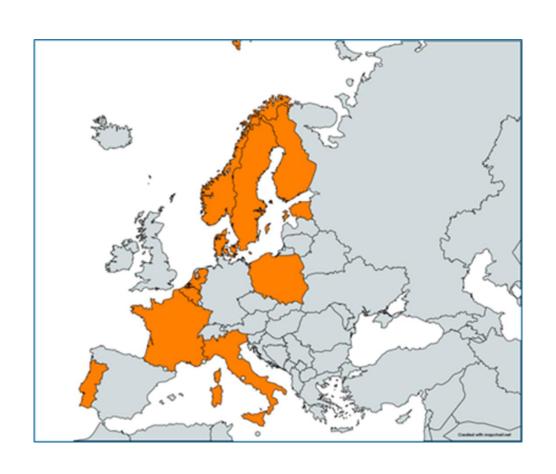




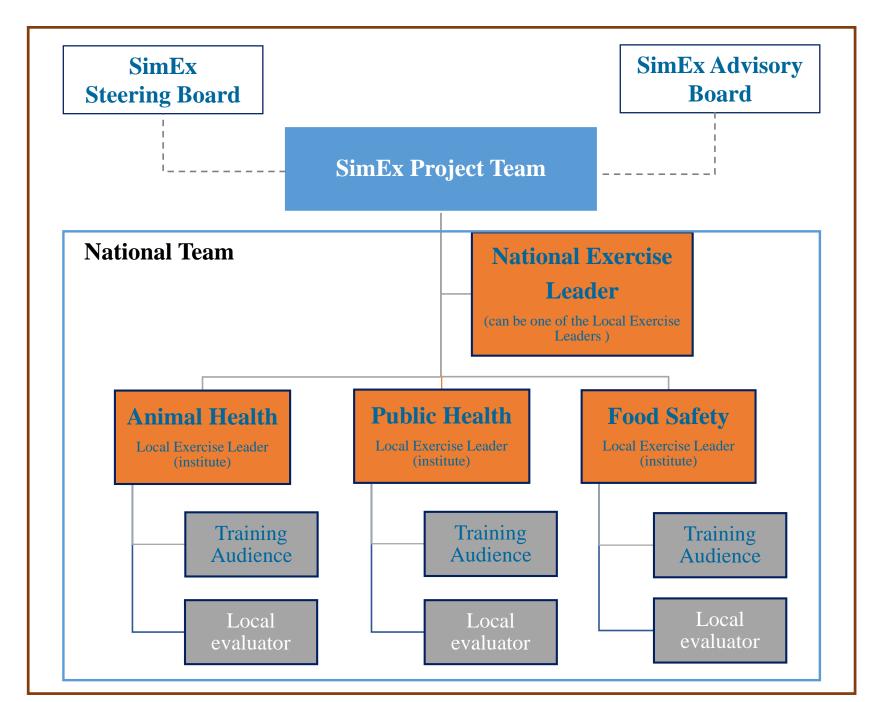
## Scope, format and participants

- National level
- Foodborne zoonosis
- Table-top exercise
- 2 days to conduct from May to September 2022
- •
- Voluntary
- 255 participants
- 11 countries
- The sectors, communication officers, governments, guests





SimEx organisation







## Kudos to the SimEx project team!



Anna Omazic, project lead

Lena Tuominen

Rebecca Litzell

Frederico Alves







Omid Parvizi

**Denise Marston** 





Juliette Bloch Anne Brisabois



...and of course to all participants, local and national exercise leaders, steering group, advisory board members, evaluators... – Thank you!





