8th Meeting of the One Health High-Level Expert Panel (OHHLEP)  
11 & 12 November 2022 - Singapore

Note for the record

Day One-11 November 2022

Welcoming remarks

OHHLEP Chairs, Prof Thomas Mettenleiter and Prof Wanda Markotter welcomed the in person and virtual participants to the 8th full panel meeting and gave the floor the Quadripartite (QPT) Senior Technical leads for their welcoming remarks.

- Dr Barbara Haesler presented welcoming remarks on behalf of Dr Keith Sumption, Chief Veterinary Officer, Food and Agriculture Organization (FAO). She highlighted the success of the World One Health Congress (WOHC) that took place the days preceding this OHHLEP meeting and the influence and recognition of OHHLEP on an international level.

- Dr Doreen Robinson, Head of Biodiversity and Land, United Nations Environmental Program (UNEP) recognized and praised the strengthened integration of the environment in One Health (OH) observed in this edition of the WOHC.

- Dr Francesco Branca, Director Food Safety and Nutrition, World Health Organization (WHO) added that this congress provided a recognition of the work of the QPT as well as OHHLEP and their products. He thanked the organizers of this second hybrid full panel meeting. He also thanked Dr Danny Sheath (WHO), for leading the organization of the event with the help of Dr Chadia Wannous from the World Organization for Animal Health (WOAH) and the National Parks team in Singapore for hosting.

- Dr Jean Philippe Dop, Deputy Director General, WOAH highlighted the importance of One Health in the global agenda demonstrated by the various events happening this year. He also mentioned the Paris International Peace Forum taking place simultaneously, that witnessed two years ago the decision to create OHHLEP. He thanked the experts for their work and stressed the importance of the evidence-based scientific approach of OHHLEP in advising the QPT’s policy advice to their members.

- Prof Thomas Mettenleiter emphasized the level of maturity that OHHLEP reached since its inception and praised the reception of the One Health definition in the OH global community. He recognized the efforts and efficiency of the experts for the products delivered so far. He then presented the agenda for the day.

- Prof Wanda Markotter highlighted the interesting discussions during the WOHC and stressed the importance of the Panel deliverables and invited the Panelists to take an active role in discussing the way forward for OHHLEP and products.

Panel Session One: OHHLEP Thematic Group Updates and Products

TG1: Publication of the theory of change

TG1 co-leads, presented updates on TG1 activities and discussed next steps. They thanked OHHLEP experts and partners, particularly Dr Claudia Ciarlantini and team, who contributed to the OHHLEP ToC.

Discussion:
The OHHLEP Theory of Change (ToC) is published on the OHHLEP website/webpage.
- The ToC was designed to be aligned with the ToC of the OH Joint Plan of Action (JPA), but it informs OH actions beyond the QPT organizations.
- Further publicizing of the ToC is considered as well as translations to make it widely accessible.
- Multiple channels of publication will be used in order to reach different stakeholders, including scientists, decision makers and the broader public. Three main channels were discussed:
  - Publishing a Lancet commentary on the ToC detailing where it should be applied, with the objective of influencing the pandemic instrument (800 words commentary piece).
  - A more extensive version could be finalized and sent to the Lancet for a separate publication.
  - A broader outreach is considered through social media, perhaps using a video/animation of the ToC, including the OH definition and underlying principles. A separate post detailing each of the underlying principles could be considered.

Further discussions focused on the OH definition, the first product delivered by TG1:
- The OH definition has been broadly accepted and adopted within the scientific community and in political contexts (e.g., G20, G7).
- OHHLEP members were encouraged to always read out the entire definition in their presentations, and to mention the underlying principles.
- Request for a link to be added to the QPT websites for the PLoS Pathogens OH definition paper.
- Translation of OH definition and underlying principles to different languages were discussed, to allow their accessibility and endorsement by different regions/countries.
- The QPT partners are currently translating the OH JPA containing the OH definition. The time of delivery is still unclear, but they can be reviewed by OHHLEP once translated.
- The OHHLEP members were asked to translate the OH definition and guiding principles to the languages they master, not limited to the 6 UN languages.
- A translation of the OH definition and underlying principles was made in Spanish and very well received in Latin-America.

Action point/next steps:
- OHHLEP experts to translate the OH definition and guiding principles to the 6 UN languages and other languages within their capacity. Translation will be submitted for endorsement by OHHLEP.
- The translation of the OHHLEP ToC will be done at a later time.
- A video will be made for the ToC, to include OH definition and underlying principles.
- A follow up meeting will take place with TG1 to determine the way forward with the ToC.
- The OHHLEP ToC will be submitted for publication as a commentary piece in The Lancet.
- A more detailed article will be prepared by TG1 and submitted for publication.
- Secretariat to discuss publication strategy for the ToC and other OHHLEP products with the communication team.

