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## **Deliverable JIP2-2.2: Inventory and ambition workshop**

### **Workpackage 2**

Responsible Partner: RIVM

Contributing partners: APHA, FHI/NIPH,  
ISS, WBVR, SVA



## GENERAL INFORMATION

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## COHESIVE workshop November 26 & 27 2018

APHA ([Animal and Plant Health Agency](#) in New Haw, U.K.) hosted the first workshop for the One Health European Joint Program funded [COHESIVE](#) Project. This workshop was a combined Inventory and Ambitions workshop on 'One Health collaboration dealing with new and (re)emerging zoonoses' (1) with a workshop on 'Data platforms to facilitate risk analysis and outbreak control' (2).

Group picture around the Christmas tree, Day 2



### One Health collaboration dealing with new and (re)emerging zoonoses

#### DAY 1

##### 1. Welcome

The workshop began with a word of welcome by Dr Sarah Evans of APHA. Dr Sarah Evans is Lead Scientist for Bacterial Diseases and Food Safety and APHA member of the EJP Scientific Steering Board.

##### 2. Introduction

[\[see pdf C1\]](#)

Kitty Maassen, the coordinator of the COHESIVE project, presented a brief introduction to the project, its goals and the program of the workshop. She also described the situation in The Netherlands (very densely populated with both people and animals) and what the incentives were for the government to set up an integrated human-veterinary risk analysis structure for efficient signalling, risk-assessment and control of (emerging) zoonoses in The Netherlands (Zoonoses Structure). A crisis, the Q-fever outbreak of 2007-2011, has accelerated the process of setting up this One Health structure.



#### Introduction by Kitty Maassen



### 3. Sketching Europe in zoonotic risks

[see pdf C2 & C3]

Valentina Rizzi from EFSA presented, via Skype, an overview of surveillance of zoonotic food-borne pathogens in Europe. Jolyon Medlock from PHE covered topics about a One Health approach considering vector-borne diseases.

#### Presentation of Valentina Rizzi, in a modern digital manner







#### 4. How are human-veterinary collaborations organised?

[see pdf C4, C5, C6 & C7]

The programme continued with a series of inspirational talks from scientists of 4 countries that are currently working in One Health, and the organisational structures that have been set up in each country. A representative from the UK, Dilys Morgan, presented the structure and experiences, including the do's and don'ts of the Human and Animal Infections and Risk Surveillance Group ([HAIRS](#)). Gaia Scavia from Italy presented the structural integrated One Health approach to zoonotic risks within the National Health System and the challenging situation on managing Hepatitis A food contamination outbreaks, due to the administrative complexity in a country where surveillance and reporting is undertaken at both regional and national level. Elina Lahti (Sweden) presented the collaboration between the Nordic countries. Denmark, Finland, Iceland, Norway and Sweden gather on a regular basis, to discuss topics that are of concern across the region, such as outbreaks of *Salmonella* in pets and humans. In the last presentation, Jürg Danuser from Switzerland gave an overview of the new dedicated One Health body and how they were involved in assessing the risk of Hepatitis E in Switzerland.

#### 5. Similarities and differences, results of the questionnaire

[see pdf C1]

Kitty Maassen presented the outcomes of the questionnaire that was sent to the participants prior to the workshop. The survey identified the four most often perceived barriers, which were discussed in the interactive session 'Working across domains'.

The four barriers towards multisectoral collaboration:

1. Existing structures, regulations and bureaucracy
2. Conflict of interests
3. Communication, including sharing of information
4. Geographically related barriers

#### 6. Interactive session 'Working across domains'

In four break-out sessions, the abovementioned barriers were discussed.

##### Subgroup 1 Existing structures, regulations and bureaucracy (Margreet te Wierik, Hendrik-Jan Roest)

During this session, differences in ways of thinking and approaches between veterinary and human structures were discussed. The impression was that professionals in human health structures first consider the risks concerning human health, before other factors, e.g. possible adverse economic consequences for farmers. However, the impression also was that professionals in the veterinary domain might consider other factors such as economic consequences first. This difference has much to do with the fact that the veterinary sector is more economically motivated and has more strict rules. Effective communication between the domains is essential to overcome differences in thinking and decision making.

##### Subgroup 2. Conflict of interests (Kitty Maassen, Ines Mogami Gonzalez)

In this subgroup, several conflicts of interest were discussed. The discussion started by stating that depending on the geographic area considered (such as regional versus national), there are differences in prioritisation. The following conflicts were discussed:

- Efficiency versus costs. This discussion focused on the effectiveness of interventions versus the costs of the intervention, for instance how to choose between vaccination or culling. The best science versus best politics, was mentioned to sketch these kinds of conflicts. The opinions might differ between the human and veterinary domain, but different opinions might also occur within one domain.



