



D6.7 Report on the second ASM Satellite Workshop

WP6: Education and Training

Responsible Partner: UoS (P23)



GENERAL INFORMATION

European Joint Programme full title	Promoting One Health in Europe through joint actions on foodborne zoonoses, antimicrobial resistance and emerging microbiological hazards
European Joint Programme acronym	One Health EJP
Funding	This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 773830.
Grant Agreement	Grant agreement n° 773830
Start Date	01/01/2018
Duration	60 Months

DOCUMENT MANAGEMENT

Title OHEJP deliverable	Report on the second ASM Satellite Workshop
WP and task	WP6, Task 6.2 'Workshop Programme (satellite to Annual Scientific Meetings)
Lead Organising Institute	National Institute for Public Health and the Environment (RIVM)
Lead Event Organiser	Kitty Maassen
Local Organising Committee	Kitty Maassen, Simon Ruegg
Collaborating Organising Institutes	University of Surrey (UoS) University of Zürich, Switzerland
Collaborating Organisers	Roberto La Ragione, Piyali Basu, Jade Passey, Elaine Campling, Dan Horton, Simone Severs-Mommers
Due month of the deliverable	24
Actual submission month	48
Type <i>R: Document, report</i> <i>DEC: Websites, patent filings, videos, etc.; OTHER</i>	R
Dissemination level	PU



<p>PU: Public (default) CO: confidential, only for members of the consortium (including the Commission Services).</p>	
<p>Dissemination Author's suggestion to inform the following possible interested parties.</p>	<p>OHEJP WP 1 <input checked="" type="checkbox"/> OHEJP WP 2 <input checked="" type="checkbox"/> OHEJP WP 3 <input checked="" type="checkbox"/></p> <p>OHEJP WP 4 <input checked="" type="checkbox"/> OHEJP WP 5 <input checked="" type="checkbox"/> OHEJP WP 6 <input checked="" type="checkbox"/></p> <p>OHEJP WP 7 <input checked="" type="checkbox"/> Project Management Team <input checked="" type="checkbox"/></p> <p>Communication Team <input checked="" type="checkbox"/> Scientific Steering Board <input type="checkbox"/></p> <p>National Stakeholders/Program Owners Committee <input checked="" type="checkbox"/></p> <p>EFSA <input checked="" type="checkbox"/> ECDC <input checked="" type="checkbox"/> EEA <input checked="" type="checkbox"/> EMA <input checked="" type="checkbox"/> FAO <input checked="" type="checkbox"/> WHO-EU <input checked="" type="checkbox"/> OIE <input checked="" type="checkbox"/></p> <p>Other international stakeholder(s): </p> <p>Social Media:</p> <p>Other recipient(s):.....</p>

Contents

Introduction.....	5
Theme and Overview.....	5
Aims and Objectives	6
Virtual Format	6
Programme Structure	7
Experts and Lecturers	8
Logistical arrangements	8
Promotional Campaign.....	9
Applications and selection procedure.....	9
Delegates	10
Course Evaluation	11
Certificates of Attendance	12
Post-event communications	Error! Bookmark not defined.
Blog Post	12
Testimonials	12
Photos.....	13
Internal Events Survey information	14
Annex: Full Promotional Flyer, agenda and further information PDF.....	15

Introduction

The emergence of zoonotic diseases poses a serious threat to both human and animal health. These threats can occur in any country, requesting actions in the different sectors and collaboration between sectors. The question is, are you prepared to deal with it in a One Health fashion? The goal of this workshop was to engage people to think about how signalling and response is organised in their country and who plays a role in it. For this we used systems thinking to open the perspective on opportunities to enhance the collaboration between sectors. The aim was to provide participants with insight into how signalling and response to zoonoses is organised in a specific country and who plays a role, insight into where collaboration between different sectors involved in zoonoses can be improved, and to give them with an insight into what systems thinking is and, how it can help with tackling complex problems. The experience of drafting a system map as a mechanism for drafting the context is useful for many situations.

Invitations were sent out to the COHESIVE mailing list and OHEJP internal mailing lists among collaborating institutes, interested institutes and countries, with encouragement to circulate the invites among others who might be interested..

We received 148 applications in total. There were 71 applications from 25 OHEJP member institutes (16 countries), 24 applications from non-OHEJP member institutes but within an EU country (11 countries) and 53 applications from institutes that were not OHEJP members and not from an EU country (22 countries, such as India, Nepal, Egypt, Iran, Ethiopia, Canada, but also the UK).

The participants were excited to be learning about systems thinking and the exercises they undertook during the workshop enlightened them on the potential and added value of using it in their country. The workshop took place on 8th October 2021 from 9am to 5pm CET, and was designed and delivered by Dr Kitty Maassen from RIVM and Dr. Simon Ruegg, a veterinary epidemiologist and experienced systems thinker at the University of Zürich, Switzerland.

