



# Integrating One Health into a New Pandemic Treaty: Reflection on the Zero Draft

## Introduction: The Need for One Health

The COVID-19 pandemic has underscored the shortcomings of global health governance and brought the need for reform to the fore of global health and sustainability politics. The Severe Acute Respiratory Syndrome Coronavirus-2's likely zoonotic (animal-to-human transmitted) origin and reverse zoonosis (human-to-animal transmitted) ability (1,2) highlight the need for a holistic and equitable, inter-, transdisciplinary, and intersectoral approach to safeguarding and advancing health among humans, among other animals, and throughout the environments that we share. One Health (OH) offers such an integrated approach, enabling effective pandemic prediction, prevention, and preparedness.

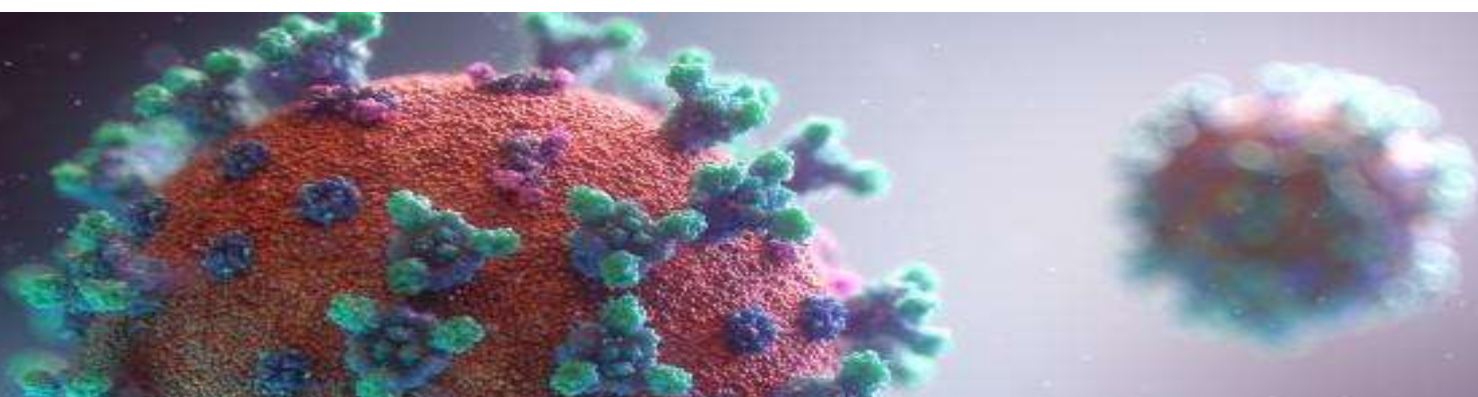
During the World Health Assembly special session in Geneva in late November 2021, Member States of the WHO made a major breakthrough in global health governance by agreeing to begin negotiating a new pandemic treaty. Recently, the WHO published a draft document (zero draft) of the first legally binding treaty meant to ensure that vaccines, drugs, and diagnostics are shared more equitably around the world during the next pandemic, avoiding the deep divides seen during the COVID-19 pandemic. To enhance its effectiveness and ensure impact, it is critical that OH be integrated into this treaty as international negotiations get fully under way. This Policy Brief reflects on how the OH approach could inform the pandemic treaty, as well as assesses to what extent OH considerations have been integrated into the draft pandemic treaty.

## One Health Principles

Among the core OH principles that we suggest should fundamentally inform the proposed pandemic treaty are the following:

- (1) The health of all living beings is rooted in their interdependencies and is the result of interactions between and among humans, other animals, plants, and our shared (biotic and abiotic) environment.
- (2) Safeguarding and sustaining health and well-being among animals, plants, and the ecosystems that support all life is a *sine qua non* for achieving human health and well-being.

In addition to these fundamental principles, implementation of OH requires consideration of five major elements: 1) equity, 2) holism and systems thinking (i.e. OH is grounded in an understanding of socioecological interconnections), 3) transdisciplinarity and intersectoralism, 4) intersectionality (recognition that race, class, gender, and other social identities work together to make some groups particularly vulnerable to the impacts of disease or ill health); and 5) OH leadership and governance.



## Existing Gaps in Global Health Governance

As the COVID-19 pandemic has revealed, there are several gaps in global health governance. These gaps are often a combined consequence of insufficient funding, inadequate health infrastructure, selective adherence to existing agreements and guidelines, and limited cooperation by state actors.

### Example 1: Wildlife Trade

Wildlife trade is largely unregulated by international treaties and conventions; hence, its regulation generally falls on the shoulders of domestic policymakers. Similarly, wildlife health is under-monitored and under-regulated at the international level and, in many cases, at regional and national levels as well. Other than the diseases specifically listed by the World Organization for Animal Health (WOAH), there is no requirement for international reporting or surveillance of diseases in wildlife. The sole standardized database of wildlife disease events - WOAH's World Animal Health Information System (WAHIS) - remains largely unused; hence, prior to the COVID-19 pandemic, there was limited reporting of wild animal outbreaks (see Figure.1). *While the zero draft recognizes the importance of wildlife trade and identifies wildlife trade as one of the drivers of the emergence and re-emergence of disease at the human-animal-environment interface, there are no further recommendations on how to better monitor or regulate wildlife trade.*

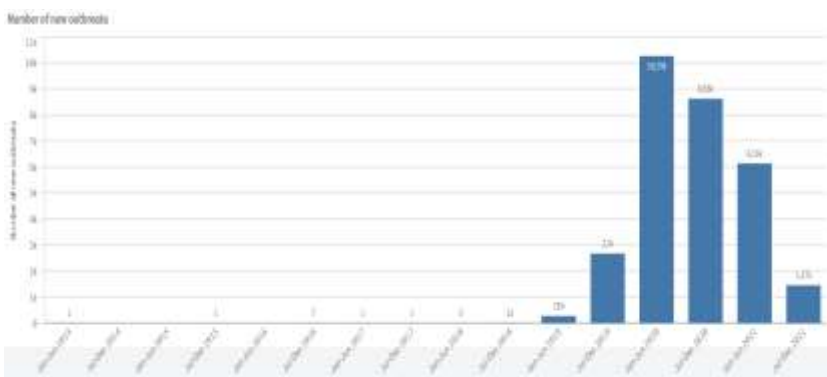


Figure 1. WAHIS Reported Wild Animal Outbreaks 2014 – 2021.