## Thank you for your attention!







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**IZSLER** 











# The Italian SimEx foodborne outbreak exercise: perception and outcomes

Matteo Gradassi, IZSLER
Local Exercise Leader SimEx Italy

One Health EJP Final Meeting

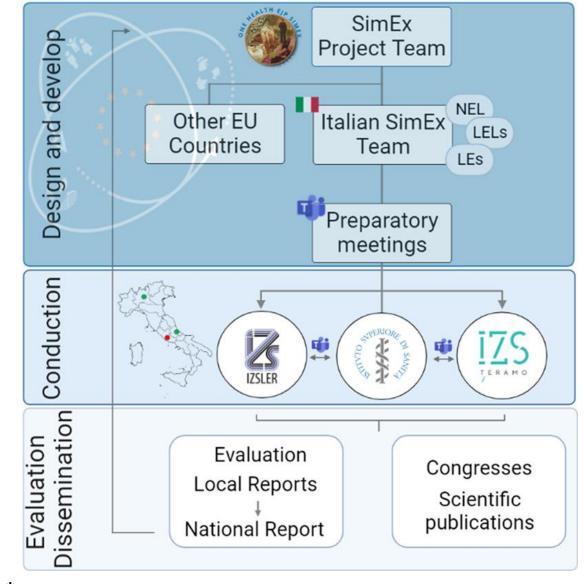
Paris, 11-12 September 2023

ISS (PH-FS), IZSLER (FS-AH), IZSAM (FS-AH)



## SimEx project in Italy

- In Italy, the SimEx exercise was conducted in May 2022 (30-31 May 2022)
- Divided in three different subgroups, each one coordinated by an OHEJP partner:
- ✓ ISS, Rome, expertise PH, FS (NEL, LEL)\*
- ✓ IZSLER, Brescia, expertise in FS, AH (LEL)\*
- ✓ IZSAM, Teramo, expertise in FS, AH (LEL)\*
- Other Contributors:
  - ✓ Italian Focal Point for ECDC-FWD (ISS)
  - ✓ NRL for Salmonella (IZSVe)
  - ✓ Support for FoodChain-Lab web application tool (ISS)
- During the conduction, several online sessions were held between the 3 groups to share perspectives, views and the results of discussion.



\* NEL: National Exercise Leader
LEL: Local Exercise Leader

**LE**: Local Evaluator





## SimEx participation

• Great interest in the simulation exercise shown by the relevant authorities:

**✓ Regional Health Authorities** 6 x

**Local Health Authorities** 22 x

Universities 3 x

/ IIZZSS 9 x

High attendance: total of 40 participants
 Representation across the sectors:

**✓ Food Safety** 25 x

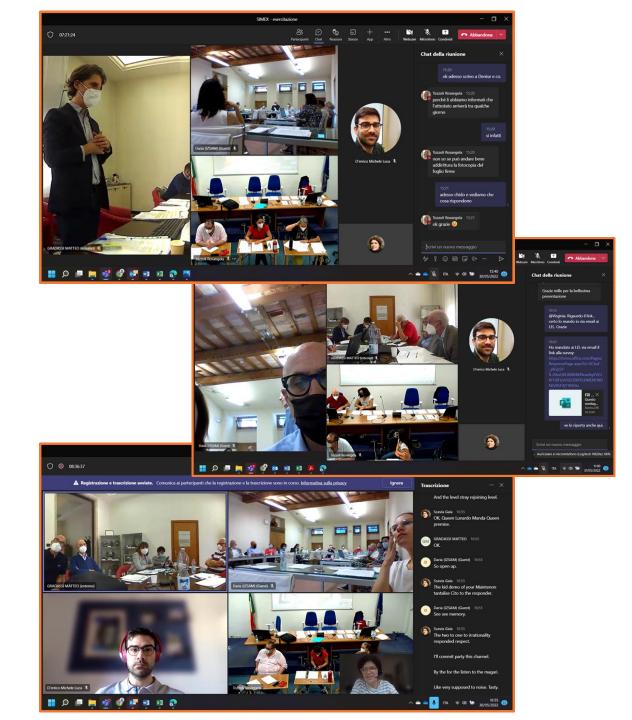
✓ **Public Health** 15 x

✓ Animal Health 3 x

**✓ Communication** 1 x

✓ Junior staff 2 x







## SimEx perception in Italy



- The post-exercise survey revealed an overall positive opinion on the SimEx training (response rate of 86.5%)
- Qualitative analysis of post-exercise survey feedback:

Has your **knowledge about the roles and responsibilities of other sectors** increased?