Theme and Overview

The emergence of zoonotic diseases poses a serious threat to both human and animal health. The zoonotic pathogens can originate from livestock, pets, wildlife but they can also be vector- borne or dangerous because they are resistant against certain antimicrobials. It is clear that working towards a world with less zoonotic disease burden **requires collaboration at all levels and between the veterinary, human, food and environmental sectors**. In European legislations, regulations and for many (especially food borne) zoonoses surveillance systems are in place, providing early warning and timely response and control. However, it is not always realised that new and emerging zoonoses which are not monitored can become public and/or animal health threats. Every country can face such threats unexpectedly. Examples are BSE/CvJD in the UK and Q-fever outbreak in The Netherlands, and not to forget the current pandemic which started as a jump from animal to human. As a result of the above mentioned outbreaks, the UK as

well as The Netherlands have implemented an risk analysis system covering **signalling, risk assessment, risk management and risk communication in a One Health approach**. These One Health approaches are stimulated also by the Global Health Security Agenda (GHSA). One of the goals of the GHSA at the national level is to introduce an operational framework that supports multi-sectoral notification for outbreaks of suspected zoonotic origin in the early stage of emergence (prior to efficient human-to human transmission). The framework should address outbreaks that occur in both animals and humans at a similar time and/or place (https://www.cdc.gov/globalhealth/security/pdf/ghsa-action-packages_24-september-2014.pdf).

However, there is no blueprint for such **One Health risk analysis system (OHRAS)** due to different organisation of food production systems, organization of ministries, geographical factors, and differences in cultures between countries. In the One Health EJP project COHESIVE, **implementation guidelines** have been drafted to support countries to organise risk analysis activities at the national level. For countries who like to do this, it is important to determine the exact goal of the OHRAS and the **context** in which the OHRAS will be organised. In order to get insight in the context, the current **system** you operate in, a **systems mapping** approach can be very helpful.

Systems mapping is an approach used in systems thinking. In a nutshell, systems thinking is a method for looking at and talking about reality that helps us understand and work with complex systems that interact with their environment. It helps in conceptualising many elements that interact and behave together, and that are in their totality at times beyond our capacity to understand. System thinking allows us to analyse details without losing the sense for the whole entity. It offers a set of tools for capturing, analysing and communicating about systems.

Aims and Objectives

The aims of the workshop were:

- To identify the actors involved in the signalling and response of zoonoses of your choice.
- To gain insight in (missing) links and relationships between stakeholders.
- Get (some) experience in using systems thinking for complex problems.

Virtual Format

Originally, the workshop was planned during the ASM in May 2020. Due to COVID-19, the ASM was held online, and the workshop was postponed. Although it would have been preferable to hold this workshop as a physical event, it was clear that due to the ongoing pandemic, this would not be possible in the near future. Therefore, the workshop was reconstructed for an online workshop. The advantages are that it is easier for people to attend. Challenges were the brainstorming, and writing and drawing on the same paper, although all groups managed to successfully draw a map.

Programme Structure

A [programme leaflet](#) was created with information about the background, aims, who the workshop is intended for, how to apply, the selection procedure, structure of the workshop and how to prepare for the workshop. This included some videos on systems thinking that could be watched before the workshop. No further preparation for the workshop was necessary.

The workshop was first opened and followed by an introduction, motivations behind the workshop and the [COHESIVE](#) project was introduced. Simon introduced himself and all the participants introduced themselves and what they expected from the workshop. The participants were guided through the concept of systems thinking, in relation to 'zoonoses risk analysis', by doing several exercises by themselves or in break-out groups. In the first exercise participants were asked to draw a toast in 5 minutes. Then, participants were asked to show their drawing and briefly elaborate on what this drawing tells about who you are. This exercise shows clearly how many different views there are on a very familiar topic. The next exercises were related to systems thinking as a method. Beforehand, we drafted 4 scenarios of zoonotic diseases to be of help for the process of systems thinking. Next, people were asked to list the stakeholders involved in risk analysis of zoonoses in their country. People from the same country were in the same group and most the groups consisted of two countries. There was one group with people working at supranational organisations. Again, they could use the scenarios provided. The largest task was to draft a systems map in break-out groups, using the work done in previous exercises. All groups used a scenario provided and produced a map. The maps were plenary presented and discussed. Questions could be asked throughout the workshop. At the end of the round, a short transparent and open discussion was conducted to gather feedback of the workshop from participants.

Workshop programme:

CEST 09.00 - 09.15	Opening and introduction
09.15 - 10.45	Introduction to systems thinking
	<i>Coffee Break</i>
11.00 - 12.15	Development of a stakeholder map
	<i>Lunch break</i>
13.00 - 14.30	First draft of a 'systems map' for a zoonosis risk analysis system
	<i>Coffee break</i>
14.45 - 16.00	Continue drafting a 'systems map' for a zoonosis risk analysis system
16.00 - 17.00	Discussion and take home messages

Experts and Lecturers

Dr. Kitty Maassen (RIVM), coordinator of the JIP COHESIVE presented the motivations behind this workshop and the link to COHESIVE.

