

FEAM Forum – One Health in action: advancing cross sector collaboration

Introduction

Participants were welcomed by the webinar moderator, Dr. André Jestin (Chair FEAM One Health Committee and advisor to the Board, French Academy of Veterinary Sciences) who went onto to introduce the webinar. He is a veterinary doctor and scientist at ANSES, the French agency for food, environmental, and occupational health and safety. He has coordinated several research projects dealing with animal health, zoonoses and foodborne disease in a One Health approach. He has previously held positions as President of the French Academy of Veterinary Sciences and as Vice-President at FEAM. Thanks to the speakers. Many of the panellists are members of the FEAM Forum. The FEAM Biomedical and Policy Forum is an initiative developed by FEAM that brings together members from different sectors, fostering open discussion on biomedical policy issues.

The aim of the session was to highlight the importance of cross-sector collaboration in implementing the One Health approach, with contributions from multiple sectors. The webinar also hoped to showcase the role of boundary organisations in bridging disciplines and facilitating multi-sectoral cooperation. Speakers will discuss practical examples, institutional experience, and how One Health can shape research and policy.

The webinar was structured to allow each panellist to give a short introduction to their work collaborating across sectors in One Health before opening to questions from the audience.

This session explores how cross-sector collaboration across human, animal, medical, environmental, agriculture sectors and institutional boundaries can strengthen our collective approach to One Health.

Panellists were invited to reflect not only on institutional policy but on real world collaboration and barriers to implementation.

Four invited speakers are:

- Nancy DeBriyne, Federation of Veterinarians.
- Diana Texiera, Animal Health Europe
- Marija Jetvic, European Health Management Association
- Tuomas Aivelo, member of the SAPEA working group on One Health governance in the EU, and Associate Professor in XXX at the Leiden University.



Nancy De Bryine – Executive Director of the Federation of Veterinarians of Europe

One Health is one of the core topics of work for FVE. FVE is the umbrella organisation for veterinarians in 39 countries in Europe, in total representing approximately 330,000 veterinarians.

Starting from the OHHLEP definition of One Health, she highlighted the phrases 'closely linked and interdependent' as reasons it is necessary to work across sectors, disciplines and communities.

She went on to share the work of FVE on One Health, which covers a variety of aspects including AMR, and pandemic and disaster preparedness. The animal health sector is seeing new and reemerging diseases due to climate change, many of which can become pandemics. Pandemic preparedness is therefore critical and can only be effective through a One Health approach. FVE has a position paper on One Health in pandemic preparedness.

FVE have followed the pandemic treaty negotiations closely, giving input with concrete examples of how the sectors can work together in both LMICs and HICs. They have been very pleased to see agreement reached recently on the pandemic treaty. Other aspects of FVE's work on One Health include:

- Working with other organisations to strengthen the environmental pillar in One Health, which is still underrepresented and should be strengthened.
- Holding several webinars on high-pathogen avian influenza, which is worrying from a pandemic potential point of view.
- Working together with other healthcare professionals, producing infographics, webinars, and press releases over the course of 20 years. Nancy highlighted the value of these collaborations where every time these sectors meet, they see how much they can share and learn from each other.

Finally, Nancy shared her main takeaways – that One Health is much more than AMR, which is often focussed on by policymakers. It is also crucial in disaster preparedness, joint research programmes to tackle shared health risk, the availability of essential medicines (which is crucial to protect human and animal health), for sustainable, high-quality food and feed supply and to ensure sustainable healthcare workforces.

Question from the moderator André Jestin: from your experience how does the vision you have presented translate into the daily practice for veterinarians?

It is always a challenge to translate principles into practice. There are plenty of examples of things both veterinarians and human doctors are doing which are in the One Health field, even if they do not describe or identify it as such. Nancy gave three examples:

• If treating a pregnant woman who has a cat, the first thing both practitioners will think about is toxoplasma and preventing infection. The same applies for lime disease, ringworm, scabies. Whether in animal or human, it's necessary to think about the other.



- As healthcare professionals, we can talk about One Health with our patients and owners on AMR, the appropriate disposal of medicines, benefits of vaccination as examples.
- The human-animal bond there are benefits for mental health of pet ownership. Here it is important for a doctor and vet to work together to keep patients (especially if immunocompromised) and animals together and healthy.

Diana Teixeira - Public Affairs Manager Animal Health Europe

Animal Health Europe is the representative body of animal medicines manufacturers and industry in Europe.

