

# The One Health EJP: creating and reinforcing cross-sector collaboration, and efforts to turn science into policy



**Hein Imberechts, Sciensano, Belgium**

One Health EJP Scientific Coordinator

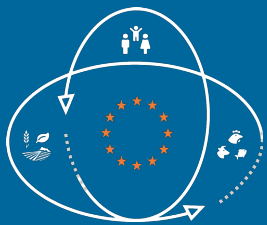
*ERRAZE@WUR*

25<sup>th</sup> of May 2022

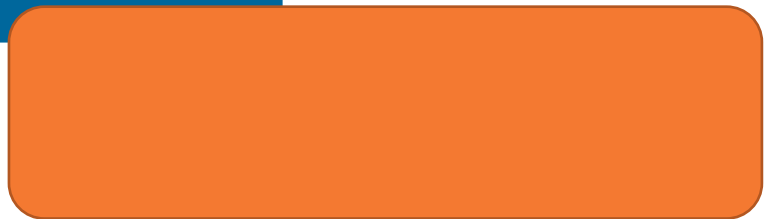


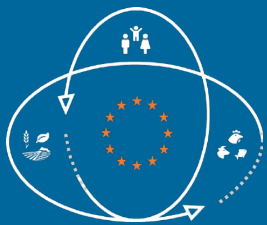
# Aim of the talk

- Aim of the talk
  - To present the **One Health EJP project** and its objectives, examples of results and outcomes.
  - To present the **strategy** used to reach out to stakeholders and **to encourage uptake** and **gain impact**.



# The One Health EJP: an introduction





# One Health EJP: key facts

- European Joint Programme Co-fund under **Horizon 2020**, 5 year project started in January 2018.
  - Coordination Team: [ANSES](#), France  
Scientific Coordinator: [Sciensano](#), Belgium.
  - 44 partners across Europe.
  - Partners have received **mandate** from authorities.
  - Total cost **€90M**, **50%** EU co-funded.
  - 24 Joint **Research Projects** and 6 Joint **Integrative Projects**.
  - Education & Training activities:
    - 17 **PhD** students
    - Short Term Missions, Workshops, Summer Schools and Continuing Professional Development modules.



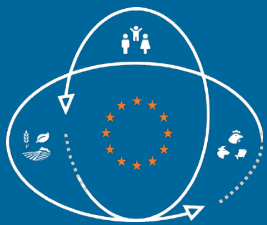
**5 YEAR** PROJECT



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



**44 PARTNERS**  
ACROSS EUROPE



# One Health EJP: 44 partners, 22 countries

44 partners across Europe:

Austria (AH, FS, PH)

Belgium (AH, FS, PH)

Bulgaria (FS)

Czech Republic (AH, PH)

Denmark (AH, PH, FS)

Estonia (AH, PH)

Finland (AH, PH, FS)

France (AH, FS, PH)

Germany (AH, FS, PH)

Hungary (AH, Public Education)

Ireland (FS)

Plus: [MedVetNet Association](#)

Italy (AH, PH)

Latvia (AH)

Lithuania (AH)

The Netherlands (AH, PH)

Norway (AH, PH)

Poland (AH)

Portugal (AH, PH)

Romania (AH)

Spain (AH, PH, FS)

Sweden (AH, FS, PH)


United Kingdom (AH, PH)



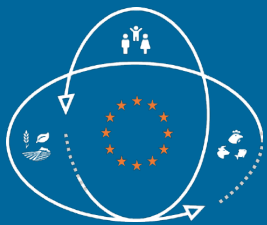
AH = Animal Health FS = Food Safety PH = Public Health



# One Health EJP: scope and budget

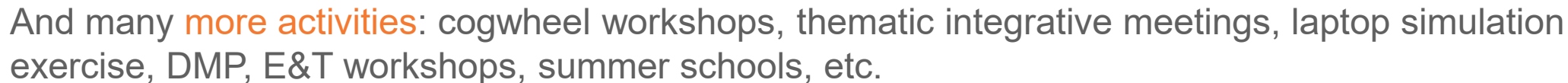
				
Zoonoses		Emerging threats	Integrative Activities	Education & Training
Foodborne Zoonoses	Antimicrobial Resistance	Zoonotic potential suspected Non-foodborne zoonoses Foodborne zoonoses	Joint data Harmonisation of protocols. Common frameworks for surveillance and control	17 PhDs 40+ STMs 5 Workshops 4 Summer Schools 4 Continuing Professional Development
Bacteria, viruses, parasites, prions	Transmission by food or not			
11 projects €28.2M	7 projects €15.7M	6 projects €12.6M	6 projects €20.8M	€4.0M