Dr. Simon Ruegg DVM (University of Zurich) was chosen to lead the workshop because he has been involved in the COST action NEOH (Network for the evaluation of One Health), in which they developed a method to evaluate One Health activities. This is based upon systems thinking in which he is very experienced and an advocate of. A similar kind of workshop is also part of the implementation steps in the COHESIVE guidelines to support countries in setting up One Health risk analysis systems.

Short biographies and photos can be found on the OHEJP website [here](#).

Logistical arrangements

We collaborated with the WP6 and Communications team, who were very helpful. We had monthly meetings to discuss things such as planning, logistics, flyers, program, procedures etc to ensure the event is delivered as intended on time and within budget.

The Communication team helped with the setup of an event webpage on the OHEJP website, designing the event logo, program, flyers, certificate, in line with the OHEJP branding. They also setup the application form and helped communicate the invitation through their website, social media channels and newsletters. After the event, they also setup an evaluation form, and wrote a blog which included photos and testimonials. It was a very pleasant and fruitful collaboration.

The workshop was really designed to be a physical workshop and it was challenging to adapt it into a virtual event. Primarily, because the brainstorming and drawing exercises are complex to perform online. Therefore, the workshop was postponed a couple of times, in the hope that a physical workshop could take place. This turned out to be unrealistic. It was decided to adapt the workshop to a virtual format after all, but it took some time to get everything arranged and we wanted to use experiences with live workshops. The Belgium workshop was cancelled, but the Norwegian was held in September 2021 and was a success. Eventually the core of the workshop remained the same as originally planned, but more difficult to lead. The workshop remained very interactive, with lot of individual and group exercises. The workshop was held on Zoom, where it was easy to create break-out rooms for the different working groups, and for trainers to visit the groups. To promote freedom of speech and stimulate discussions, it was decided not to record the workshop.

Promotional Campaign

The promotional campaign for the physical event started at the end of 2019 with a save-the-date flyer, This was uploaded to the [Summer School 2021 webpage](#), and shared through an email campaign to all internal mailing lists, on social media, the education and training monthly bulletins and our internal newsletters as this was a consortium event.

The webpage was updated with the full flyer, further information and application details. The application form was setup and collection of data was managed by the communications team. The local organisers performed the selection process for the physical workshop.

However, as this event was changed to a virtual format, the flyer document was updated with the new information, and the application call was re-launched. This can be found in the Annex of this report. The Communications team disseminated this launch through all internal mailing lists, on social media, and the education and training monthly bulletins. The mailing list included : the Programme Management Team, the Programme Managers Committee, Scientific Steering Board, Project Leaders, PhD students and supervisors, Communications team and our stakeholders.

Our two speakers provided short biographies and a photo which were uploaded to the website page and used as part of the campaign to increase interest leading up to the event.

The promotional campaign was a success, demonstrated by the number of applications received.

Applications and selection procedure

Invitations were sent out to COHESIVE and OHEJP internal mailing lists among collaborating institutes, interested institutes and countries, with encouragement to spread among others who might be interested as well (see promotional campaign).

In the invitation information, we specifically mentioned that it is essential to be committed the whole day.

We aimed for participants from public health, veterinary, food safety or other background that:

- Are working (or interested) in the field of zoonoses
- Are involved (or interested) in signalling, risk assessment, risk management or risk communication
- Feel that collaboration between sectors in the area of zoonoses is important and can be improved
- Are interested in applying systems thinking in your work
- Like to share experiences and knowledge with PhD students and vice versa
- Are a PhD student or a junior/senior professional.

We received entries from 71 participants from 25 OHEJP member institutes (16 countries), 24 participants from non-OHEJP member institutes but within EU country (11 countries) and 53 participants from institutes that were not OHEJP members or an EU country (22 countries, such as India, Nepal, Egypt, Iran, Ethiopia, Canada, but also UK). Also, 11 VIP participants from WHO, EFSA, ECDC, EMA and EEA applied for the VIP places offered by WP6 training event organisers.