Totally agree with previous speaker that One Health is more than AMR, it is also food borne diseases and pandemics, but importantly it is coordination collaboration, communication.

AHE have been conducting an awareness campaign to highlight importance and breadth of One Health. This campaign is supported by a position paper which includes actions for short, and medium and long-term to address what areas, beyond AMR, should be prioritised.

AHE's 10 areas for action:

- 1. Intersectoral collaboration and
- 2. Territorial cooperation and harmonisation One Health is an international topic spanning several professions.
- 3. Human animal bond which needs further exploration.
- 4. Research gaps in both human and animal health.
- 5. Leveraging synergies in terms of supply chains.
- 6. Raising public awareness and One Health literacy.
- 7. Transitioning to sustainable food production.
- 8. Responsible use of medicines.
- 9. Preparedness surveillance and early warning.

Diana's key message was the need to "team up!". AHE do this by working with other organisations, including some of the other panellists, for example EHMA's Special Interest Group on One Health, and with FVE on Pet Power Alliance and a platform for the responsible use of medicines. They also align with the work of SAPEA and the recommendations from the Group of Chief Scientific Advisors.

AHE also do sectoral collaborations across the area of animal health. How to take intersectoral collaboration to the next level? AHE want to apply an approach based one (1) regular dialogue, (2) rapid and early decisions, and (3) efficient use of resources. This would help move towards preventative approach. In the short-term, AHE recommends creating an EU One Health cross-border, cross-sectoral advisory group, to map the associations working in the area and existing initiatives. Second, an operational platform around preparedness and response, including users of medicines. Finally, coherence in all policies and all financing.

Finally, Diana shared information around AHE's conference 'Preventing Disease X – safeguarding animal health on July 3.



Takeaways: prevention better than a cure and preparedness is better than culling in animal health.

Question from the moderator André Jestin: how do manufacturers perceive their role in future strategies for One Health in Europe? Especially considering recent outbreaks and impact for human health.

If you want to make a change in the world, you start by changing your own - that is what AHE members are trying to do. Whether it is a formal One Health strategy or not, we need to be involved given the role animals play in transmission and pandemics. The sector is also looking at prevention. There is a need for more science-based solutions and vet expertise in an integrated way. Our members are contributing with research and development, vaccine production and distribution, partnering with governments and maintaining vaccine banks for outbreaks, enhancing supply chain resilience, public awareness campaigns, ensuring we contribute to the supply of safe and high-quality products, coordinate between members particularly in emergencies.

Our members are solution providers – for example, controlling foot-and-mouth disease in beef cattle can reduce emissions.

As well as the positive aspects already discussed, there are negative impacts too – for example the impact on farmers of animal culling.

AHE tries to empower farmers on One Health, through education and are trying to engage with others. For example, AHE is a member of Prezote and WilemID projects.

Marija Jevtic Scientific Advisory Committee EHMA and The Academy of Medical Sciences of Serbia

EHMA is a non-profit membership organisation which launched a special interest group on One Health in 2023. This group aims to advocate for One Health in health management and transcend boundaries between disciplines and sectors. Last year, the group produced a position paper as a pathway towards sustainable use of resources and unifying approaches in global healthcare systems inspired by One Health.

The One Health definition recognises the interconnectedness of human and animal health, but its management aspects remain underdeveloped. Therefore, we developed a definition of One Health Management which is a comprehensive and strategic approach that integrates leadership and coordination across human animal and environmental sectors. This approach is grounded in principles of effective governance, co-design, co-production, to take a coordinated approach to health threats that impact individuals and communities. One Health Management coordinates resources across sectors to ensure more equitable distribution and encourage long-term planning and investment in cross-sector infrastructure. This definition of One Health management has different applications in policy and research.

In practice it involves the development of integrated community-based initiatives that consider the full spectrum of factors affecting health and fostering of cross-sectoral collaboration and preventative measures to enhance hospital management, working closely with public health authorities, veterinary services, environmental agencies and the private sector.



EHMA also supports green skills through a One Health management approach, implementing educational programmes that foster collaboration and emphasise interdisciplinary training. They are developing curricular aimed at re-skilling and upskilling professionals with an emphasis on green and digital skills, and pandemic preparedness.

There are some important challenges to implementing One Health management:

- Persistent institutional siloes
- Sustaining long-term collaboration between diverse actors
- Resource allocation
- Cultural and institutional resistance to shifting long-standing priorities.

Question from the moderator André Jestin: How can occupational health managers more actively integrate One Health thinking into institutional practice?