Total: €81.3M scientific and integrative activities; €56.5M: FBZ, AMR and ET



# One Health EJP: governance









# One Health EJP, Capacity building

- To bring **researchers** together: 24 JRP & 17 PhD
- To strengthen cooperation and collaboration to support surveillance and cooperation: **integrative activities** and 6 JIP
- To **train One Health experts** in surveillance, laboratory analysis, risk analysis and management ([webpage](#): 300 scientists over 46 countries)



## A legacy through our Education and Training activities

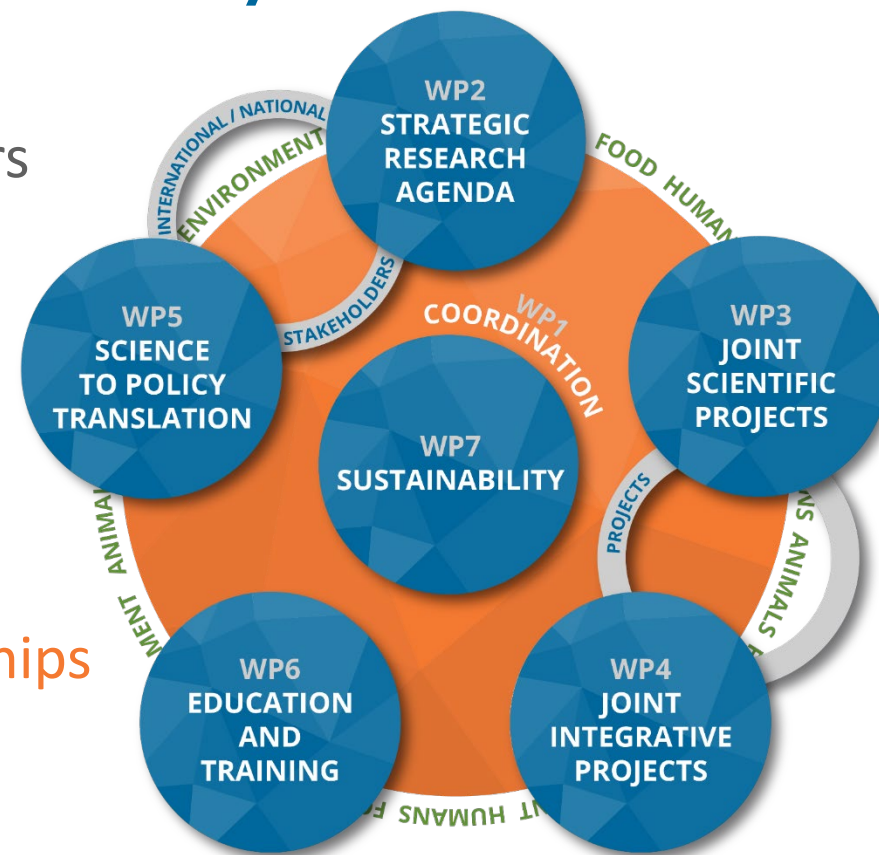
Since the start of the One Health EJP Education and Training programme in 2018, we have trained over 300 One Health scientists from 46 countries across the world. A key aim of these Education and Training activities has been to train the next generation of One Health researchers and ensure they are equipped with the skills to integrate their knowledge and skills with existing frameworks, and to challenge and improve One Health approaches.





# One Health EJP: sustainability

- To develop a credible **strategy** for the years to come, i.e. **SRIA**.
- Fostering strong relationships **to create a solid base** to improve and consolidate integrative actions among One Health EJP partners.
  - Especially through **Horizon EU Partnerships**





# Horizon Europe

- No One Health EJP 2.0 will be possible, unfortunately.



- The European Commission plans partnerships in either 'Cluster 1: Health' or 'Cluster 6: Food, bioeconomy, natural resources, agriculture and environment'; no One Health, cross-cluster approach.
- Role of [MedVetNet Association](#) as a legal entity; possible future European One Health forum, where multi-disciplinary research consortia with heterogeneous funding sources cooperate and exchange expertise across sectors and across borders to strengthen integrative activities and thus support the preparedness of all actors involved.