- Finances. The feeling of some participants was that issues in the human domain are generally prioritised higher leading to that domain getting money more easily than in the animal domain, even when it is about One Health issues.
- Lack of trust: several participants experienced a lack of trust. They stated that there should be mutual respect between people in the human and veterinary domain, including each other knowledge. When dealing with One Health issues there should be good communication, involving all parties.
- Data sharing. Mainly this was perceived as an issue regarding sequence data and epidemiological data. The competition issue was also mentioned. The main question here was: who owns what data? But this was not extensively discussed, since there was a separate subgroup for this topic.
- Prevention versus response. This was shortly mentioned as an issue when prevention at the animal side might be needed to prevent spreading of a pathogen/disease to prevent/minimise disease in humans. The view on the importance of such measures is not always perceived in the same manner in both the human and animal domain. Especially when no or only a few human cases are determined.
- Commercial parties. Could have both a positive as well as a negative influence on conflict of interests. On the one hand, there could be more collaboration and there could be more attention from the public to the topic of zoonoses. On the other hand, when there is negative news such as a potential outbreak, the commercial industry might tend not to publish this as such news can have a negative influence on their industry.

#### Subgroup 3. Communication, including sharing of information (Solveig Jore, Charlotte Cook)

These barriers need to be considered:

Structures need to be in place «in peace-time» to be able to work in a real outbreak setting. Formal meetings or settings must be established and ready to be used. To know each other and relationship building is of primary importance.

When an outbreak/signal occurs, it is important to have informal contacts to discuss the issue with (i.e. should we press the red button). Trust can very easily be lost if outbreaks are not handled with care and consideration.

Many found it difficult to know whom they should contact with what issue in an emergency/outbreak setting. Having formal structures set up would help address this issue, even though they may not be the right person to contact, but provide a focal point for an institute.

Different domains have different relationships with stakeholders. For example, the animal health sector relies on having a very good relationship with the industry to encourage passive surveillance submissions.

Different domains have different priorities (which then acts as a barrier) and then this can change the message and then impact other domains. It is important to remember that the public health message may not be the same as the message to the animal health sector, depending on the priority of the pathogen in question for each domain.

Regionalisation might act as a barrier (individual ways of working). The organisational set up within regions may differ significantly, so there might not be an exact one to one equivalent in roles and responsibilities. This can be problematic when trying to find people to contact.

We are missing these stakeholders: Wildlife and industry which could have advisory roles and provide valuable expertise when producing risk assessments.

#### Subgroup 4. Geographically related barriers (Gaia Scavia, Elina Lahti)

The subgroup discussed geographical barriers, the potential reasons for these and impact on the capability to respond to emergencies. Geographical barriers may exist between countries, between



regions within a country, or across countries. These barriers may correspond to differences in regional identities, cultural identities including language barriers or differences in capabilities between regions. Moreover, geographical barriers and borders imply administrative barriers and possible conflict in the chain of responsibility and competency. In some situations these barriers may lead to a lack of knowledge and even a reduced trust between ethnical or linguistic subgroups and competent authorities, which may obstacle the recognition or the response to emergencies. Also, geographical regions may have different epidemiological patterns which might hamper co-operation or understanding of the epidemiological situations in other areas. Prioritisation of One Health as a whole, or certain areas within One Health, may differ between regions which may lead to differences in budgets allocated in the different sectors to support the One Health approach. Deficiencies in financing or budget cuts may lead to insensitive or poorly-sensitive surveillance. One Health may also be understood in different ways. Regions, and especially countries, might have different political or cultural interests or legal constraints also depending on different experience in the past (e.g. epidemic crisis etc.).

Geographical barriers may be perceived differently between the veterinary, public health, food safety and environmental fields, both within and across countries.

In addition, lack of trust or lack of knowledge within the population or within special subgroups, such as migrant populations or ethnical subgroups may hamper early detection of a threat, communication, cooperation and thus weaken the risk management of a threat or a crisis.

## Day 2

### 7. [Cross-border data sharing for public health](#)

George Haringhuizen and Carolina dos Santos Ribeiro, two colleagues from RIVM involved in the Horizon 2020 project COMPARE, delivered this interactive session. Using online questions identified dilemmas around sharing data that were addressed through real - life examples.