	N	Percentage %	
•	35	79.5%	
	1	2.3%	
<u></u>	8	18.2%	

Sentiment analysis

FoodChain-Lab web application made you gain new knowledge or a better understanding of FS tracing procedures?

	N	Percentage %		
	34	77.3%		
	1	2.3%		
•••	10	22.7%		

Sentiment analysis





## Post-conduction survey findings

#### LEs' perspective

Crucial role of Laboratory/ Epidemiology Experts (technical knowledge) Need to enhance preparedness (define R&R)

Need for data sharing

Important role of **traceability**(usefulness of
FoodChain-Lab tool)

Need for **training** (simulation exercises)

Importance of **building** working relationships

Need to improve communication

Shortage of human resources

Need for harmonised procedures (and coordination)

Importance of interdisciplinary and cross-sectoral cooperation (One Health)

Need to **strengthen information systems** 

Underreporting of cases

Better knowledge of "the others" and "the process" (look at the whole picture)



Results from survey



### SimEx Outcomes:



- Reinforced networking, interpersonal relation
- ✓ Increased trust among team members
- ✓ Led to a **better understanding of roles and mandates**
- Encouraged interoperability of authorities in PH, FS and AH
- ✓ Highlighted the additional value of applying the One Health's approach to tackle zoonotic threats



Bridging across the sectors

Beneficial for improving data sharing routines

✓ Relevant authorities have shown interest in implementing further training activities, such as response simulation exercises, to familiarize with the procedures in place, enhance their implementation and to test practical intervention methodologies

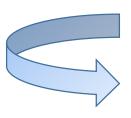






## SimEx Outcomes:

✓ Examples of **review and improvement of Regional procedures** for the management of food-borne outbreaks



- ➤ Need for integration of **communication strategies** into procedures
- Establishment of multidisciplinary response teams of experts at an early stage of outbreak including expertise in characterisation methods for foodborne pathogens (e.g.WGS), traceability, epidemiological studies and communication
- Establish a routine of meeting
- Implementation of Rapid Risk Assesment (RRA)
- ➤ More efficient case-reporting software

#### New Year's resolution

Establish an **inter-institutional agreement among ISS and IIZZSS** for the purpose of giving continuity to the SimEx experience in order to meet the **need of training in "peacetime"** 





In future training, beneficial exploring additional expects:

- broading multi-sectoral networks including the environmental health sector, in an OH approach
- building resilience against Agro-Terrorism and Agro-Crime







### SimEx Outcomes: dissemination



#### 1 National Congress contribution (Abstract):

Surveillance and control of foodborne zoonoses: experiences of ISS One-Health training for the NHS

Mazzocca R., Ventola E., Tozzoli R., Di Sabatino D., Gradassi M., D'Errico M.L., Mazzacarra A., Scavia G.

Congress of the Italian Society of Hygiene, Preventive Medicine and Public Health, 2-6 May 2023, Rome, Italy

#### ➤ 1 International Conference contribution (Poster):

The Italian OHEJP SimEx experience: One Health foodborne outbreak simulation exercise for improving multi-sectoral emergency preparedeness

Gradassi M., Filipello V., Tozzoli R., Di Sabatino D., Anniballi F., Zenobio V., Finazzi G., Ventola E., Di Giuseppe A., D'Errico M.L., Scavia G.

Global Conference of Emergency Management, 3-5 April 2023, Paris, France





1 scientific publication on Italian SimEx experience (in progress)