## Overview of 49 candidate European Partnerships

PILLAR II - Global challenges & European industrial competitiveness				PILLAR III - Innovative Europe	
CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture, ...	EIT	SUPPORT TO INNOVATION ECOSYSTEMS
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe	InnoEnergy	Innovative SMEs
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth	Climate	
Transformation of health systems	High Performance Computing	Single European Sky ATM Research 3	Climate Neutral, Sustainable & Productive Blue Economy	Digital	
Chemicals risk assessment	European Metrology (Art. 185)	Europe's Rail	Water4All	Food	
ERA for Health	AI-Data-Robotics	Connected and Automated Mobility (CCAM)	Animal Health & Welfare*	Health	
Rare diseases*	Photonics	Batteries	Accelerating Farming Systems Transitions*	Raw Materials	
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Agriculture of Data*	Manufacturing	
Personalised Medicine*	Clean steel - low-carbon steelmaking	Zero-emission road transport	Safe & Sustainable Food System*	Urban Mobility	
Pandemic Preparedness* Co-funded or co-programmed	Processes4Planet	Built4People		Cultural and Creative Industries	
	Global competitive space systems**	Clean Energy Transition			
		Driving Urban Transitions			

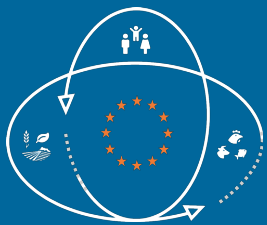
■ Institutionalised Partnerships (Art 185/7)  
■ Institutionalised partnerships / EIT KICs  
■ Co-Programmed  
■ Co-Funded

\* Calls with opening dates in 2023-24  
 \*\* Calls with opening dates not before 2022

CROSS-PILLARS II AND III  
 European Open Science Cloud

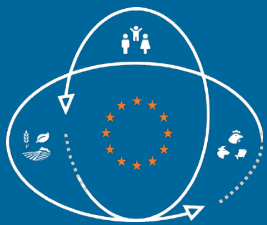
European Commission



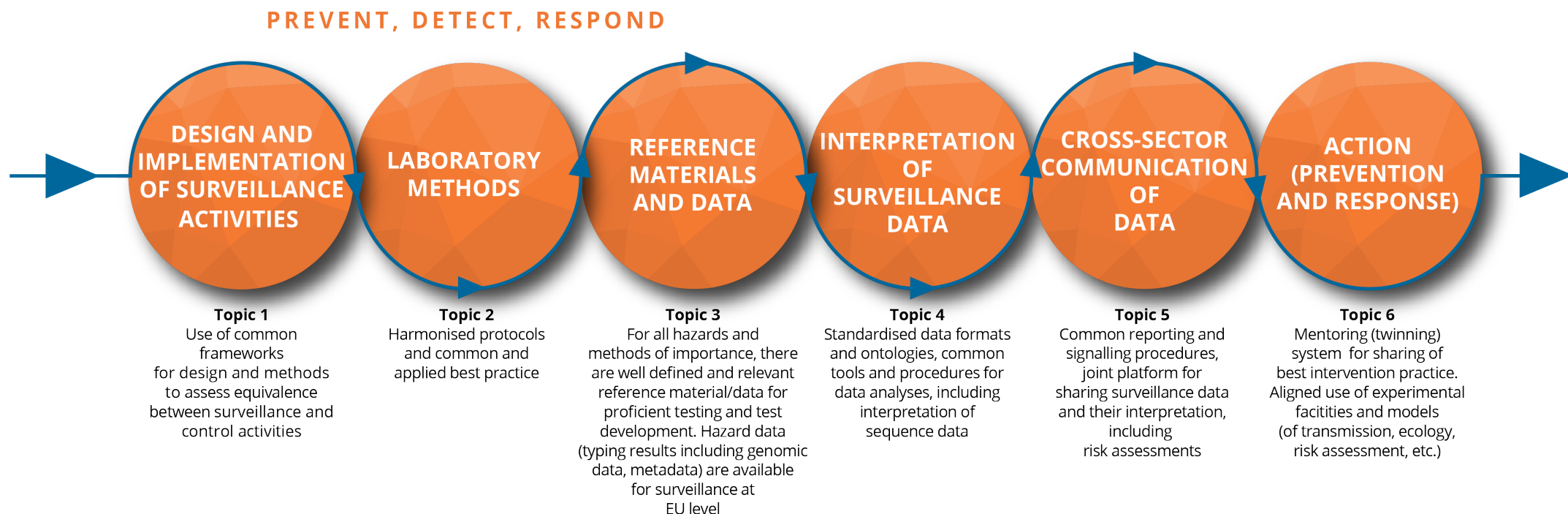


## Examples of One Health EJP projects, their results and expected impact

*Project Leaders*



# Integrative Strategy Matrix



Successive steps in setting up surveillance programmes, **preparedness**.



