

Breaking Barriers Event – Pre-Event Technical Briefing / Background Information

This document has been compiled by the Wildlife Conservation Society (WCS) as a co-host in the Breaking Barriers event. It is intended to provide participants with some key information and provide an understanding of the history and context of our interest to convene this event.

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Part 1: Highly Intact Ecosystems Are Critical for Health and Wellbeing

Global leaders, governments, and civil society widely acknowledge that an intact and functional environment is crucial for the health and wellbeing of all. Cooperation and action between the environmental and public health sectors is urgently needed to meaningfully address the risk of future pandemics and non-communicable diseases (NCDs) by protecting the environment for the benefit of the planet and all who inhabit it. To do this, it is essential that we move beyond rhetoric towards implementation of an effective and comprehensive framework that integrates the environment with health.

The following resources provide more science-based information about the important linkages between healthy, intact ecosystems and our health and wellbeing as a planet:

- Vora, N. M., Hannah, L., Walzer, C., Vale, M. M., Lieberman, S., Emerson, A., Jennings, J., Alders, R., Bonds, M. H., Evans, J., Chilukuri, B., Cook, S., Sizer, N. C., & Epstein, J. H. (2023). [Interventions to Reduce Risk for Pathogen Spillover and Early Disease Spread to Prevent Outbreaks, Epidemics, and Pandemics](#). *Emerging Infectious Diseases*, 29(3), 1–9.
- World Health Organization, & Secretariat of the Convention on Biological Diversity. (2015). [Connecting Global Priorities: Biodiversity and Human Health](#). WHO Press (Issue June 2017).
- OHHLEP (One Health High-Level Expert Panel). (2023). [Prevention of zoonotic spillover: from relying on response to reducing the risk at source](#).
- Bernstein, A. S., Ando, A. W., Loch-Temzelides, T., Vale, M. M., Li, B. V., Li, H., Busch, J., Chapman, C. A., Kinnaird, M., Nowak, K., Castro, M. C., Zambrana-Torrel, C., Ahumada, J. A., Xiao, L., Roehrdanz, P., Kaufman, L., Hannah, L., Daszak, P., Pimm, S. L., & Dobson, A. P. (2022). [The costs and benefits of primary prevention of zoonotic pandemics](#). *Science Advances*, 8(5), 1–14.
- Evans, T., Olson, S., Watson, J., Gruetzmacher, K., Pruvot, M., Jupiter, S., Wang, S., Clements, T., & Jung, K. (2020). [Links between ecological integrity, emerging infectious diseases originating from wildlife, and other aspects of human health - an overview of the literature](#). May 2020.
- Ceballos, G., & Ehrlich, P. R. (2023). [Mutilation of the tree of life via mass extinction of animal genera](#). *Proceedings of the National Academy of Sciences*, 120(39). 1–6.

Part 2: Emerging Definitions and Support for a One Health Approach – Timeline of key events

- In 1855, German physician and pathologist, Rudolf Virchow, coined the term “zoonosis” and proclaimed that there should be no dividing line between human and animal medicine. Over a century later, epidemiologist Calvin Schwabe coined the term “One Medicine”
- In 1986, the Ottawa Charter for Health Promotion emphasized the importance of sustainability and a resilient ecosystem in promoting good health.
- In 2004, [a symposium organized by the Wildlife Conservation Society](#) (WCS), featuring global health experts, resulted in the **Manhattan Principles**: 12 recommendations for how to jointly address human, animal, and environmental health in a holistic 'One Health' approach "to prevent epidemic / epizootic disease and for maintaining ecosystem integrity for the benefit of humans, their domesticated animals, and the foundational biodiversity that supports us all."
- In 2009, the One Health Commission was formed bringing together the human, animal, and environmental sciences for value-added information.
- In November 2019, the *One Planet, One Health, One Future* conference was jointly convened by the German Federal Foreign Office in collaboration with WCS. This led to the updated '[Berlin principles on One Health – Bridging global health and conservation](#)', which stated that it was critical to "reconnect the health of humans, animals, and ecosystems in an economic and socio-political context."
- In early 2020, the COVID-19 pandemic hit and changed our world as we knew it. It demonstrated the incredibly significant and devastating costs that spillover of a wildlife-origin pathogen and subsequent pandemic can inflict on human lives, livelihoods, and wellbeing as well as on local and global economies. The pandemic also catalyzed increased global attention to the interlinkages between human, animal, and environmental health.
- In November 2020 at the Paris Peace Forum, the heads of FAO, UNEP, WHO and WOAHA announced plans for a multidisciplinary One Health High-Level Expert Panel (OHHLEP)
- Numerous high-level statements during the COVID-19 pandemic have highlighted the inexorably entwined relationships between health of animals, people, and the environment. Centrally, the [Rome Declaration](#) was adopted at the Global Health Summit in May 2021.
- In 2022, the formal incorporation of the UN Environment Program (UNEP) into the Tripartite partnership (which included FAO, WHO, and OIE [now WOAHA]), to form the Quadripartite Collaboration for One Health¹, further emphasized the importance and integration of the environment into this approach).
- In 2023, One Health High-Level Expert Panel (OHHLEP) released [One Health: A new definition for a sustainable and healthy future](#), providing a consensus definition for One Health.

