



# From Science to Policy – How the Pandemic Instrument Can Prevent Pandemics and Enable Equity

Consortium of Universities for Global Health Conference 2023 Satellite Session, Conference Report

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#### Introduction & Background

In response to COVID-19, in December 2021 governments at the World Health Assembly (WHA) agreed to negotiate an international instrument ('pandemic instrument') under the Constitution of the World Health Organization (WHO) to strengthen pandemic prevention, preparedness and response. The WHO Member States aim to finalize the legal text for consideration at the 77th WHA in May 2024<sup>1</sup>.

Approximately 75% of emerging infectious diseases are zoonotic<sup>2</sup>. As highlighted by the IPBES Workshop Report on Pandemics and Biodiversity, increasing contact between humans, farmed animals and wildlife is driving the risk of (re)emerging diseases. Deforestation, the rising demand for meat and the globalized food trade, wildlife farming and trade, land use change, biodiversity loss and climate change are all key risk factors<sup>3</sup>.

Recognizing that human, animal and plant health are interdependent and bound to the health of the wider environment in which they exist, the concept of 'One Health' was developed. One Health is "an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems"<sup>4</sup>; in other words: in order to be successful, public health interventions require the cooperation of human, animal, and environmental health partners. This definition, developed by the One Health High-Level Expert Panel (OHHLEP) and endorsed by the Quadripartite<sup>5</sup>, is grounded in a set of guiding principles, which include equity among sectors and disciplines, socio-political and multicultural parity, socio-ecological equilibrium, and transdisciplinary and multisectoral collaboration. In addition, the principles acknowledge the responsibility of humans to change behavior and adopt sustainable solutions that recognize the importance of animal welfare and the integrity of the whole ecosystem, in order to secure the well-being of current and future generations.

To discuss how the pandemic instrument can help prevent the next pandemic, including by mainstreaming a One Health approach, FOUR PAWS organized a Satellite Session at the annual conference of the Consortium of Universities for Global Health (CUGH), which took place in Washington DC on 13 April 2023. The event was supported by a number of partner organizations (Born Free Foundation, Brighter Green, Phoenix Zones Initiative, The Global Initiative to End Wildlife Crime, Wildlife Conservation Society, World Animal Protection, World Federation for Animals). The Satellite Session consisted of two expert panel discussions followed by group work. The experts included representatives of the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (WOAH, formerly OIE), the OHHLEP, Harvard Law School, Georgetown University, University of New Mexico School of Medicine, Upstate Medical University, and civil society. The diversity of expertise enabled the two key topics of the session - "One Health - why it matters and what it can enable" and "Essentials for making the pandemic instrument a success" - to be explored from a multidisciplinary perspective.

Introduction & Background



"One Health is not just about healthy humans, although that's a very important outcome, but also healthy animals and healthy ecosystems." - Catherine Machalaba, OHHLEP

### **Key Findings**

The principle take-away from the Satellite Session was clear: humanity is at a turning point. The rate of emergence of infectious diseases has grown alarmingly over recent decades. The experts confirmed that such diseases emerge largely as a result of human activities including ecosystem destruction, deforestation, habitat loss and fragmentation, threats to biodiversity, agricultural expansion, encroachment into animals' habitats, commercial trade in wild and domestic animals, animal farming and live animal markets. Humans are rapidly degrading the planet, increasing interfaces between wildlife, livestock and humans, which enables and accelerates pathogen emergence, proliferation and spillover across species.

'There's really no question today that this fractured relationship with nature is at the core as the root cause for future zoonotic origin spillovers." – Chris Walzer, Wildlife Conservation Society

#### Expert Panel 1: One Health - why it matters and what it can enable

Experts: Dr. Daniela Battaglia (FAO), Dr. Catherine Machalaba (OHHLEP, EcoHealth Alliance), Dr. Hope Ferdowsian (Phoenix Zones Initiative, University of New Mexico School of Medicine), Dr. Chris Walzer (Wildlife Conservation Society), Nicoletta Dentico (Society for International Development).

The Expert Panel concluded that transformative change is needed. We must better incorporate primary prevention measures in pandemic strategies to protect health and enable equity. According to the OHHLEP, "prevention includes addressing the drivers of disease emergence, namely ecological, meteorological and anthropogenic factors and activities that increase spillover risk, in order to reduce the risk of human infection"6. Such primary prevention measures include making food systems more sustainable, ending wildlife trade and live animal markets, halting and reversing biodiversity loss, enhancing microbiome diversity and reversing antimicrobial resistance globally. One Health takes into account disease risks when balancing trade-offs and co-benefits.



A One Health approach which "mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being"7 is an essential component of a paradigm shift towards achieving sustainability and enabling equity. Promoting health for all - humans, animals and the environment - is vital if we are to achieve equity.



The underlying principles that accompany the OHHLEP One Health definition are:

- 1. equity among sectors and disciplines,
- **2.** socio-political parity recognizing that everyone is equal and should have equal rights,
- 3. socio-ecological equilibrium,
- 4. stewardship including sustainability, biodiversity and animal welfare and
- 5. multi-sectoral transdisciplinary and inclusive perspectives, including traditional knowledge forms.