TG2: New focus and update on the current state of advancement

TG2 co-leads Dr Casey Barton Behravesh and Prof Dominique Charron presented the ToRs and focus of TG2, recently updated.

1. Updating the assessment of OH implementation tools project
2. Reviewing the framework for the country level OH implementation
3. Best practice case studies
4. Advice on Framework for stakeholder mapping and engagement for implementation
5. Review of OH workforce initiatives and items relevant to workforce for the OH JPA

Based on the preliminary work conducted by partners and CDC on synergizing tools for OH assessment at country level, a concept-note listing the specific objectives has been developed and shared with partners and OHHLEP for feedback. Objectives of this piece are:
- To update the previous assessment published in 2019.
- Ensuring optimal outcomes for countries and regions using available and updated OH tools.
- To provide a framework with guidance, identifying gaps and priorities for the development of new tools, to further include the environmental dimension.

- This updated assessment will not imply endorsement of a specific tool, nor will it be prescriptive, it aims at highlighting several potential approaches to link and coordinate the implementation of available OH tools.

- The following timelines were suggested for delivery:
  - Draft/pilot data base of OH tools will be shared by mid-November 2022 for feedback, comments and suggestion of additional tools, until mid-December.
  - Analysis on the updated database and drafting of a document for OHHLEP and partners review, will start early January to be finalized in mid-April.

- The importance for technical focal points within each organization was stressed, to answer enquiries and inform on this work.

**Discussion**

- TG2 co-leads welcome the participation of OHHLEP members or partners to support the ambitious agenda of TG2.

- **Prof Thomas Mettenleiter** suggested a full panel video conference to address and support the remaining activities within the thematic groups, in this case TG2.

- The areas where TG2 needs support are, i) finalizing the database of tools and update of an algorithm aligned with OH definition and JPA; ii) conducting the analysis of the tools that will be translated in a document as a final deliverable.

- This work will provide a living database that will provide various information on the different existing tools that will serve the QPT in assessing the OH implementation with relevant tools, it will also be a resource for OHHLEP that will outdate the current mandate.

- Other groups such as Afrohun are prospecting for tools and this database can inform further initiatives in assessing the OH implementation.

- It was suggested to design a tool that could cover the existing gaps in the OH assessment.

- Partners welcome this project and could use a list of recommendations linked to this project to accompany the QPT, in the implementation phase.

- The confidentiality issue was raised, OHHLEP is ready to respond and advise on similar issues that the QPT might have and will support with their expertise.

**Action point/next steps:**

- Designation of a contact person in each QPT organization to respond to enquiries.
- Plan an extended TG2 meeting with OHHLEP experts willing to participate.
- OHHLEP members to provide comments on the draft/pilot database and recommend any additional tools to include by 16/12/22.

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**TG3: OH aligned surveillance system, peer review manuscript and recommendations**

TG3 co-leads **Prof Marion Koopmans** and **Prof David Hayman** presented updates on the OH aligned surveillance system, and associated recommendations.

The paper is almost ready and will soon be submitted to a peer reviewed journal following a final review by the Bureau, the journal targeted is The Lancet.

**Discussion:**

- The recommendations document is an overarching list to the Quadripartite, not specific for each organization.
- The driver-based surveillance is a new concept for the organizations and might need more clarification in the recommendations.
- The recommendations should identify the gaps in surveillance, e.g., the environment aspect, wildlife, etc.
- Using some best practice examples in the surveillance was suggested to make the recommendations more tangible for the QPT.
Panel Session Two: External presentations

Maria Van Kerkhove (WHO) – Mapping zoonotic disease hotspots
Dr Maria Van Kerkhove, Head of the Emerging Diseases and Zoonoses Unit WHO presented their current work on “mapping of zoonotic disease hotspots”, conducted in collaboration with the University of Washington.

- This project uses data from multiple sources to understand the mechanism of disease spillover and multiplication. It builds on multiple existing maps, often focused on specific diseases.
- Data grouped from existing maps, including different factors relevant to different OH sectors.
- It will involve surveillance and capacity building at the most local level for an early risk detection and identification of a pathogen emergence or reemergence.
- The pilot phase will focus on 12 countries only.