# Some examples, JRP



- **NOVA** Food-borne disease surveillance from a One Health point of view; novel approaches i.e. electronic purchase data and syndromic surveillance.
- **TOX-Detect** More performant MALDI-ToF database for the identification of *Bacillus spp.*, *Clostridium spp.* and *Staphylococci spp.*; harmonized SOP to share with diagnostic and reference labs.
- **LISTADAPT** Detailed characterization of a wide variety of *Listeria monocytogenes* strains will be useful as reference material for EURL Listeria and the food sector.
- **ARDIG** Data collection systems for antimicrobial use in animals; the project added to the JAICRA report by EFSA, EMA and ECDC; close collaboration with the network on AMR in animal pathogens, EARS-Vet.
- **MOMIR-PPC** Better understanding of the excretion of *Salmonella* in humans, pigs and poultry, to develop efficient measures to predict the most susceptible animals (or flocks) or to prevent infection (pre- and probiotics).





# JIP COHESIVE

- One Health Structure In Europe
- Outcomes
  - **Guidelines** to enable setting up a One Health Risk Analysis System (OHRAS) including several tools to facilitate risk assessment, signal sharing and integration.
  - An updated release of the tracing web portal **FoodChain-Lab** (included in Surveillance Information Sharing Operational Tool, SIS OT, FAO).
  - A prototype **information system** (CIS) that allows different databases to be interoperable.



The OHRAS consists of 6 activities, to be performed in a OH fashion:

## OH Signalling

Share information on zoonotic events with relevant organisations across sectors.



## OH Risk assessment

Scientific analysis of information on zoonotic hazards to provide risk managers with a risk estimate in a structured way.



## OH Feasibility assessment

Weigh suggested measures to reduce zoonotic risks by taking into account factors such as practicality, proportionality and acceptability, for/with relevant stakeholders.



## OH Risk management

Coordinate decision making on measures to prevent and control the effects of zoonotic diseases.



## OH Risk communication

Provide coordinated messages about the outcome of the OHRAS activities to the public at risk as well as other relevant stakeholders.



## OH Governance

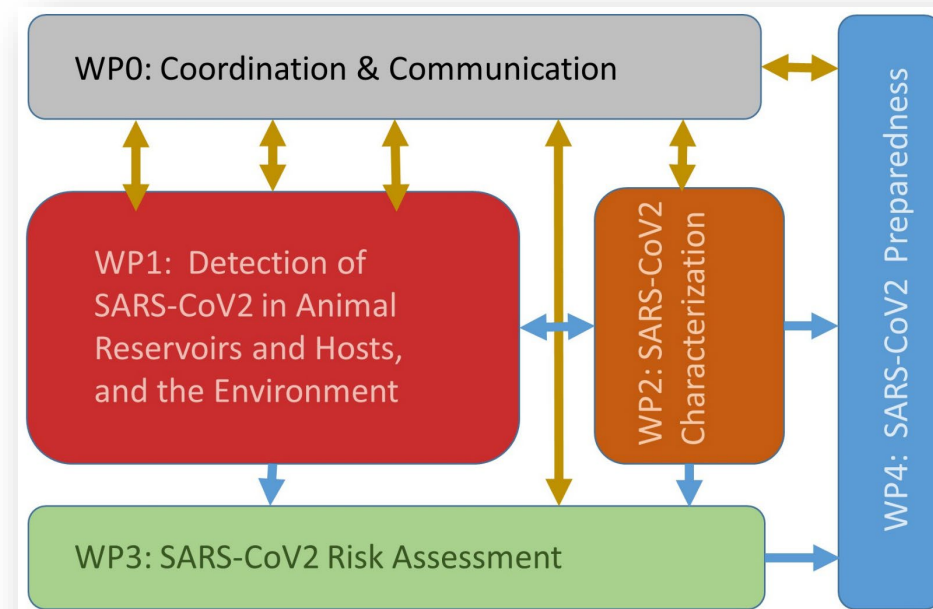
Give vision and direction to the activities of OHRAS ensuring clear and supported ways of working.