## Acknowledgments to the Italian SimEx Team

#### **★ IZSLER, Brescia**

M. Gradassi (Local Exercise Leader, LEL)

G. Finazzi (Deputy Local Exercise Leader, dLEL)

V. Filipello (Local Evaluator, **LE**)





D. Di Sabatino (Local Exercise Leader, LEL)

A. di Giuseppe (Deputy Local Exercise Leader, dLEL),

V. Zenobio (Local Evaluator, LE)









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BfR



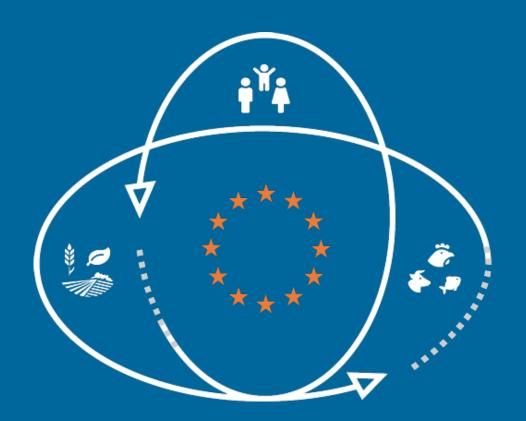
THL











Evaluation of the One Health European Joint Programme (OHEJP) simulation exercise (SimEx) —

An analysis on actions taken and lessons learned

Cristina González Pérez

One Health EJP Final Meeting

Paris, 11-12 September 2023



Methodology

Results

- 1. Perspectives
- 2. Challenges
- 3. Future exercises

Lessons learned

#### Introduction



The OHEJP simulation exercise (SimEx) was launched to assess and improve the collaboration between public health, animal health, and food safety sectors



A foodborne outbreak table-top exercise across 11 European countries



Promoting intersectoral cooperation and demonstrating the added value of employing the One Health approach in an outbreak situation



After SimEx was completed, individual interviews were conducted to assess its impact, actions taken, and identified challenges



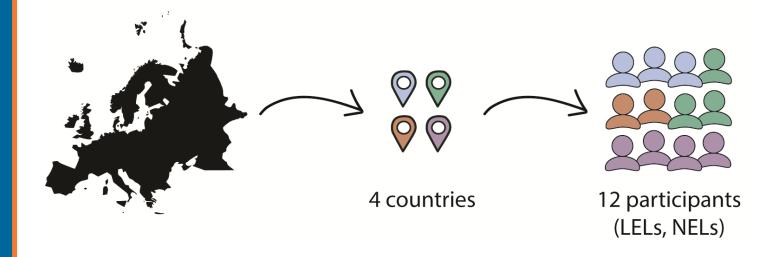


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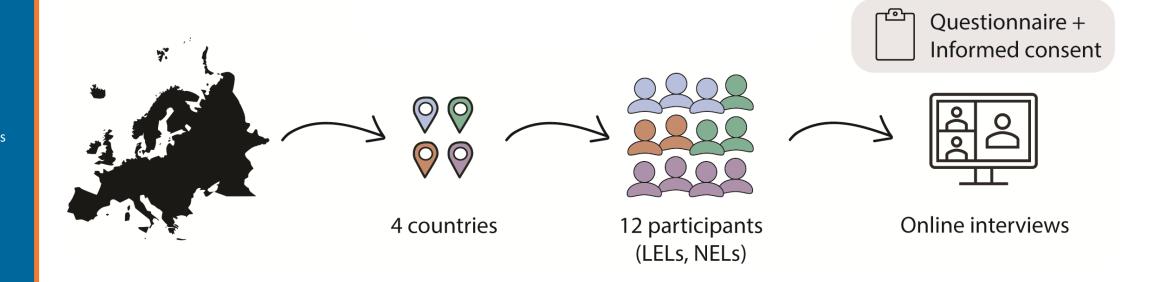


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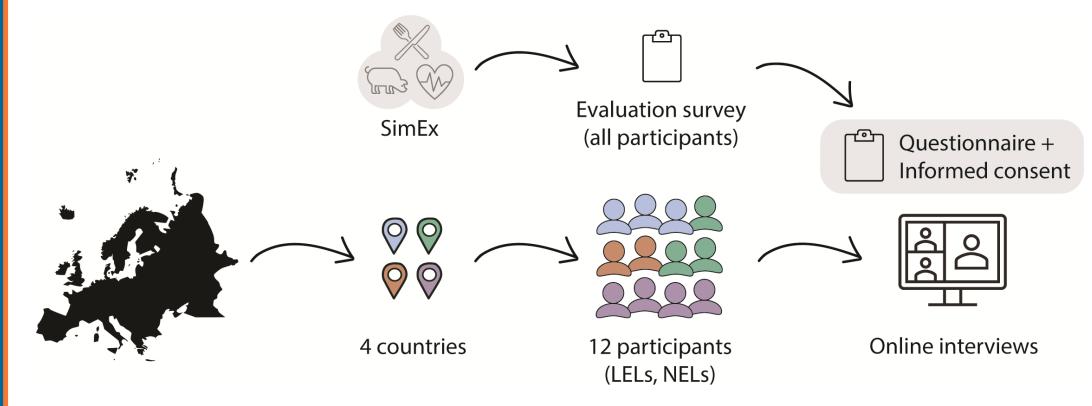