Discussion:
- The group of Maria Van Kerkhove is seeking collaboration and partnership with scientists in their personal capacity and as groups for feedback and suggestions. OHHLEP and experts can be collaborators.
- The problem of data quality and availability was stressed.
- The University of Teramo are leading a similar project called “EcoRegion”
- OHHLEP co-chairs proposed regular contact with this project, Prezode and SAGO.

Action points/next steps:
- Consider/discuss collaboration and feedback from OHHLEP regarding the hotspot mapping.

Franck Berthe (World Bank) - Overview of the World Banks’s OH portfolio
Franck Berthe, Senior Livestock Specialist in the Agriculture Global Practice of the World Bank presented an overview on the World Bank OH portfolio. The World Bank has raised the bar on One Health, planning a program to allow countries to borrow funds to strengthen their health system and promote the OH approach. 19 billion USD funding is open to Low Income Countries (LIC) & Middle-Income Countries (MIC).

- Most countries borrow money from the Bank only for response purposes and hardly ever for prevention.
- The Bank has recently launched a new funding mechanism to shift the focus on prevention: the Financial Intermediary Fund (FIF). FIF funds are allocated to “implementing entities”, not the Ministry of Finance.
- The Bank set One Health as the guiding principle for prevention. Policy commitment on One Health is requested from those countries who want to borrow money from the Bank.
- Pandemics receive a lot of focus, but OH is more than that. Now we can make good use of the pandemic-related interest in OH but keep it broader.
- The Bank currently has 50-60 active operations, with 1.5 billion USD invested in OH in LMICs (mainly in West and Central Africa, post-Ebola)

Discussion:
- Compared to preparedness and response, little money is invested in prevention. Veterinary services receive some funding, but issues such as deforestation, wet markets, biodiversity, conservation and farm biosecurity are uncovered.
- Many programs on prevention are not used to their full extent.
- FIF adopts a broad definition of prevention.
- It is crucial to break down silos in funding and to better coordinate funding, or no real impact can be made at the local level. Better communication and coordination across funding agencies is necessary.
- Donor programs should be better grounded in scientific evidence.

Action points/next steps:
- OHHLEP to prepare a first draft prevention definition for the FIF and Pandemic instrument. It will consider the issue of limited investment in prevention.
Singapore National Parks team (the hosts) presented an overview of the structure and activities of the group working at the botanical garden followed by an exchange with OHHLEP experts. Discussions focused on the multisectoral collaboration they have in place and certain aspects related to public health, wildlife surveillance and related activities.

Ad-hoc Pandemic instrument discussion:
- The contributions of OHHLEP to the pandemic instrument remain unclear.
- The pandemic instrument focuses on human pandemics and is therefore anthropocentric, how OHHLEP could influence the One Health definition and the value it could add was addressed.
- Considering the timeline, the primary focus will be directed towards the FIF, then the Instrument.

Panel Session Three: OHHLEP TG updates and products

Thematic Group 3 cont.: Surveillance, early detection, and rapid data sharing in the prevention of emerging zoonoses
In the surveillance paper, it is important to stress linkages to the work of the World Bank around One Health, and prevention in particular. The linkages between surveillance and community engagement (community surveillance), and One Health workforce are to be highlighted too. A Google document will be open for OHHLEP member comments.
- The recommendations to the partners (1-2 pages) should not only focus on infectious diseases.
It is agreed that the surveillance paper:
- Includes a graph about the system thinking approach applied to surveillance, to highlight that we should share not only data but also knowledge, funding, resources, staff, common vision, common planning and common problems.
- Mention that in most countries there are food safety policies that are based on risk analysis, which are not called “One health” itself but they apply a multisectoral approach, so they are an existing asset.
It is agreed that the recommendations:
- Should keep a broad and high-level focus (also to link well with the JPA).
- Should include the workforce aspect.
- Consider participatory surveillance, to ensure a two-way information flow between local communities and governments and costing of such a system.
- Should focus on how to break down silos and integrate steps/actions.
- Should not suggest major changes from the full paper.

Action points/next steps:
- The surveillance paper is planned to be submitted to The Lancet once final.
- The Quadripartite will share feedback on the recommendations by 26/11/2022.

Update on TG4 systematic review of pathogen spillover
Prof Salome Bukachi and Dr Amira Preure, WHO Secretariat, share progress about the ongoing systematic review of the drivers of pathogen spillover.
- Currently in the screening phase, references from three out of the eleven drivers were screened based on the title and abstract with a first set of inclusion/exclusion criteria.
- The references were obtained from three different databases and COVIDENCE was used as the review management tool.
- The main challenges faced during this review were highlighted:
  - The existing confusion in the literature between the drivers of pathogen spillover and the drivers of disease spread (epidemics/pandemics).
  - Challenge in finding relevant primary source information.
  - Huge number of references to review.
• TG4 evidence review of the drivers requires further support and a review team composition to allow this piece, and the accompanying mitigation measures piece, to be completed in good time.