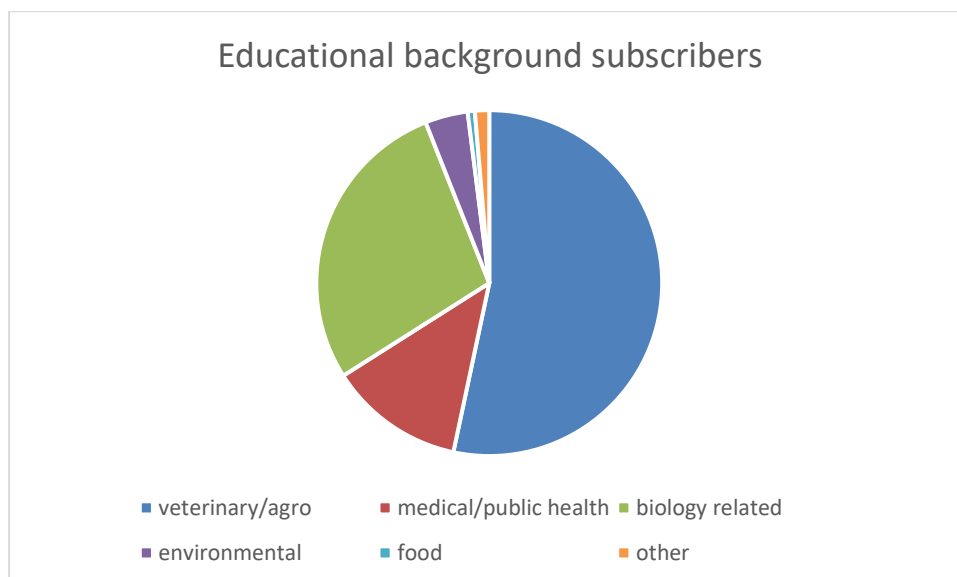


Figure 1. Specified educational background of the subscribers. Note that 1 person could have specified more than one education. Background of VIP subscribers from ECDC, WHO, EFSA, EMA and EEA not provided. Others: social sciences, physics.

Participants who were selected for the postponed ASM Satellite workshop in 2020 were guaranteed a place in this workshop. They were asked to confirm with the organisers that they were still interested. In addition, we strived for a broad mixture of applicants over countries, sectors and experiences. Countries with more than one participant were given preference.

Since it was stated in the invitation that it was intended for OHEJP partners, from the 71 applications from OHEJP partners, we selected 21 participants (including VIPs from WHO, EEA, EFSA, ECDC or EMA) from 12 countries for the workshop. We sent those that were selected an email. In here, it was stated clearly that if they were unable to join, they should let us know ASAP. so we could replace them for another interested applicant. All others received an email that they were not selected, but they may receive a new invitation if we organise additional workshops.

Delegates

In total, 21 participants including VIPs participated in this workshop. Delegates work backgrounds encompassed universities, public health, veterinary and food institutes, and European and international policy makers – ECDC, WHO, EFS and EMA, as shown in Figure 2. Participants belonged to the countries depicted in Figure 3.

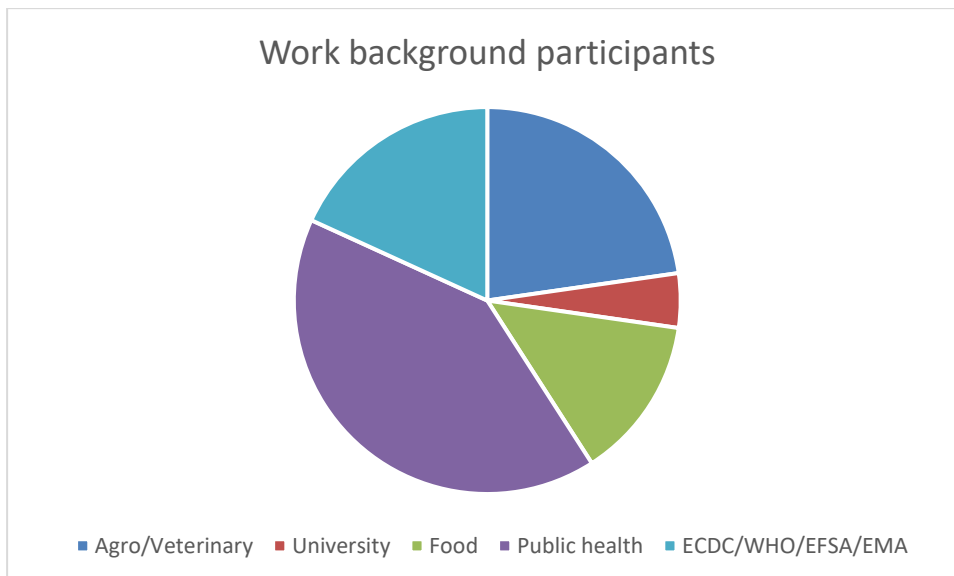


Figure 2. Work background of the participants.

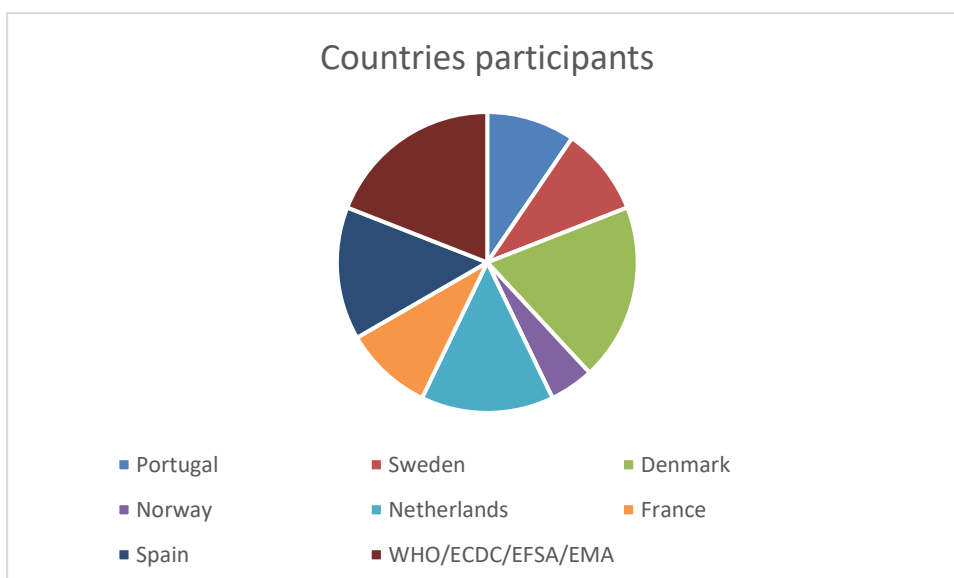


Figure 2. Countries the participants were from.