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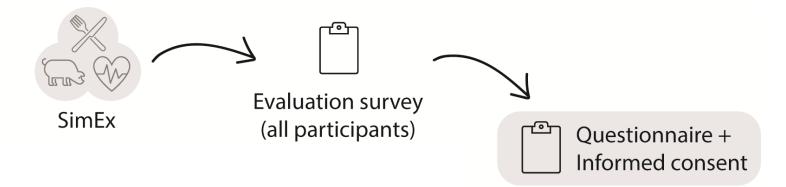


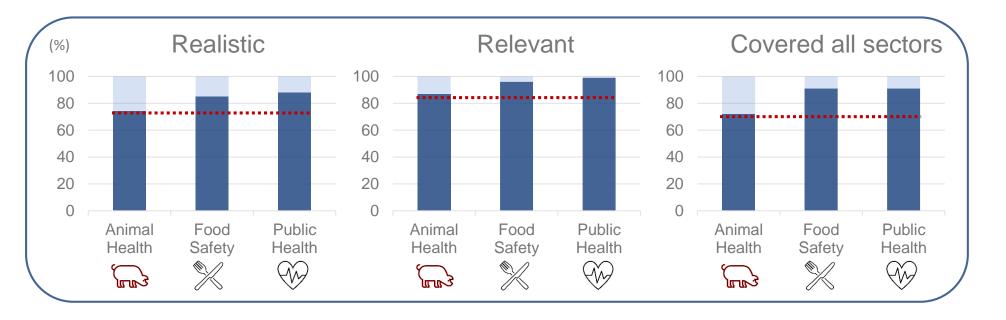
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Methodology

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## Perspectives from the different sectors involved in the SimEx

The animal health sector may have played a minor role during the exercise

"The exercise did not represent what we truly understand as "animal health" but focused on public health and food safety. [...] Previous exercises of this type have included the construction of a surveillance system for the disease in question and it has worked to boost the participation of this [animal health] sector."

The exercise contributed to forming connections between the animal health and the other sectors

"We [as animal health sector] have experienced a **stronger communication** with the public health sector. Now, at the local level, **we call each other when outbreaks occur, we exchange information, strains** and so on."

• Meeting face-to-face with the different participants allowed for the establishment and/or "Defining the different roles and functions was something new to" nals from all sectors us."





Methodology

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## Impact of the exercise: identified challenges

Need for political support from top of office and to involve actors in higher positions

"When it comes to outbreak investigations, the decisions are taken at a higher level, and, unfortunately, those were marginally involved [in the exercise]."

Discussion on resources, budget, or infrastructure, decision-making capabilities and needs

"Who is going to pay for this?"

 Some Member States, while aiming to apply the One Health approach, do not yet have an action plan to achieve their goal

"We are still at the stage of talking and not acting. For this, someone needs to lead the change."





Methodology

Resulte

- 1. Perspectives
- 2. Challenges
- 3. Future exercises

Lessons learned

## Future perspectives on simulation exercises

- Adaptation to each country's situation to achieve the necessary structure for the One Health approach (e.g., internal organization, structures and working language)
- Use of common terminology should be considered
- Dissemination of the main conclusions, results and recommendations is crucial
- After-action review exercises could greatly contribute to national preparedness plans

"The scenario was well presented but the actual **outbreaks have more challenges to address**. Most countries are aware of the "One Health" approach but may encounter organisational obstacles [...]. **Working on real challenges to be improved and identifying weaknesses** would be of high value."