These need to be kept in mind when applying and implementing the One Health approach.

Communities in vulnerable situations, i.e. in high-risk areas, operating at the human-animal-environment interface, are often the most marginalized with limited access to healthcare. COVID-19 has clearly demonstrated that improved preparedness and response are essential, but it's vital that we also address the upstream drivers of pandemics to protect vulnerable communities. The panelists explained the importance of justice and ecology. Justice comprises fair acknowledgement of the basic rights to life, freedom and flourishing for all animals, human and non-human, and special protections for the most vulnerable. Ecology embraces our relationships with each other - humans, animals, the natural world - and social justice. Efforts to achieve justice and embrace ecology contribute to the achievement of the Sustainable Development Goals.

One Health needs to be implemented at global, regional and national levels. Investment in the "Four Cs" - Communication, Collaboration, Coordination and Capacity building across sectors and disciplines and at multiple levels - are essential for implementation.

How the Pandemic Instrument Can Prevent Pandemics and Enable Equity Key Findings



One of the most important aspects of communication is to push back against misinformation and to promote scientific, evidence-based decision making. During COVID-19, the WHO highlighted the immense risk associated with the emergence of an "infodemic", resulting from "too much information including false or misleading information in digital and physical environments during a disease outbreak<sup>8</sup>." Experts and scientists need to speak up and share evidence and facts. Even though 75% of emerging infectious diseases originate in animals<sup>9</sup>, environmental and animal health data is still lacking in the public health field due to siloed and insufficient information systems. We need to take responsibility, overcome these silos, work across departments and ministries, raise awareness, pro-

vide communities with evidence-based and reliable data and solutions, make this data accessible and ensure that the information is being absorbed respecting local circumstances and cultural sensitivities. National One Health coordination platforms can help facilitate collaboration and more effective communication.

Another major gap that was highlighted is funding. Health needs to be seen as an investment, rather than as a cost. We need funding expertise, incentives and capacity building to be able to implement prevention measures and effective One Health strategies.

"All living beings, humans, plants, animals are sharing the same environment, and this has profound health interconnections." – Nicoletta Dentico, Society for International Development

"Health is a global good, it's not only a cost, health is an asset." – Chris Walzer, Wildlife Conservation Society

#### Expert Panel 2: Essentials for making the pandemic instrument a success

Experts: Dr. Chadia Wannous (WOAH), Prof. Sam Halabi (Georgetown University), Dr. Syd Johnson (Upstate Medical University), Dr. Ann Linder (Harvard Law School), Nina Jamal, MSc (FOUR PAWS), John Scanlon AO (The Global Initiative to End Wildlife Crime).

The One Health approach enables us to tackle health threats at the human, animal and environment interface and to ensure sustainable development. The Quadripartite developed the One Health Joint Plan of Action (OHJPA) to "prevent future pandemics and to promote health sustainably through the One Health approach<sup>10</sup>."

In order to prevent pandemics, One Health should form the foundation of the pandemic instrument and be mainstreamed throughout the text and the pillars of prevention, preparedness and response. In its "Call to Action for One Health for a Safer world", the Quadripartite emphasized the importance of prioritizing One

Health in the pandemic instrument (and the pandemic fund), developing and strengthening national One Health strategies, accelerating and supporting their implementation and investing in the development of a One Health workforce (which includes those working in human, animal and environmental health). One Health strategies at national and international levels need to be developed through a whole-of-government, whole-of-society approach. Furthermore, the four institutions that make up the Quadripartite call on countries to take concrete preventive measures targeting activities and locations that increase the risk of spillover events from animals to humans. The investment in and financing of One Health strategies need to be increased, including funding to enable prevention at source. Moreover, the Quadripartite calls on countries to strengthen One Health knowledge and evidence<sup>11</sup>.

Scientists, academics and other experts have a key role in informing the negotiation process for the pandemic instrument. Research that can inform the assessment of zoonotic risk and disease spread, particularly in areas such as captive wildlife, is severely lacking. Incentives and institutional support to gather critical information are needed to inform evidence-based decision making. We need to overcome regulatory and informational silos and develop processes to share information while also involving local communities.

When it comes to knowledge and evidence-based policymaking, we need regulatory support to transition away from high-risk practices. We need to incentivize and invest in habitat protection, reforestation, and in ending high-risk activities such as wildlife trade in order to address forms of human encroachment that drive disease risk, and restore biodiversity which acts as a natural buffer. These threats are real and urgent; if we continue to ignore them, we will continue to put ourselves, animals and the wider environment at risk. Using the Montreal Protocol as an example, implementing agencies, which could be international institutions such as UNEP or World Bank, can support governments with the design and implementation of One Health strategies.