Course Evaluation

Evaluation was largely undertaken during the workshop. All participants were given the opportunity to provide feedback during the workshop and subsequently did so. In addition, an evaluation form was created with help from the WP6 team. Because we already received a significant amount of feedback, we took the decision to ask participants to rank the feedback already provided. Results were then collected by the WP6 team. Overall, the results were very positive, with an average rating of participant’s experience being 7.6/10. Testimonials from delegates collected throughout the evaluation period can be found in this report. Some suggestions to improve the workshop were provided and these will be implemented in future workshops. In addition, an anonymous survey

managed by the WP6 team which focused on equality, diversity and inclusion was also disseminated with the evaluation form.

Certificates of Attendance

The communications team supplied a branded certificate of attendance template. As organisers, we placed the name on each certificate by hand and sent these to each participant by email.

Post-event communications

Blog Post

The published blog post can be found on the One Health EJP website [here](#).

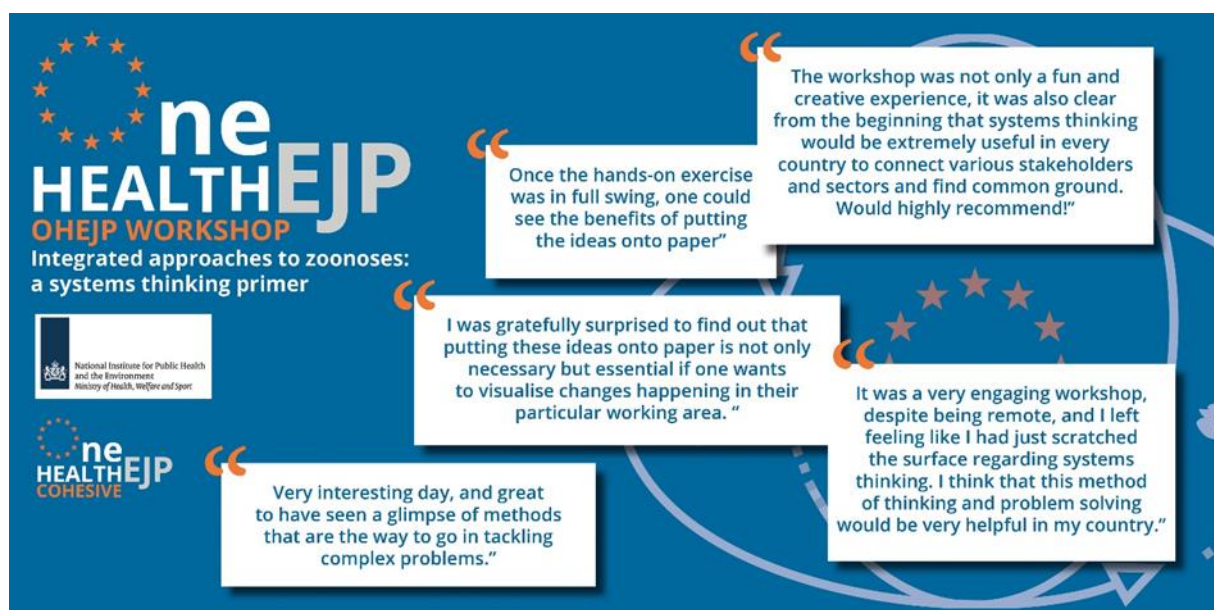
Work Package 6 worked closely with the local organising team and the Communications Team to publish this blog post promoting the highlights of the event, with testimonials and photos.

This was shared through the One Health EJP social media channels Twitter and LinkedIn, the consortium newsletter published in December 2021, and the monthly education and training activities bulletins published in November and December 2021.