Methodology

Results

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**Lessons learned** 

### Lessons learned



## All sectors were satisfied

Building a surveillance system for a greater involvement of the animal health sector



## SimEx resulted in relevant cross-sectoral work and discussions

Establishing a routine of meetings for continuity



#### **Implementation**

Show the value of the One Health approach to boost political will

Involve actors at all levels

Disseminate lessons learned



#### **Future exercises**

Adapt the scenario to each country

Perform national after-action reviews





### Lessons learned

Introduction

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**Lessons learned** 



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Perform national after-action reviews



## Institutional support



**Investment** 



Collaboration and communication



Good practices



Preparedness and anticipation







## Thank you for your attention!







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Moderator: **Ludovico Sepe** BfR

Dolores Gavier-Widén
OHEJP Sustainability Deputy Leader, SVA











# Outcomes of the Workshop on Institutionalisation of One Health

#### **Dolores Gavier-Widén, Stefano Morabito**

One Health EJP Final Meeting

Paris, 11-12 September 2023



## Workshop on the Institutionalisation of One-Health



- 21 June 2023, Natural History Museum, Brussels, Belgium
- In association to the Stakeholders Conference OHEJP
- Stakeholders invited to attend, approx. 70 attendees





### Programme

- ➤ Kenote presentation: SUSTAIN
- Panel discussion
- ➤ Institutionalisation: OHEJP activities
- > Round table discussion
- Conclusions and proposal for roadmap document



Part of One Health EJP Stakeholder Conference

## **Workshop on Institutionalisation of One Health**

#### MUSEUM OF NATURAL SCIENCES, BRUSSELS

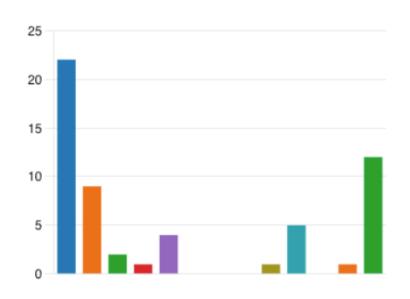
13.00 CEST	Welcome and purpose of the workshop Stefano Morabito, One Health EJP <u>Sustainability</u> , <u>Istituto Superiore di Sanità</u> (ISS), Italy Dolores Gavier-Widén, One Health EJP <u>Sustainability</u> , <u>National Veterinary Institute</u> (SVA), Sweden
13.10	Institutionalisation of One Health: Strategic Research and Innovation Agenda Stefano Morabito
13.25	OHEJP <u>SUSTAIN</u> project: state of play on One Health institutionalisation Sarah Humboldt-Dachroeden, <u>Roskilde University</u> , Denmark
13.50	State of play of One Health institutionalisation: statement-driven open discussion forum  Moderator: Dolores Gavier-Widén  Panellists (each will make short statements on the level One Health is institutionalised in their countries):  Henrik Ullum, Denmark  Ann Lindberg, Sweden  Myriam Sneyers, Belgium  Umberto Agrimi, Italy





## Attendees: sectors represented

•	Public health	22
	Veterinary	9
•	Food	2
•	Environmental	1
	Authority (national)	4
	Policy (national)	0
•	Press	0
	Societal	0
	Authority (International)	1
	Policy (international)	5
	Economics	0
•	Legal	1
•	Other	12



**DNA vaccines** 

**Policy Europe** 

**Behavioural Science** 

Nature Portfolio

food system area of One Health foster links

European Authority academic journal Nature Food

Health

**policy** veterinary medicines

veterinary academic research

research and policy



Funding agency Public health European Agency
Health and Environment



## Key-note presentation by Sarah Humboldt-Dachroeden





## SUSTAIN: State of play on One Health Institutionalisation

WORKSHOP ON THE INSTITUTIONALISATION OF THE ONE HEALTH SARAH HUMBOLDT-DACHROEDEN

21.06.202

#### **SUSTAIN**

Scientific UnderStanding of the policy process for Transboundary integration And INstitutionalisation of the One Health approach across Europe

Work Package 7: Sustainability

"WP7 explores operational means to sustain long-term research and innovation beyond the duration of the OHEJP. WP7 works on carrying out a systems analysis of the **drivers and constraints with regard to the successful institutionalisation of One Health**, which is a key precursor to sustainability."