### 8. [Introduction to ECDC's Event Threat Management System, and related activities \[see pdf C8\]](#)

Karin Johansson from ECDC (ECDC) presented the activities of ECDC and their new Event and Threat Management System (EMTS).

### 9. [Interactive session on cross border collaborations](#)

The interactive session on cross-border collaborations was introduced by two inspiring talks which summarised the activities carried out to face a cross-border epidemic crisis in recent years under different epidemiological, technical and legal conditions. The first was the perspective of an established network of NRL laboratories appointed by the EU Commission to cover one of the pathogens considered of priority in both public health and food safety. The second talk concerned the example of an emerging pathogen with no previously established framework for mandatory surveillance. The session started with a presentation by Rosangela Tozzoli on the role of the EURL for *Escherichia coli*, nominated by the European Commission in the Food and Feed area, coordinating the network of NRLs for *E. coli*, and collaborating with EFSA and ECDC. At the national level, the NRLs play a similar role in coordinating the network of the laboratories involved in the Official Control of foodstuff. Rosangela gave good examples on collaborations on investigations on multi-country outbreaks of STEC as well as on how the EURLs offer training, guidance and support to NRLs to fulfil their duties. The second presentation by Hendrik-Jan Roest had another angle of approach, namely on Q fever, a pathogen without a supporting network of EURLs and NRLs and clear rules on the responsibilities of the veterinary and human side. After these inspiring talks, the participants were divided into two groups to discuss the aspects of regulated zoonoses (led by Rosangela Tozzoli and Elina Lahti) and of non-regulated zoonoses (led by Gaia Scavia and Hendrik-Jan Roest).



Aspects on cross-border collaborations; for regulated zoonoses (group Rosangela Tozzoli and Elina Lahti):

- The existence of a Regulatory framework of Reference Laboratories implies the definition of the duties and the identification of the actors involved.
- The possibility to have a national molecular typing database on foodborne pathogens may help to understand the sources of infections and to underline the importance of such an EU-wide data collection
- In respect with foodborne pathogens monitoring and molecular typing, there is the perception that advice at National level may be needed
- the harmonisation of typing methodologies applied in the veterinary and public health sectors is pivotal to implement, nevertheless sometimes there may be different economic resources allocated between disciplines, hindering such a harmonisation process
- In the event of for example an outbreak investigation, it is challenging to establish contact across borders. It is easier to connect within countries.

On cross-border collaboration (WP3) participants are invited to be involved an exercise on retrospective analysis on a cross-bordering outbreak or signal.

The workshop was interesting and gave several good thoughts and ideas that could be used in creating the guidelines discussed at the end of the second day.

10. Aspects on cross-border collaborations; non-regulated zoonoses (led by Gaia Scavia and Hendrik-Jan Roest):

The EURL/NRLs networks have a very clear legal framework (reg. 882/2004) which makes it more easy to identify the tasks and responsibilities at both EU and national level. Each EURL/NRLs network deals with single agents or group of similar agents, leading to the existence of several networks exists in the EU. Beyond the role attributed by regulations to EU-NRLs, in many cases these networks have been increasingly called to play a role in providing expert scientific advice to the EU Commission, EFSA and ECDC especially during crisis or in support to the development of surveillance/monitoring plans. The regular meetings and exchange between the EURL and NRLs and the other competent bodies contribute importantly to realise a common understanding of the commitments and to support the overall network capability which is critical during epidemic crisis and emergencies. It was suggested that it would be helpful if a structural harmonised comprehensive One Health approach at the EU and NRL level could be developed.

As experts and based on past events, we can endorse the importance of EURLs/NRLs networks during emergencies. Such kind of networks should be considered in relation to the epidemic potential of pathogens which are orphans or emerging and not included in the EURLs/NRLs networks. It was suggested that it would be helpful when a structural harmonized comprehensive One Health approach at the EU (but also at national levels) could be build, especially for unregulated diseases. The EFSA zoonoses task force and other reporting networks (i.e. microbiological risks, TSE) already exist and have experts from all Member States. However, this group meets only once a year so it does not currently function for emergencies. Could this network be improved, and the terms of references change to include unprecedented situations?

These networks need to be set up in peacetime, and not during an ongoing outbreak.

At both the EU and the Member States level, the current systems for surveillance and monitoring do not routinely include Vet Med partnerships so there is a need to reinforce this partnership and to build that into any new networks that will be set up.

EFSA has a clear mandate from the EC to deliver data and analysis of zoonoses data/monitoring. The list detailed in the zoonoses directive is very exhaustive but the priorities are mainly food-borne.