Testimonials

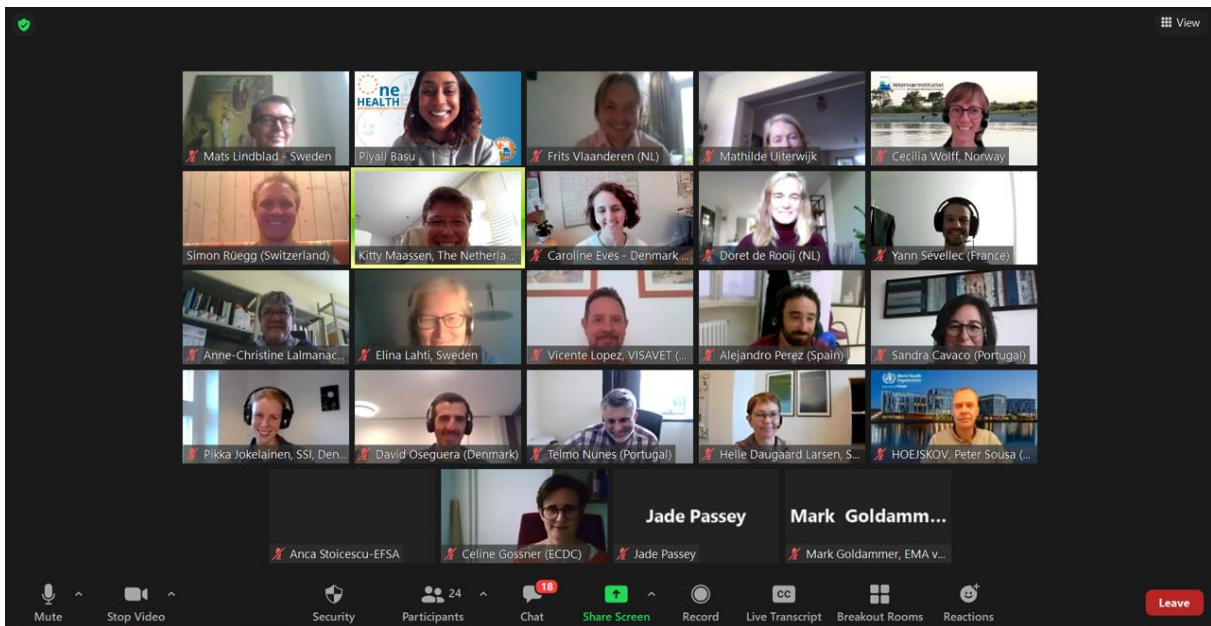
10 testimonials were collected through the evaluation forms, which demonstrated the success of the content, delivery, and interactivity of the event. A selection of testimonials were included in a montage (below) in the blog post.

[Examples of Delegate Testimonials collected](#)



Photos

Permission to publish these photos was obtained during the event registration process. All participants and lecturers provided permission to use these photos below.

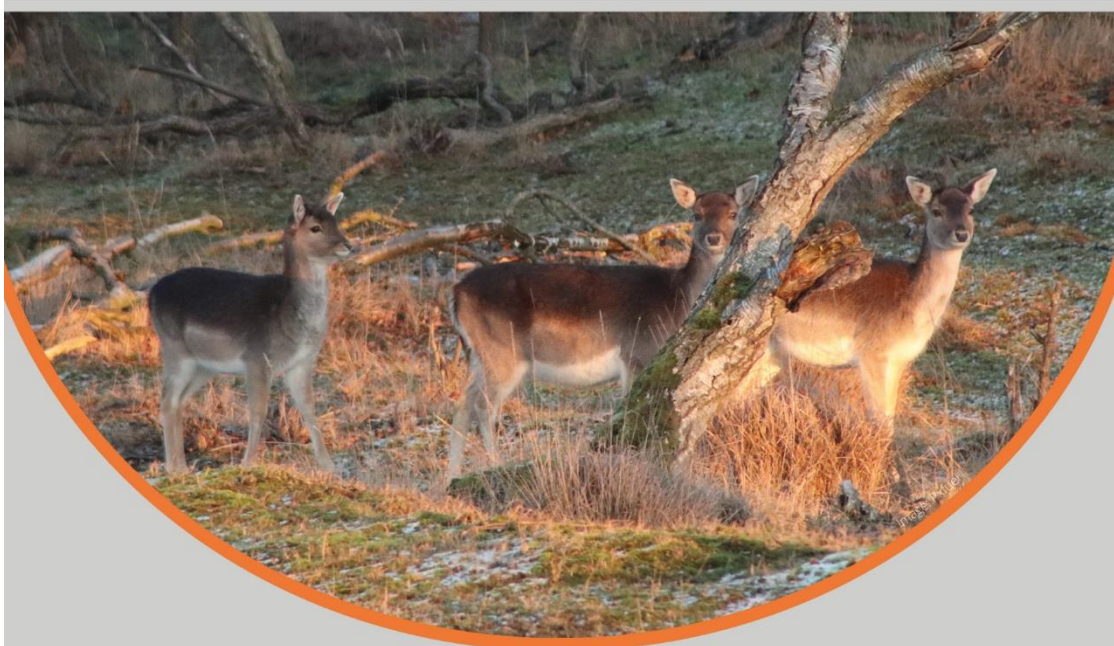


Internal Events Survey information

The European Commission (EC) requires all dissemination and communication activities, and events to be reported. This information has been reported through the [Internal Events Survey](#) on the OHEJP website, which collects data and is reported to the EC.