Adapted from <https://wahis.oie.int/#/dashboards/qd-dashboard>

### Example 2: Consequences of Inadequate One Health Surveillance

As a holistic framework, OH requires the integration of human, animal, and environmental health surveillance systems. State actors, who are generally the sole entities responsible for environmental surveillance and data collection within their territory, are often unwilling or unable to share data and fail to recognize or address the need for an integrated approach to surveillance. A survey of 125 countries' National Biodiversity Strategy and Action Plans found that only 8 countries (6.4%) "reported tangible activities related to wildlife health or zoonotic disease" (3). In some low-income countries, attempts to establish responsive and timely surveillance initiatives are hampered by limited resources and capacity, both of which often result from inadequate financing (4–6). Existing inefficiencies in surveillance systems, as well as lack of human, material, and laboratory resources for animal, human and environmental testing, prevent valid and timely monitoring and reporting in many low-income contexts, thus suggesting that there is a need to build capacity for OH surveillance (6) at local, national, regional, and global levels (3,7). *The zero draft calls for improving surveillance (including using a One Health approach), outbreak investigation, and control, through interoperable early warning and alert systems, as well as for AMR-specific surveillance systems. But it does not outline how to achieve such an integration of surveillance systems or to mobilize resources to globally facilitate an integrated OH surveillance system.*

### Example 3: Inequities in Vaccine Distribution

The COVID-19 pandemic has also drawn renewed attention to longstanding inequities in access to essential medicines, health technologies, and services, as well as to unequal opportunities for participation in their development. In particular, there have been vast inequities in global vaccine distribution. As of today, just over 70% of the global population had received at least one vaccine dose, but only 23% of those doses were administered in low-income countries (8). This suggests that equity should be a central consideration in treaty design. *The zero draft contains many progressive articles that could improve equity in some areas of pandemic response, such as establishing a global network for the supply and distribution of ingredients used to produce drugs; strengthening research and the development of vaccines and therapeutics; and sharing that knowledge with the world. But the current text falls short of requiring states to share IP rights as part of the pandemic treaty and, while meant to be legally binding, it does not specify how countries will be incentivized to equitably share scant resources during a pandemic or how treaty compliance can be guaranteed. Finally, while the zero draft underscores the importance of fair and equitable sharing of benefits arising from the sharing of samples and genetic sequence data of pathogens, it is unclear how such benefit-sharing will be achieved in the absence of dedicated and enforceable governance mechanisms.*

### Policy and Practice Implications (9–15)

The OH approach is holistic and systems-based. Any effort to embed One Health within the pandemic treaty must encompass the following four areas of OH implementation: (1) prevention of pathogen emergence and hence disease; (2) monitoring and surveillance; (3) preparedness and response; and (4) economics and financing. Equity must be a central consideration in each of these areas, as well as during all phases of treaty design, implementation, and evaluation.

- To improve **prevention** of zoonotic disease outbreaks, a pandemic treaty should strengthen biosecurity programs in food production systems, ranging from agriculture to wildlife markets, and from farm to fork. Coordination between existing human, animal, and environmental health mechanisms, such as WOA's *Terrestrial Code* and the WHO's International Health Regulations (IHR), must be enhanced and made more enforceable in order to be effective.
- Integrated **monitoring and surveillance** capacity should be developed as part of the pandemic treaty. This should include and connect data that identify risk factors for disease emergence in wildlife, companion animals, livestock, the environment (e.g., soil and water), and humans. It should also facilitate the co-creation of knowledge and awareness at all stakeholder levels. Additionally, existing OH expert networks should be engaged to advise and provide OH risk assessment focused on monitoring the presence and distribution of infectious agents in the environment to predict and prevent their spillover.
- Intersectoral, transdisciplinary, and multi-level communication is critical to outbreak and pandemic **preparedness and response**. Multisectoral coordination mechanisms, the backbone of many OH initiatives, should be established among member states, and should include regular tabletop exercises to assess and strengthen OH governance capacities. Enhanced cooperation between veterinary services, public health, the social sciences, and environmental protection entities, both domestically and internationally, should be a focus of these coordination mechanisms.
- A robust, legally binding **financing architecture** should be part of the pandemic treaty in which a OH approach is firmly integrated. There should be a clear focus on providing financial support for global OH policies and initiatives and a global redistributive element should be included to ensure equitable allocation of resources.
- Finally, to ensure continued support for these policies within the context of the pandemic treaty, the treaty should establish a permanent **OH-specific structure to provide capacity-building support to partners and member states, and to help collect, interpret, and share OH knowledge**. Potentially modeled after tried-and-proven organizations like the Intergovernmental Science-Policy Platform for Climate Change (IPCC), this structure could provide research and policy advice in concert with hands-on external evaluations, assist in the integration of existing methodologies, and potentially develop new OH methodologies to support equitable and effective OH implementation.

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