The emerging diseases are problematic as they are not named in the annex B of the zoonoses directive. The priority list established by the zoonosis directive (Dir 99/2003/CE) has been sometimes challenged in recent years (e.g. Q fever, Hepatitis E etcetera).

In addition, it is not clear when a certain action should be taken, e.g. when to share information in the EPIS network, especially at a point when detailed information is missing (when is a signal a signal?)

The EPIS platform was of great help in many epidemic crises in recent years allowing for a less formal exchange of information among the experts at the EU level. An incoming problem for this kind of 'expert technical platforms' is that there is a conflict between the 'freedom' of informal sharing of the information on potential epidemic risks, which may be very useful at the beginning of food-emergencies, and the need for robustness for further formal rapid risk assessment of epidemic risks. Anyway, the lack of a platform similar to EPIS in food-safety and veterinary domains to widely share the information at the technical level (laboratories) is perceived as an important limitation. The recent advancements linked to the ECDC/EFSA joint database with increased accessibility of the food-safety sectors to the EPIS and Urgent Inquiry has partly mitigated the problem. The new ECDC Emerging Treat and Management System, which is under development, is also trying to tackle this problem.

The HAIRS forum does include some international sharing informally. Could it be possible to try and unroll this throughout the EU? Real-time? Retrospectively?

It is necessary to address the domain you are aiming at, e.g. public health and/or veterinary health. Still, the sensitivity of the data will be problematic.

A network itself is not enough if data sharing in outbreak situations or in suspicions of outbreaks cannot be shared. The formal exchange of data and informal exchange of information is needed. Previous experiences with alarms based on insufficient data (such as the association of Spanish cucumbers and *E. coli* O104:H4 outbreak) is not appropriate.

In most cases the alerts are useful, but these could go wrong as there is no consultation with items shared within EPIS.

The route for escalating issues is entirely different between animal health and public health. From the animal health side, there is no direct contact with ECDC.

An essential tool that has been increasingly implemented and used at the EU level, are rapid outbreak assessments (including the updates) which allow sharing all the relevant information on cross-border epidemic crisis publicly. These documents are useful to provide a comprehensive and shared understanding of the epidemiological situation and are very useful also to support risk communication to media and public opinion.

#### 11. Risk assessment; who, what (not), when and how?

[\[see pdf C9\]](#)

Charlotte Cook presented some of the background information produced from the literature search and questionnaire responses on the types of risk assessment methodology articles available. This is against the background of using and developing methodologies for One Health issues specifically.

#### 12. Interactive session Structured decision making

The structured decision making session aimed to produce some 'user stories' where the attendees could state what techniques are currently being used and the main reason for performing risk assessments. This information will be used to ensure the structured decision-making tool sorts risk assessment techniques on topics that are relevant to users. For example, attendees listed; outbreak support, source attribution and mitigation measures as some of the purposes for risk assessment. Therefore it will be important for the tool to include risk assessment techniques that are suitable in these circumstances and 'tag' them as appropriate. The suitability of methods for outbreak support may be linked closely to the speed of application and data requirements. Policy decision making and



surveillance activities were also listed as reasons for performing risk assessment. The methods available for this purpose may change considerably to the outbreak use as the data availability and uncertainty tolerance are likely to be very different.

The session also collected information on the users' likes and dislikes of particular methods. Such as the need for well documented sources of uncertainty and methods for combining risk scores. While the tool will not be able to evaluate methods, it may be possible to highlight where specific systems work well or provide links to additional sources that will help to mitigate some of the concerns raised.

### 13. Interactive session Towards the guidelines

[\[see pdf C10\]](#)

One goal of COHESIVE is to develop practical guidelines for countries to set up One Health collaborations. The session started with a brainstorm: 'What should be covered in the guidelines', 'In what detail (level of abstraction)' and 'In which format'? Then the contents of the Tripartite Zoonosis Guide (TZG), developed by the FAO (Food and Agriculture Organisation), OIE (World organisation of animal health) and WHO (World Health Organisation) in 2008 was presented. It turned out that the contents of the TZG nicely covers the items mentioned in the brainstorm. It was therefore concluded that the TZG will serve the purpose as a start point. However, since the TZG is a global guideline an addition focusing on the EU situation is desirable. It was concluded that the focus of WP2-task 1 will be on the implementation of the TZG and that check-lists, roadmaps or other elaborations could be developed as tools to establish strengthened collaboration between the human-veterinary (and environmental) domain.