# JIP COVRIN: OH research on SARS-CoV-2 emergence, risk assessment & preparedness

- Two main objectives
  - A. To identify **drivers** for the emergence and spread of SARS-CoV-2.
  - B. To generate **data** and build **models** for risk assessment of SARS-CoV-2To achieve this, the COVRIN integrative research activities encompass four main areas:
  1. Detection of SARS-CoV-2 in **animal reservoirs** and hosts, and the **environment**,
  2. SARS-CoV-2 **characterization**,
  3. SARS-CoV-2 **risk assessment** and surveillance with a OH approach, and
  4. Coronavirus **preparedness**.

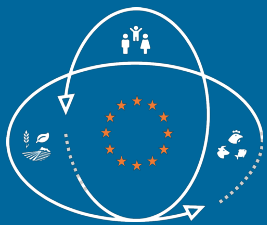






# PhD: LIN-RES

- LIN-RES: Investigation of the Molecular Basis, Origin, Transferability and Risk Factors Associated with **Linezolid Resistance emergence in Gram Positive Bacteria of Human and Animal Origin**; Sciensano, Université Libre de Bruxelles.
- Some resistance found **among healthy pigs and veal calves** against this critically important antibiotic for humans (MRSA, VRE).
- [Publication](#) (2021) and PhD (2022): Michael Timmermans.
- Norway has started in 2022 a linezolid selective monitoring based on this publication; awareness among human sector.
- Contacts with EUR-AR