An anthropocentric approach to addressing pandemics fails to understand the nature of zoonotic health challenges. A complex, multidimensional, global issue needs a holistic solution grounded in justice. Health equity can be enabled via the One Health approach because it is rooted in collaboration and community engagement. Communities that are affected by emerging disease outbreaks need to be part of the conversation and the solution. Most importantly, we cannot protect communities in vulnerable situations once the spillover occurs – they will be the first to suffer the devastating consequences. We need to address pandemics at source before spillover occurs.

A shift towards tackling the root causes and drivers by looking at how human activity needs to change to protect animals, the environment and ourselves, promoting an ecocentric definition of health, moving from silos to collaboration, and viewing health as an investment, constitute vital prerequisites for effective pandemic prevention. This evolution needs to be captured in the pandemic instrument.

A practical example of communities at the frontline of zoonotic threats, situations for which strategies must be developed following the One Health approach: We know that the risk of spillover is greatest among the individuals who work in animal industries and who touch and handle animals regularly. Studies have found higher prevalence of influenza viruses among individuals with occupational exposure to pigs<sup>12</sup>; the same is true of their spouses, their children, and their community.





"To translate the One Health approach from a concept into actual actions at all levels, including at the national level, the Quadripartite have broken the silos between sectors and we urge countries and stake-holders to do the same." – Chadia Wannous, World Organisation for Animal Health

"We definitely need to see measures to reduce spillover risk in the instrument. Prevention is cheaper and more cost effective, it will save more lives than response and it's a better investment also for developed countries who are investing in global health security." – Nina Jamal, FOUR PAWS

"The risk comes from how we as people interact with wildlife, and that's something we can manage. Let's never forget that when left alone, wild animals pose no risk to human health. We know that the way we interact with wild animals has the potential to affect the safety and well-being of billions of people." – John Scanlon, The Global Initiative to End Wildlife Crime

#### Conclusion

Positive developments towards a new and holistic understanding of health have been emerging. These include the formation of the Quadripartite, better incorporation of the environment in One Health, the creation of the OHHLEP, the development of the OHJPA and increased global understanding, acceptance and implementation of the One Health approach. The pandemic instrument has the potential to be a vital tool in effectively protecting health if it properly incorporates the One Health approach as its foundation, and by doing so strongly addresses sustainability and equity. In order to make the pandemic instrument effective, One Health strategies need to be developed incorporating measures to reduce spillover risk, and applied across policy processes, with the support of implementing agencies and financing. One Health maximizes our chances of pandemic prevention and preparedness.

Key Policy Recommendations

### Key Policy Recommendations

The pandemic instrument can play a crucial role in building a more resilient global health architecture and protecting the world from future health crises, provided it tackles the root causes of disease emergence. Upstream prevention through a One Health approach that transcends anthropocentrism while ensuring a whole-of-society, whole-of-government approach is critical to avoid future pathogen spillover events, any one of which could cause the next pandemic.



#### The scope of the pandemic instrument must include

- Primary prevention, tackling the drivers of outbreaks and preventing spillover at source, beginning with the following measures:
  - surveillance not only of outbreaks in animal and human populations, but also of the drivers of such outbreaks;
  - identifying the activities and hotspots of disease outbreaks that drive spillover<sup>13</sup>, in order to inform national priority setting and regulatory measures;
  - coordination and mapping of measures across international instruments and institutions that tackle the pandemic prevention, preparedness and response pathway to ensure necessary evidence-based policies and strategies are implemented.

# One Health must be integrated across the pandemic instrument and the implementation of One Health strategies at global, regional and national levels supported and incentivized:

- ◆ One Health strategies inline with the OHJPA that tackle the drivers of outbreaks and prevent spillover
  - Developed through a whole-of-government coordination mechanism involving relevant departments, ministries and institutions, and a whole-of-society approach involving relevant stakeholders, expert institutions and communities at the human-animal-environment interface to enable them to transition away from high risk practices and protect themselves;
  - Supported and incentivized by
    - Expert implementation agencies that support governments with the development and implementation of One Health strategies inline with the OHJPA;
    - a knowledge to policy interface where knowledge of drivers of outbreaks, success stories and high impact solutions are shared and where impactful policy measures are crafted;
    - > financing to enable the development and implementation of One Health Strategies.

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## About FOUR PAWS

FOUR PAWS is the global animal welfare organisation for animals under direct human influence, which reveals suffering, rescues animals in need and protects them. Founded in 1988 in Vienna by Heli Dungler and friends, the organisation advocates for a world where humans treat animals with respect, empathy and understanding. The sustainable campaigns and projects of FOUR PAWS focus on companion animals including stray dogs and cats, farm animals and wild animals – such as bears, big cats and orangutans – kept in inappropriate conditions as well as in disaster and conflict zones. With offices in Australia, Austria, Belgium, Bulgaria, France, Germany, Kosovo, the Netherlands, Switzerland, South Africa, Thailand, Ukraine, the UK, the USA and Vietnam as well as sanctuaries for rescued animals in eleven countries, FOUR PAWS provides rapid help and long-term solutions.



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