Name of the activity:	One Health EJP Workshop: Integrated Approaches to Zoonoses		
Date:	8 th October 2021		
Place:	Online (Zoom)		
Specify the Dissemination and Communication activities linked to the One Health EJP project for each of the following categories			
	Yes / No		Yes / No
Organisation of a Conference	No	Participation to a Conference	No
Organisation of a Workshop	Yes	Participation to a Workshop	No
Press release	No	Participation to an Event other than a Conference or a Workshop	No
Non-scientific and non-peer-reviewed publication (popularised publication)	No	Video/Film	No
Exhibition	No	Brokerage Event	
Flyer	Yes	Pitch Event	No
Training	Yes	Trade Fair	No
Social Media	Yes	Participation in activities organised jointly with other H2020 projects	No
Website	Yes	Other	No
Communication Campaign (e.g. Radio, TV)	No		
Specify the estimated number of persons reached, in the context of this dissemination and communication activity), in each of the following categories			
	Number		Number
Scientific Community (Higher Education, Research)	15	Media	0
Industry	0	Investors	0
Civil Society	0	Customers	0
General Public	0	Other	0
Policy Makers	6		

Annex: Full Promotional Flyer, agenda and further information



One Health EJP Workshop **Integrated approaches to zoonoses:** **a systems thinking primer**

Date: 8th October 2021

Location: Online

Audience: Attendance is free

Once the number of applications received have exceeded the number of places available, selection process will be applied; further details on the [website](#)

Participants who were selected for the postponed ASM Satellite workshop in 2020 are guaranteed a place in this workshop.



#OneHealthEJP #OHEJPTraining



If COVID-19 started in your country, would it have been tackled in a One Health approach?

The current COVID-19 pandemic makes clear that there will always be new and emerging zoonotic diseases that pose a serious threat to human, animal and/or environmental health.

This kind of threat can happen in every country, requesting actions in the different sectors and collaboration between sectors.

In this workshop we will inquire how signalling and response is organised in your country and who plays a role in it. This can be done by using an example you bring in or by a case we provide. We will use systems thinking to open the perspective on opportunities to enhance the collaboration between sectors.

Systems thinking is a way of looking at and talking about reality that helps us understand and work with complex systems that interact with their environment.

In this workshop we like to give you the opportunity to:

- Get insight in how **signalling and response** to zoonoses is organized in your country and who plays a role
- Get insight in where **collaboration between different sectors** involved in zoonoses can be improved in your country
- Get a peek into what **systems thinking** is and how it can help tackling wicked (= complex) problems
- Experience systems mapping as a way to draft the context, useful for many situations.

Participants Selection Criteria (full details on the [website](#))

- You are interested in applying systems thinking in your work
- You like to share experiences and knowledge with PhD students and vice versa
- You are a PhD student or a junior/senior professional
- Need to be able to commit to the whole day
- Although not a requirement, it would be nice if you could pair up with someone from your country, preferably from another sector (we can help with this).

Applications close midnight on the 10th September 2021:

[Register here](#)



Date: 8th October 2021
Location: Online

If COVID-19 started in your country, would it have been tackled in a One Health approach?

Introduction

The current COVID-19 pandemic makes clear that there will always be new and emerging zoonotic diseases that pose a serious threat to human, animal and/or environmental health. This kind of threat can happen in every country, requesting actions in the different sectors and collaboration between sectors. The question is, are you prepared to deal with it in a One Health fashion?

In this workshop we will inquire, how signalling and response is organised in your country and who plays a role in it. This can be done by using an example you bring in yourself or by a case we provide. We will use systems thinking to open the perspective on opportunities to enhance the collaboration between sectors.

What is systems thinking?

In a nutshell, systems thinking is a way of looking at and talking about reality that helps us understand and work with complex systems that interact with their environment. It helps conceptualising many elements that interact and behave, and that are in their totality at times beyond our capacity to grasp. System thinking allows us to analyse details without losing the sense for the whole. It offers a set of tools for capturing, analysing and communicating about systems.

In the workshop, we will look closer at stakeholder analysis and system mapping, two tools that are useful for disease management in general.

Watch this 2 minute introduction by the systems thinking pioneer Peter Senge at MIT.

Watch this 5 minute video about system thinking in public health.

A workshop in the framework of the COHESIVE project from the One Health EJP consortium

The workshop will be part of the project COHESIVE. The project is part of the One Health EJP consortium in which 44 European partners from 22 countries are involved. COHESIVE is led by Dr Kitty Maassen from the Dutch National Institute of Public Health and the Environment (RIVM). One of the aims of the project is to support member states in Europe in creating One Health approaches to strengthen the collaboration between food, medical and veterinarian professionals with respect to: early warning, response and control of (emerging) zoonoses. In order to support building and/or improving such a system at national level, currently COHESIVE is co-creating European implementation guidelines with several institutes and professionals from different disciplines. A systems mapping tool is part of these guidelines.

Why this workshop?

The emergence of zoonotic diseases pose a serious threat to both human and animal health. The zoonotic pathogens can originate from livestock, pets, wildlife but they can also be vector borne or dangerous because they are resistant against certain antimicrobials. It is clear that working towards a world with less zoonotic disease burden **requires collaboration at all levels and between the veterinary, human, food and environmental sector.**

In Europe already a lot is arranged in legislations, regulations and for many (especially foodborne) zoonoses surveillance systems are in place, providing early warning and timely response and control.



@OneHealthEJP ONE Health EJP
 #OneHealthEJP #OHEJPT raining

Date: 8th October 2021
Location: Online

However, it is not always realised that also new and emerging zoonoses which are not monitored can become public and/or animal health threats.