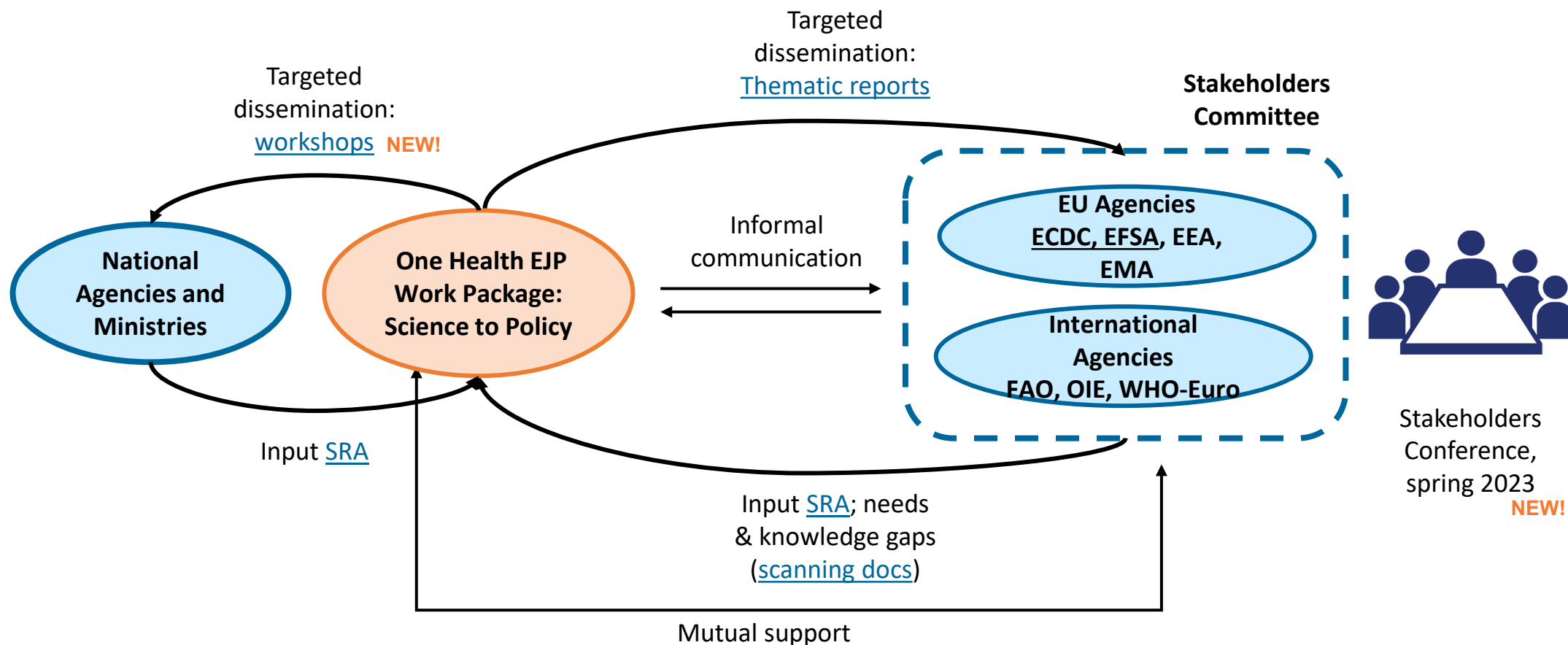


## Science to Policy & Dissemination of One Health EJP outcome

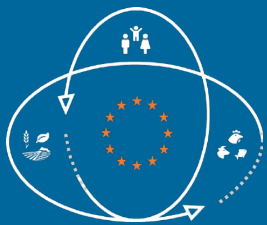
*Annemarie Kaesbohrer &  
Ludo Sepe*



# Stakeholder environment & engagement

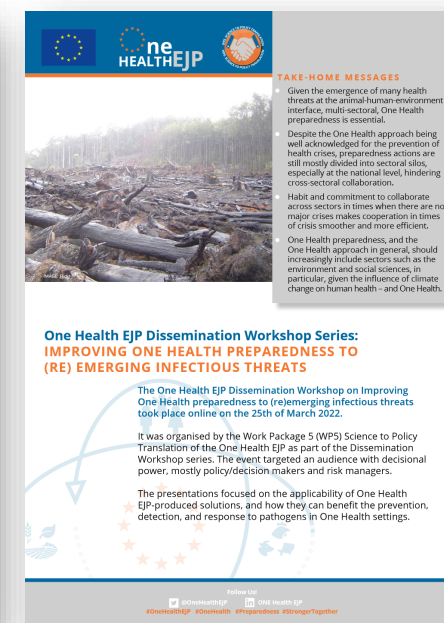
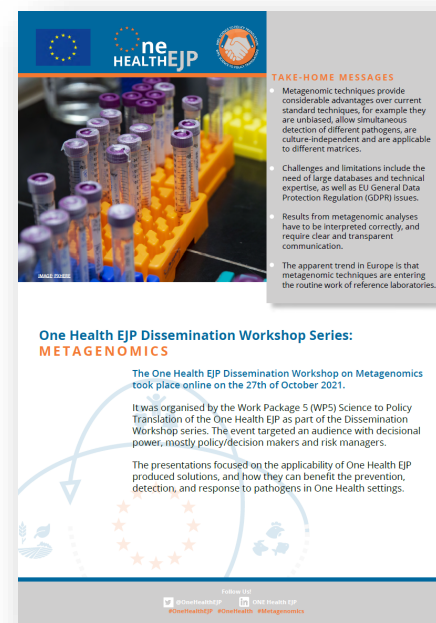


Dissemination of all deliverables through the One Health EJP **Outcome Inventory** ([OHOI](#)), support to **Data Management Plans**, **Stakeholders Conference**.



# Dissemination Workshop series

- Ongoing activity:
  - Addressing mostly **policy/decision maker and risk managers at national level**. EU and international stakeholders are welcome.
  - Focusing on **practical examples** of interest for the stakeholders: how are One Health EJP solutions beneficial?
  - Topics are based on interests of stakeholders: **Metagenomics** (Oct 2021) and **Preparedness** (Mar 2022)
- **Reports publicly available** on the WP5 webpage





# One Health EJP Stakeholders Conference

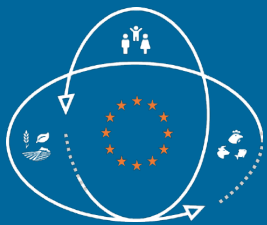
A standalone event **to reach out to policy/decision makers** at national, EU and international levels and that will take place after the finalisation of One Health EJP projects, so that solutions presented can be readily applied

- Aim: to have additional **impact** at the scientific, policy, societal and economic level
- Planned in **spring 2023**, two days
  - First day focus on national, European and international stakeholders
  - Second day focus on **wider scope** of stakeholders, including research institutes, larger projects, initiatives, industry, private sector etc.



# Going global

- WHO **Global Outbreak Alert and Response Network (GOARN)**
  - One Health EJP joined WHO-GOARN in 2020.
  - Contribution to GOARN strategy 2022-2026 in writing and at the Global Meeting of Partners (December 2021); take home message: One Health is too theoretical, need for operationalisation and application.
  - [Joint publication](#) with GOARN and One Health Commission on One Health networks and involvement in COVID-19 response.
- WHO **Regional One Health Coordination Mechanism**
  - One Health EJP joined the Partner Platform.
  - Contribution to the First Dialogue Meeting; take home message: some outcomes of One Health EJP can be used by the whole region of Europe and Central Asia.