Part 3: Status Check - Recognition of One Health in key international policy/fora and frameworks:

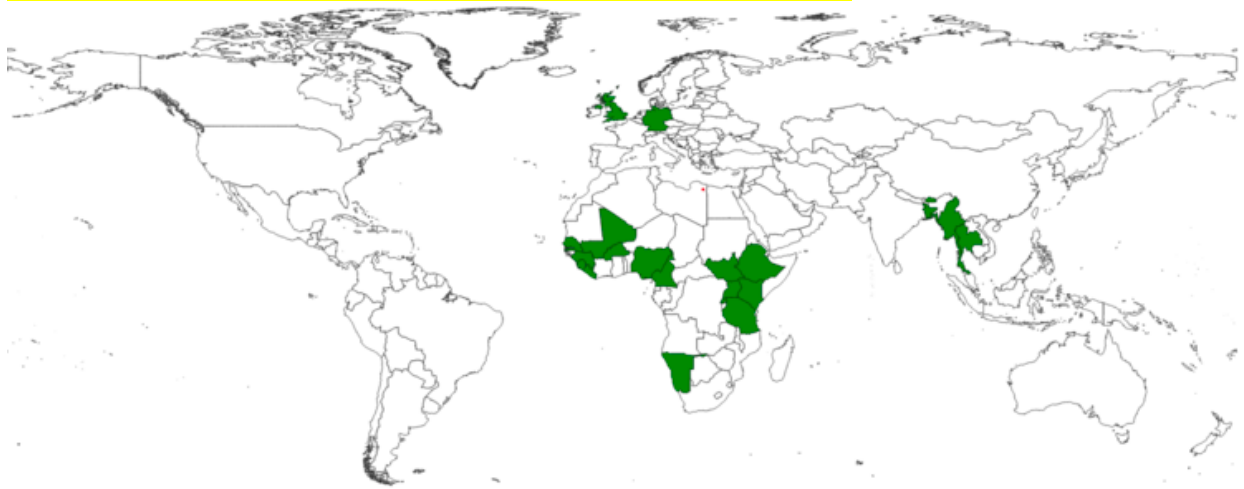
- In October 2022, **FAO, WHO, UNEP, and WOAHA** released the Quadripartite [One Health Joint Plan of Action \(2022–2026\): working together for the health of humans, animals, plants, and the environment](#), which outlines the commitment of these four multilateral organizations to advocate for and support the implementation of One Health collectively.
- The One Health approach was endorsed by **G7 Leadership** with the [Carbis Bay Health Declaration](#) (2021), **G20 Leadership** with the [G20 Bali Leaders' Declaration](#) (2022), and subsequent

¹ The Quadripartite Collaboration on One Health now includes the Food and Agriculture Organization of the United Nations (FAO), the United Nations Environment Programme (UNEP), the World Health Organization (WHO), and the World Organisation for Animal Health (WOAH)

communiqués of [G7 Health Ministers](#) (2022) and [G20 Health Ministers](#) (2023). The G7 and G20 countries have recognized the necessity of strengthening health systems and underpinning efforts with a One Health approach. These declarations further emphasize the importance of implementing a One Health approach at global, regional, national, local levels.