Every country can face such threats unexpectedly. Examples are BSE/CvJD in the UK and Q-fever outbreak in The Netherlands, and not to forget the current pandemic which started as a jump from animal to human. As a result of the above mentioned outbreaks, the UK as well as The Netherlands have implemented a risk analysis system covering **signalling, risk assessment, risk management and risk communication in a One Health approach**. These One Health approaches are stimulated also by the Global Health Security Agenda (GHSa). One of the goals of the GHSa at the national level is to introduce an operational framework that supports multi-sectoral notification for outbreaks of suspected zoonotic origin in the early stage of emergence (prior to efficient human-to-human transmission). The framework should address outbreaks that occur in both animals and humans at a similar time and/or place (https://www.cdc.gov/globalhealth/security/pdf/ghsa-action-packages_24-september-2014.pdf).

However, there is no blue-print for such **One Health risk analysis system (OHRAS)** due to different organisation of food production systems, organisation of ministries, geographic factors, differences in cultures between countries. In the One Health EJP project **COHESIVE implementation guidelines** are drafted to support countries to organise risk analysis activities at the national level. For countries who like to do this, it is important to determine the exact goal of the OHRAS and the **context** in which the OHRAS will be organised. In order to get insight in the context, the current **system** you operate in, a **systems mapping** approach can be very helpful.

In this workshop we will give you the opportunity to:

- Get insight in how **signalling and response** to zoonoses is organised in your country and who plays a role
- Get insight in where **collaboration between different sectors** involved in zoonoses can be improved in your country
- Get a peek into what **systems thinking** is and how it can help tackling wicked (= complex) problems
- Experience systems mapping as a way to draft the context, useful for many situations.

What will we do?

During this workshop we will give you an introduction to the world of systems thinking. We will discuss some reasons to apply systems thinking for today's health challenges. The full spectrum of systemic methods is enormous and very diverse - thus we will focus on two simple methods to engage in systems thinking when facing a problem.

As an exercise you will **draft a stakeholder analysis** of stakeholders involved in the subject of your choice, for example, you can apply this to AMR, foodborne zoonoses, one specific zoonosis, or all emerging zoonoses together, and you can also focus on local, national or regional level. You will also get experience in how to **sketch a "systems map"**. The choices made for the stakeholder analyses and the output will determine how to perform the systems mapping exercise.

Within the scope of your knowledge, the **primary aims** are:

- To identify the actors involved in the signalling and response of zoonoses of your choice.
- To gain insight in (missing) links and relationships between stakeholders
- Get a little experience in using systems thinking for complex problems.



Date: 8th October 2021
Location: Online

We strive to reach a better understanding of the interactions between the actors involved in the signalling and response of (the group of) zoonoses of your choice. Ideally two or three people from the same country, from different sectors should work on the same subject, but this is not a requirement. The workshop just gets you started on systems thinking and systems mapping. It is important to realise that these maps are living documents, never perfect and ideally should be evaluated and updated regularly. By involving other people in the reflection, these documents evolve.

With the first drafts of the stakeholder analysis and the 'systems map' you will then be able to:

- Extend the map with (identified) stakeholders
- Identify missing communication links
- Identify missing data and knowledge
- Gain a better understanding of the dynamics between different elements, sectors and disciplines, such as reinforcing and balancing feedback loops
- Gain a holistic view on biological and social dynamics in the field
- Think of steps to improve signalling and response of the chosen zoonoses.

This is something for you if 3 or more of the following apply:

- You are working (or interested) in the field of zoonoses
- You are involved (or interested) in signalling, risk assessment, risk management or risk communication
- You feel collaboration between sectors in the area of zoonoses is important and can be improved
- You are interested in applying systems thinking in your work
- You like to share experiences and knowledge with PhD students and vice versa
- You are a PhD student or a junior/senior professional.

Requests to participants:

- Due to the interactive nature of the workshop, it is **essential to be committed the whole day.**
- Although not a requirement, it would be nice if you could pair up with someone from your country, preferably from another sector. You can ask us to help you find an entrance looking for 'partners' in other organisations.

Selection:

Once the number of applications received have exceeded the number of places available, selection process will be applied. **Participants who were selected for the postponed ASM Satellite workshop in 2020 are guaranteed a place in this workshop.**

In addition, we will strive for a broad mixture of applicants over countries, sectors and experiences. Countries with more than one participant **will** have a preference.

Preparation: Some background documents will be provided before the workshop, but preparation in advance is not mandatory.

CEST 09.00 - 09.15	Opening and introduction
09.15 - 10.45	Introduction to systems thinking
	<i>Coffee Break</i>
11.00 - 12.15	Development of a stakeholder map
	<i>Lunch break</i>
13.00 - 14.30	First draft of a 'systems map' for a zoonosis risk analysis system
	<i>Coffee break</i>
14.45 - 16.00	Continue drafting a 'systems map' for a zoonosis risk analysis system
16.00 - 17.00	Discussion and take home messages