# Going global

- **Preventing Zoonotic Disease Emergence (PREZODE)**
  - Providing support as One Health EJP and as partner institutes.
  - Contribution to PREZODE Europe Workshops.
- **Surveillance and Information Sharing Operational Tool (SIS OT)**
  - One Health EJP outcomes included in the tool (COHESIVE).
  - JIPs involved in the European pilot that will take place in Romania.

- EFSA's **ONE2022**

- One Health EJP Side Event: 22<sup>nd</sup> of June 2022
- Contribution by researchers, PMT and stakeholders
- Hybrid (broad outreach!)



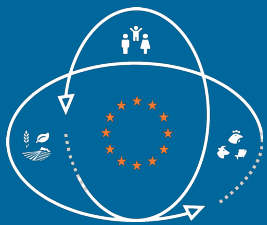
## SIDE EVENTS



### ONE HEALTH EUROPEAN JOINT PROGRAMME: LESSONS LEARNT FROM A EUROPEAN MULTIDISCIPLINARY INITIATIVE

The objectives of the side event are to: i) introduce the One Health European Joint Programme; ii) inspire and encourage all (from early career colleagues to high-level stakeholders) to learn about the One Health approach; iii) share experiences of working in a multidisciplinary environment; and iv) reflect on the One Health approach along with the benefits of cross-sectoral collaborations from a personal and professional development point of view at institutional, national and European level.

22 JUNE 2022, LUNCHTIME



# The One Health EJP Communication

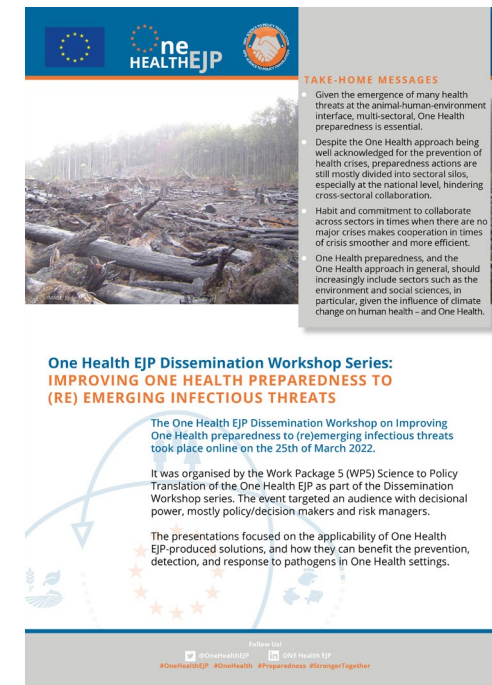
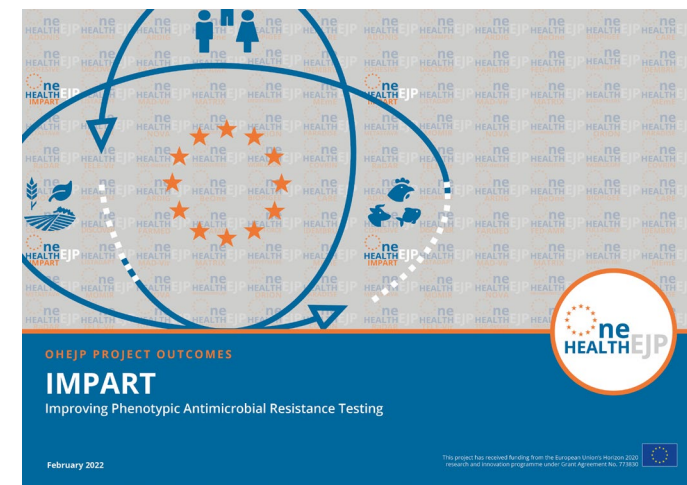
*Jennifer Cantlay, Aurore  
Poirier & Elaine Campling*