## Key-note presentation by Sarah Humboldt-Dachroeden

#### Research question

What are the key institutional drivers and constraints on the effective implementation of the One Health approach?

#### **Findings**

- 1. Cross-sector collaboration challenges
- Mandates and priorities
- 2. One Health strategy
- Problematisation
- 3. Meaning of One Health
- Engagement of social & political science sector and the public





## Panel "State of play of One Health institutionalisation: statementdriven open discussion forum



#### Panellists:

- Henrik Ullum, Denmark
- Ann Lindberg, Sweden
- Umberto Agrimi, Italy

#### **Objective**:

To scan the various approaches used to identify and highlight major hindrances in implementing the One Health approach, and in particular addressing public health issues.





## Panel "State of play of One Health institutionalisation: statement-driven open discussion forum

In your country...

- To what extent is the OH approach implemented?
- > Does it include all the sectors and to the same extent?
- Is OH collaboration adequately funded?
- > National legal framework for OH implementation? If yes, connection with European frameworks? Or is it rather bottom-up/spontaneous?
- Would European framework(s) for OH be beneficial?
- What are the main obstacles to OH institutionalisation?

#### Conclusions

- > Lack of inclusion of the environmental sector
- > Absence of a legislative framework and of ad hoc investments
- ➤ Obstacles establishing effective cross-sectoral collaboration: lack of awareness of the benefits, of concrete One Health strategies, cross-sectoral integration perceived as invasion of sector-specific domains.





# Keywords attributed by the plenum to an ideal OH in Europe

- Collaboration
- Communication
- Political will and commitment
- Political courage
- Data Sharing
- Trust
- Coordination
- Mainstreaming
- Understanding
- Competition
- Health for all (human animal environment)
- System thinking
- OHEJP

- Good science
- Economic advantage
- Appreciation of other disciplines
- Sustainability
- No barriers
- Co-design
- Mandate
- Anticipation
- Equilibrium between sectors
- Global perspective
- Resilience
- Research and innovation
- Equity





#### Components of institutionalisation of OH in OHEJP activities

Capacity building: knowledge, achievements of Joint Research Projects; current situation and future needs

Hein Imberechts, One Health EJP Scientific Coordinator, Sciensano

Capacity building: resources, achievements of Joint Integrative Projects; current situation and future needs

Karin Artusson, One Health EJP WP4 Leader, National Veterinary Institute (SVA), Sweden

Capacity building: training and education programmes; current situation and future needs
Roberto La Ragione, One Health EJP <u>Education and Training</u>, <u>University of Surrey</u>