We need to think about how we can improve education, reduce resistance and promote cross-sectoral collaboration between human, animal and environment health sectors. Particularly want to highlight environmental issues here and ensuring that occupational and environmental health are aligned with the broader public health goals. To do this, we encourage data and information sharing in line with open science principles. We are wanting to improve communication across sectors, to support early detection and intervention of health threats. We also need to build capacity and awareness – training for health professionals on the One Health approach.

Tuomas Aivelo: Assistant Professor of Biodiversity and Society at Leiden University and member of the SAPEA working group

Tuomas started by introducing his experience from a practice-based view on One Health. He introduced the approach to One Health and his research which has been on urban rats, sharing a slide which lists the different people and sectors work with this even when considering just one species (in this case, urban rats). For example, how to humans affect rats; how to rats affect humans; how does the ecosystems play here. So when focusing on one health and the urban environment – how to make it as healthy as possible for humans, we also need to think about how it can become has healthy as possible for other species (rats).

He works with a truly inter- and transdisciplinary group of researchers working on rats – cultural history, psychology, educational science as well as microbiologists, ecologists. They also work with other stakeholders, including property owners and maintenance, pest management and environmental health. These groups are brought together annually to discuss how to humans, rats and other species survive together in urban areas.

Tuomas was also part of the SAPEA working group who produced an Evidence Review Report, led by Tyra Grove Krause and Jakob Zinsstag. The report was published at the end of last year and the scoping paper which lays out the advice requests, the evidence review report and the Scientific Opinion from the GCSA who gave advice based on the evidence of the working group.



He highlighted a few findings from the report, centred on the chapter on 'leverage points' for building capacities and planning and implementing One Health policies. This Chapter includes two sections: a literature search on the benefit-cost ratios of One Health initiatives, and some specific case studies.

First, the results of the literature search. Much of the literature was on infectious diseases and was very anthropocentric in focus. Most common way of looking at the benefits of One Health initiative is to look at the economic values of human health and lives (e.g. DALYs or similar measures). There is room for diversification of measures of the benefits of One Health initiatives.

On the case studies, he first noted the variety of timelines of when these different projects and programmes were introduced. For example, trichinosis surveillance was established by the 1860s, whereas some, like One Health in cities, are much more recent but are now combining social justice, biodiversity, governance aspects and measures. Looking at the case studies, they tell us where one health is, where are the benchmarks and good practices in some areas, and what still needs to be done going forward.

Question from the moderator André Jestin: How can we ensure that One Health becomes a priority in FP10 and future European funding frameworks?

As can see in the evidence review report, there are well-defined research gaps now, and work is now needed to address these. So far research in One Health has been oriented towards zoonosis and AMR as well as human and economic benefits.

We are living in a time where we have multiple crises – environmental, social which lead to others like biodiversity loss and climate change. Human health is highly valued and so through linking it to these other crises can be important to help address these. Wildlife is a key issue – as was with Covid and Mpox.

We need a political understanding that human health is highly dependent on the environment and ecosystems of other species and then need to push actionable research questions and topics to address evidence gaps.

Moderated discussion

Moderator André Jestin then moderated a Q&A session with questions submitted by the audience.

What is the role of entomology in One Health?

Medical entomology is a dying art –that's true of a lot of aspects of biodiversity (e.g. taxonomy, classification of species). An obvious problem - there are a lot of species in the world – none more so than insects. There are modern technologies like barcoding and environmental DNA approaches which are increasingly used to understand, for example, where do mosquitoes live, what pathogens are they carrying. It is unclear whether there will be a return to these disciplines having as big a role as they once did in the life sciences, but these modern methods can support and provide high throughput measures in biodiversity. This work and the expertise here is incredibly valuable for the future.



What about communication and engagement with the broader public on One Health?

This is a key issue – especially in a context of a lot of fake news around health information. The type of organisations represented today have a crucial role in bringing out reliable information, e.g. on vaccination, to try and challenge these narratives. There is always room to do more. But there is always space to do more. Often the information and evidence exist but not always in the best format for public engagement.

How can we improve training for such a variety of professionals?

Training can be used to help connect different disciplines through running common training and CPD programmes, rather than separate ones for different professions. EHMA has a One Health corner at their conference – which invited different disciplines together to discuss this issue.

Interdisciplinary masters and PhD studies at universities should be explored – to prepare different disciplinary experts to work together and communicate to increase resilience in organisations tomorrow.