- **The Association of Southeast Asian Nations (ASEAN) Leaders** issued a [One Health Initiative Declaration](#) (2023) committing to establish an ASEAN One Health Network secretariat and to grow coordination, collaboration, and implementation of One Health in the region.
- **Convention on Biological Diversity (CBD):** [The opening sentence](#) of the recently adopted Global Biodiversity Framework (2022) states, ‘Biodiversity is fundamental to human well-being, a healthy planet, and economic prosperity for all people, including for living well in balance and in harmony with Mother Earth’. The Framework addresses One Health with 2030 Targets 11 and 12 about connections between people and nature, which build on the 2010 Aichi Target 14 to safeguard ecosystem services.
- **The World Bank** makes a business case for One Health issuing, [‘Putting Pandemics Behind Us Investing in One Health to Reduce Risks of Emerging Infectious Diseases,’](#) pointing out COVID-19 costs exceeded US\$13 trillion and that investments in One Health aligned prevention would cost an estimated US\$12 billion annually.
- In September 2023, the **UN General Assembly** released the [Political Declaration of the United Nations General Assembly High-level Meeting on Pandemic Prevention, Preparedness and Response](#), acknowledging the value of One Health and cross-sectoral collaboration in epidemic prevention.
- **WHO Pandemic CA+:** In August 2023, the Intergovernmental Negotiating Body established a workstream co-facilitated by the United Kingdom, India, and Tanzania on Article 4 (pandemic prevention and public health surveillance) and Article 5 (strengthening pandemic prevention and preparedness through a One Health approach) of the Bureau’s text of the [WHO CA+](#) to improve the text for the next iteration of the CA+ in early November. These articles have the strongest potential to speak directly to prevention at source and One Health approaches.

Part 4: Status Check - Development of National One Health Strategies



Countries with published and publicly available National One Health Strategic Action Plans (green). The existence of these plans does not necessarily equate to their resourcing or implementation.

(Source: https://www.onehealthcommission.org/en/resources__services/one_health_strategic_action_plans/)

Part 5: Problem – and Opportunity – Statement

Today we must recognize that: *"The reality is that One Health will be delivered in countries, not by concordats between multilateral organisations, but by taking a fundamentally different approach to the natural world, one in which we are as concerned about the welfare of non-human animals and the environment as we are about humans. **In its truest sense, One Health is a call for ecological, not merely health, equity.**"* - January 2023 [editorial](#) in The Lancet

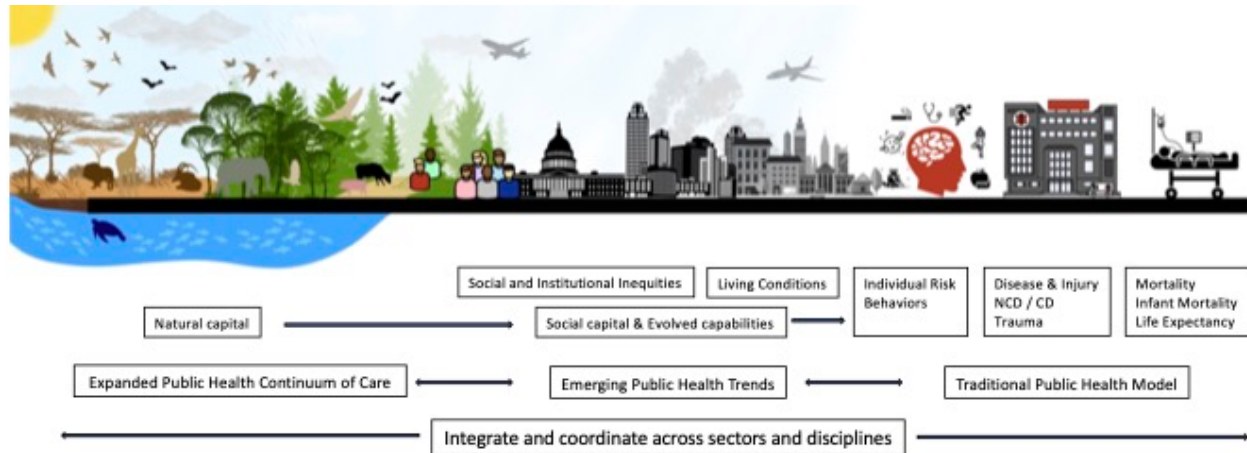
In a world of polycrisis – climate change, biodiversity loss, emerging infectious diseases, and global inequities – addressing root-cause drivers are not only conservation priorities, but also essential actions for human health and wellbeing. In the words of a recent editorial in The Lancet, [One Health: a call for ecological equity](#) (2023), the reduction of human impact on the environment is a significant primary medical intervention in itself. We need to halt deforestation, retain intact ecosystems, improve communities' health and economic security in disease hotspots, enhance biosecurity in animal husbandry, regulate wildlife markets and trade, and expand pathogen surveillance in wildlife. We have the technical knowledge to intervene and data showing there are clear economic benefits of a preventative approach. Nevertheless, high-level statements of the past two years outlining the triad of pandemic prevention-preparedness-response (P-P-R) have not been sufficiently acted upon, and today, the focus rests on preparedness and response, neglecting the essential role of prevention.