Science-to-policy transfer: current situation and future needs

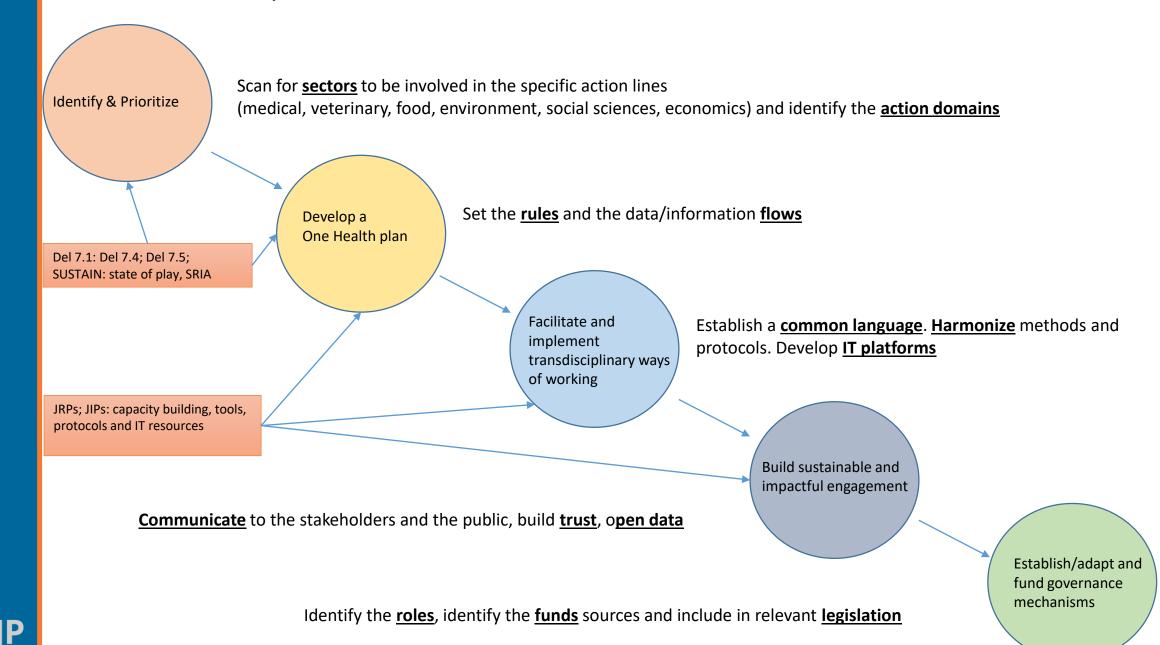
Annemarie Käesbohrer, One Health EJP Science to Policy Translation, BfR

Stakeholders' expectations: input from the Stakeholder Conference

Ludovico Sepe, One Health EJP Science to Policy Translation, BfR



## Roadmap for the institutionalisation of OH-discussion





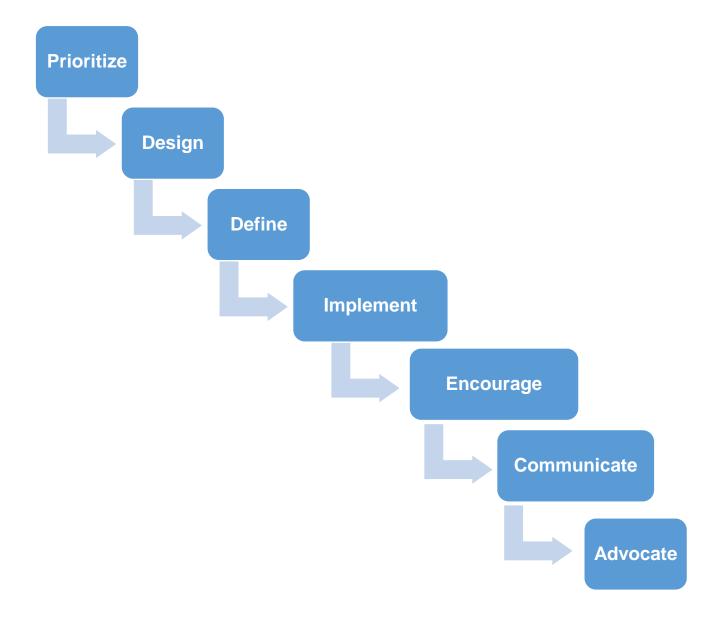
#### Discussion: data

- Data necesary to survey, analyse and manage public health issues such as zoonoses need to be produced in a harmonized way across sectors and should allow cross-sectoral interoperability. Some examples from OHEJP: <u>OH-EpiCap</u> Tool, <u>The OHS Codex: The</u> <u>Knowledge Integration Platform</u> and the <u>Food Safety Knowledge Exchange (FSKX) Format</u> (See <u>One Health EJP Outcome Inventory</u>).
- Data management, need to adopt a FAIRification process and shared ontologies, a central
  aspect of the One Health approach to allow for data sharing and communication. Data
  Management Plans at the beginning of the process of One Health institutionalization, to make
  any policy on the data efficacious for all the stakeholders. This process needs to consider the
  existing legal framework, e.g. GDPR, and the legislations for its national adoption.





### Process for the institutionalisation of OH









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