# Comms Team: dissemination tools

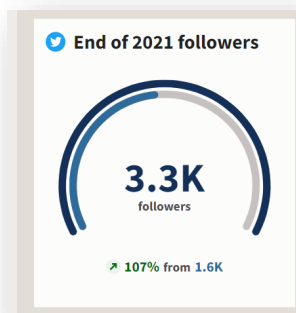
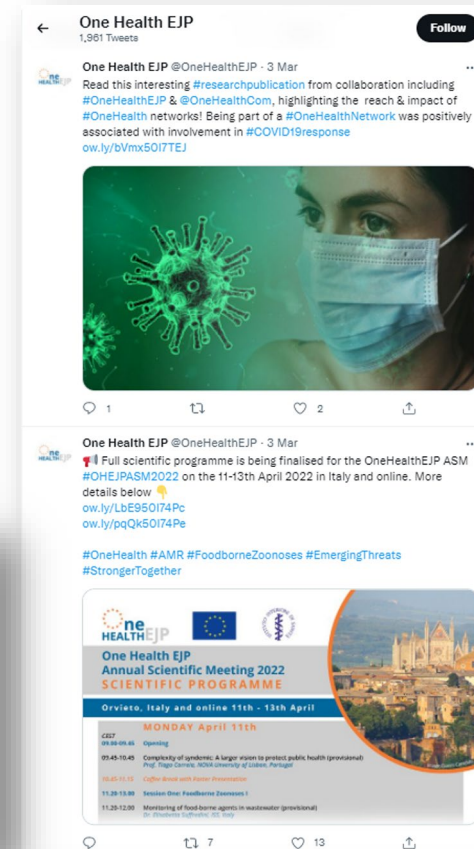
- To generate the most impact:
  - Bespoke end-of-project **project brochures**.
  - Brand-visible **social media campaigns** with content suitable for identified audiences using relevant platforms.
  - Internal and external **newsletters**.
  - Website** frequently updated.
  - Disseminating **key news** taken from meetings and events to demonstrate One Health EJP impact, project outputs and outcomes.
  - Upcoming: **Annual Report 2021**

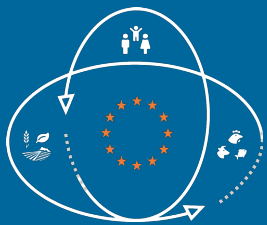




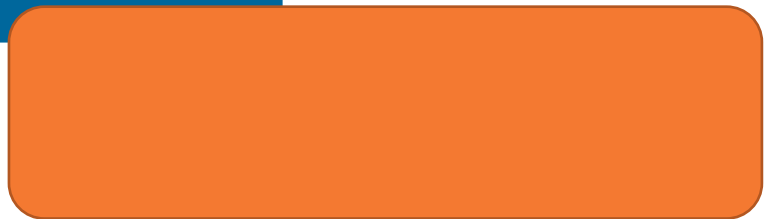
# Comms Team: social media

- Utilising the power of social media platforms to continue to grow our global reach: in 2021 we doubled our followers on both LinkedIn and Twitter.
- Campaign designed to promote OHEJP events, share our news, and generate interest in One Health.
- Content is created to suit target audience groups using highly visible branding and key messages.





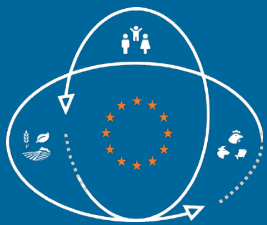
# Conclusions





# The strength of the One Health EJP

- The added value of the One Health EJP
  - Unique European network of **public health / animal health / food safety** organizations; **increasing One Health-ness** of its partners;
  - Results and outcomes with significant **cross-sector** value;
  - Alignment with national and international **stakeholders**;
  - Oriented towards **uptake & impact**.
- Fostering strong relationships to **build trust** and to create a solid base to improve and consolidate integrative actions, in **peace time**.



# Take-home message



- The One Health EJP has **many valuable outputs** and possible outcomes
  - Suggestions for improved surveillance, SOP for detection and characterization, repositories, data bases, etc.
- Regional and national programme owners, laboratory managers, risk assessors and risk managers are **invited to take up the outcomes**.
- The cross-sector, **One Health approach** is very profitable; the existing Med-Vet/Food network is an excellent basis for a **unique European One Health consortium!**
  - The legal entity [MedVetNet Association](#) is ready to take over!
  - The environment dimension should be further reinforced.

# Thank you for your attention!

[Hein.Imberechts@Sciensano.be](mailto:Hein.Imberechts@Sciensano.be)



@OneHealthEJP



/company/h2020-One-Health-EJP



OneHealthEJP.eu