Many of us – co-organizers and participants in this event – are still struggling due to administrative silos and budgetary barriers within our own organizations, institutions, and communities. These pose real and substantial challenges to address the upstream environmental drivers of health. Similarly, many government agencies, departments, and organizations operate within specific narrow mandates and jurisdictions, often leading to fragmented sectoral approaches and limited collaboration. Inadequate funding allocated to the environmental sector and holistic One Health initiatives paired with a [prevalent unwillingness to adopt environmental full-cost accounting](#) restrict the scope and scale of interventions, making it difficult to implement comprehensive and sustainable health solutions. Without adequate financial resources, addressing underlying factors such as pollution, deforestation, and climate change is challenging.

We need collective action to "break barriers" and emerge stronger, unlocking the full potential of individuals and organizations to implement One Health. A new narrative that frames health and wellbeing as a common good and asset while recognizing interspecies and intergenerational health equity can help individuals and society implement collective action for our collective problems. We can address existential health threats with shared goals, and frameworks. One Health allows identification and realization of a common "continuum of care" and expanded socioecological model of health and wellbeing, whose efficacy relies upon environmental factors to succeed. Greater coordination and resource allocation can accelerate the effective implementation of critical One Health strategies that target the root causes of health and wellbeing issues.

Annex 1: Definition of Key Terms – see [Glossary](#) produced by the International Alliance against Health Risks in Wildlife Trade

Annex 2: Graphic concepts of expanded continuum of care model



Stephen C, Walzer C (in press). *The continuum of care as a unifying framework for intergenerational and interspecies health equity. Frontiers in Public Health - Planetary Health.*

Annex 3: Other suggested reading

- [Healthy people and wildlife through nature protection: Guidelines for prevention, detection, response, and recovery from disease risks in and around protected and conserved areas](#) (IUCN/EcoHealth Alliance Publication (with support of BMUV), 2022)
- [“One Health High-Level Expert Panel Annual Report 2021”](#) (March 2022)
- [“Umwelt- und Gesundheitsminister*innen verabschieden in Budapest gemeinsame Roadmap zur Bewältigung der gesundheitlichen Herausforderungen von Klimakrise, Artenaussterben und Verschmutzung“](#) (BMG press release, 6 July 2023)
- Reaser, J. K., Hunt, B. E., Ruiz-Aravena, M., et al. [Fostering landscape immunity to protect human health: a science-based rationale for shifting conservation policy paradigms](#). *Conservation Letters*. 2022; 15:e12869.
- Tong, S., Bambrick, H., Beggs, P.J., Chen, L., Hu, Y., Ma, W., Steffen, W., Tan, J. (2022) [Current and future threats to human health in the Anthropocene](#), *Environment International*, Vol. 158, 106892, ISSN 0160-4120.
- Willetts, Liz et al. [Health in global biodiversity governance: what is next?](#) (2023) *The Lancet*, Volume 401, Issue 10376, 533–536
- Glidden, C, Nova, N. & Kain, M., Lagerstrom, K., Skinner, E., Mandle, L., Sokolow, S., Plowright, R., Dirzo, R., De Leo, G. & Mordecai, Erin. (2021). [Human-mediated impacts on biodiversity and the consequences for zoonotic disease spillover](#). *Current Biology* : CB. 31. R1342-R1361. 10.1016/j.cub.2021.08.070.
- Sokolow S. H., Nova N., Pepin K. M., Peel A. J., Pulliam J. R. C., Manlove K., Cross P. C., Becker D. J., Plowright. R. K., McCallum H. and De Leo G. A. [Ecological interventions to prevent and manage zoonotic pathogen spillover](#) (2019) *Phil. Trans. R. Soc.* B3742018034220180342
- Eby, P., Peel, A.J., Hoegh, A. et al. [Pathogen spillover driven by rapid changes in bat ecology](#). *Nature* 613, 340–344 (2023).