**Discussion:**
• Suggest taking specific examples of pathogen emergence/outbreak and reviewing the evidence of upstream drivers involvement.
• Constitute a joint narrative around the identification of the drivers, looking at human health, animal health and environmental health (clarify how the eleven drivers were determined).
• Consider a review of relevant recent evidence reviews (an umbrella review), a comprehensive narrative review, or a scoping review, as a solution.
• The low number of primary source data was emphasized, OHHLEP members offered to share available resources within their networks.
• Dr Elmoubasher Farag offered the support of five elements of his team for the review of drivers.
• Prof Abhishek Chaudhary to contribute for the agriculture and deforestation related drivers review.
• A review of reviews, plus a review of evidence were suggested and considered feasible with sufficient support.

**Action points/next steps:**
- Follow up TG4 meeting with all panel members to discuss forming a review team and attributing specific drivers for each person/smaller group.
- OHHLEP members to share available support and databases relevant to the drivers.
- Dr Amira Preure to collect the latest reviews on the drivers from 2018 to date.

**Session Four: OHHLEP TG updates and products**

**OHHLEP definition of the Prevention of novel pathogen emergence**
**Prof. Wanda Markotter** explained the elements of the work for the OHHLEP definition of prevention:
• Background information about where this fits into the pandemic preparedness cycle, and link to the funding environment such as World Bank’s FIF.
• The World Bank’s definition is considered as a good starting example.
• This document will be similar to the OH definition and focus on the prevention of pathogen spillover and the upstream drivers (land use change, climate change, wildlife capture and trade, etc).
• It needs to bring forward the risk assessment and risk reduction and their advantages.
• It will determine the One Health approach for prevention with examples on how it can be applied.
• It includes integrated surveillance of animal, human and environmental pathogens.
• A diagram to explain the definition of prevention can be developed.

**Discussion:**
• Prevention means reducing the risk and not preventing all spillover risks, restricted to before the spillover event happens.
• The visual can have as the center the spillover event, with a left funnel indicating the different drivers that lead to the spillover and a right funnel with different consequences coming from the spillover.
• As this definition will be about One Health prevention, spillback must be considered too, and environmental drivers of risk and how to reduce them.
• Difficult to measure spillover risk, the focus should be on the critical control points (drivers).
• The drivers also have other impacts on environmental, animal, and human health (non-infectious disease oriented), which is important to keep in mind.

**Action points/next steps:**
- A virtual meeting to discuss background will be organized by the end of November 2022.

**Panel session 5.1: OHHLEP TG updates and products**

**Report on collection of country case studies from all OHHLEP members**
Prof. Wanda Markotter shares updates on the country case best examples of OH practices:

- 17 examples received so far varying in terms of focus, e.g., some focus on OH activities and others on infectious diseases response, surveillance, etc.

**Discussion:**

- Consider entering the competition CABI is organizing for best OH practices examples. Following a review two examples could be submitted.
- Reviewers are sought within the Panel, preferably from somebody with an environmental and social science background. The examples need to be aligned with the OH definition.
- One Health dialogues organized by the Quadripartite are also good places to showcase this work, developing a series of webinars or creating a platform of best practices was also suggested.

**Action points/next steps:**

- Dr Danny Sheath will circulate email to find interested reviewers in the panel.

**Panel session 5.2: Future of OHHLEP and revision of the TORs**

**Reflection on OHHLEP engagement**

As the current term of OHHLEP ends soon, the panel reflected on this period to determine the way forward.

- Dr Barbara Haesler prepared a Mentimeter survey, to allow an interactive exchange with the Panel.
- The questions covered an evaluation of the first term and areas for improvement in the next. The following areas for improvement were identified:
  - Equity in communication and balance of contributions.
  - External communication strategy and broader outreach.
  - Language simplification to increase communication with the general public.
  - Information flow from the Quadripartite to OHHLEP members particularly on the various OH initiatives initiated independently by the partners (e.g., through a regular newsletter?)
  - Expansion of OHHLEP outreach and influence.
  - More geographical and disciplinary representation, and equity in communication.

Building on these, the following actions were suggested:

- For internal communication, regular extended bureau meetings could be organized every six weeks.
- Information could be shared on QPT activities (each organization could update on their initiatives).
- Representation of OHHLEP in OH events is recommended. An OHHLEP external engagement agenda was suggested, where the experts can share their upcoming events.
- The QPT could prepare a recommendations list to better steer OHHLEP efforts.
- Harmonizing and collecting OHHLEP resources in one sharing platform. The platform recommended by WHO is SharePoint.

Other points raised were:

- The two-year mandate of OHHLEP may be too short to make an impact.
- Communication is facilitated by the in-person meetings and creates momentum.
- The next WOHC will be organized in collaboration with the QPT partners and will have an entire panel about OHHLEP.
- The panelists were encouraged to share ideas on how to improve the communication and the participation within the group.

**Action points/next steps:**

- Prof Thomas Mettenleiter writes a short paper on the story and scope of OHHLEP.
- Create a shared folder where to collectively upload presentations and documents for OHHLEP members to use and take inspiration from.

**Future of OHHLEP and revision of the TORs**

A discussion was initiated by Prof Thomas Mettenleiter regarding OHHLEP ToRs.

- OHHLEP members sought clarification from the QPT on extension of the initial TORs for the first term.
• More clarity regarding time commitment by Panelists is required to match expectations.
• Equity and equalizers for Panelists to be considered, factors such as the reduced capacity in terms of institutional arrangements, staff and finances for people coming from LICs & MICs.
• The QPT can issue letters to help OHHLEP members get the time they need for OHHLEP from their institutions.
• OHHLEP members are invited to be ambassadors of OHHLEP in their normal job to amplify the outreach of OHHLEP. When in doubt about their personal representation of OHHLEP, they are encouraged to send an email to Prof. Thomas Mettenleiter, Prof. Wanda Markotter and the Secretariat.
• Propose to write a paper on the psychological factors that hamper/facilitate motivation and collaboration.
• The current focus of OHHLEP is mainly on the infectious hazards, future consideration would be to expand the scope to broader OH issues (in line with the different action tracks of the JPA).
• OHHLEP has a key position and future efforts could be directed towards commissioning the science and influence policy making through providing science advice.
• OHHLEP is considered a long-term advisory Panel to the QPT.
• The mandate OHHLEP currently has is flexible enough to allow taking on additional responsibilities without changes in the TORs.
• Reflection on the structure and current organization of OHHLEP and secretariat related activities.

Action points/next steps:
- The QPT will discuss the next term and future of OHHLEP internally.
- OHHLEP will meet informally to discuss the same matter as well.

Panel session 6 OHHLEP support to the QPT

OHHLEP support for the JPA implementation
Dr Chadia Wannous invited the discussion on OHHLEP support to the OH JPA.
• The mapping of tools for country level assessment of OH implementation.
• The mapping of the stakeholders and what they should be involved in.
• Advice and feedback on the monitoring and evaluation.
• Advice on the financial aspects of the JPA implementation and global cost for OH. Considering the absence of finance specialists within OHHLEP, this item can be referred to an external group specialized in finance.

Closing remarks
• The Co-Chairs presented the closing remarks, thanked the in-person and virtual participants, thanked Dr Danny Sheath for the secretariat support and invited all to meet online in the next meeting.
• Dr Danny Sheath thanked Dr Chadia Wannous and GIZ and the Botanical Garden colleagues for their support in the organization of this fruitful meeting.
List of participants

**OHLEP members**
*In person:* Wanda Markotter; Thomas Mettenleiter; Salama Al Muhairi; Salome Bukachi; Osman Dar; Nitish Debnath; Margaret Khaitsa; John Mackenzie; Catherine Machalaba; Serge Morand; Baptiste Dungu; Casey Barton Behravesh; Elmoubasher Farag; Abhishek Chaudhary; Wiku Bakti Adisasmito; Pépé Bilivogui.  
*Virtual:* Dominique Charron; Marion Koopmans; Janice Zanella, Natalia Cediel; Natalia Casas; David Hayman, Vyacheslav Smolenskiy.

**FAO**
Keith Sumption; Fairouz Larfaoui; Barbara Haesler; Baba Soumare (*Virtual*)

**UNEP**
In person: Doreen Robinson

**WOAH**
In person: Jean Philippe Dop; Chadia Wannous

**WHO**
In person: Francesco Branca; Maria Van Kerkhove, Amina Benyahia; Danny Sheath; Abigail Wright; Deborah Nadal; Amira Preure

**World Bank**
In person: Frank Cesar Jean Berthe

**Apologies**
George Gao; Andrew Cunningham; Zhou Lei; Lisa Crump (UNEP); Julian Blanc (UNEP)