



THE WORLD HEALTH ASSEMBLY NEGOTIATIONS FOR A CONVENTION, AGREEMENT, OR OTHER INTERNATIONAL INSTRUMENT ON PANDEMIC PREVENTION, PREPAREDNESS, AND RESPONSE MUST INCLUDE PROVISIONS TO REDUCE THE RISK OF PATHOGEN SPILLOVER

*Advisory note for the Intergovernmental Negotiating Body and member states,
prepared by the Coalition for Preventing Pandemics at the Source*

Summary:

1. The World Health Assembly (WHA) negotiations for a convention, agreement, or other international instrument on pandemic prevention, preparedness, and response (henceforth, referred to as “international instrument”) provide a once-in-a-generation opportunity for global leaders to protect the world from future pandemics.
2. Most emerging infectious diseases are caused by pathogens that spill over from animals, particularly wildlife, to people. Indeed, every viral pandemic since the start of the 20th century has had zoonotic origins.
3. Failure to prioritize an action-oriented One Health approach in the international instrument with a focus on reducing risk of spillover from animals to people will seriously undermine its effectiveness in preventing future pandemics with fatal consequences.
4. Comprehensive actions to reduce risk of spillover are estimated to cost approximately US\$20 billion per year globally, a small fraction of the cost of the millions of lives and trillions of dollars lost from pandemics of zoonotic origin such as HIV/AIDS and COVID-19.
5. To help reduce risk of spillover, the international instrument should:
 - a. Promote protection, conservation, and stewardship of tropical and subtropical forests;
 - b. Support shutting down or strictly regulating commercial wildlife trade and markets that contribute to zoonotic spillover, particularly commercial trade in birds and mammals, both domestically and internationally;
 - c. Support universal health care, particularly for communities living in emerging infectious disease hotspots;
 - d. Support alternative livelihoods for people whose current livelihood puts them in contact with wildlife, whether intentional or not;
 - e. Support strengthened veterinary care and biosecurity during animal husbandry;
 - f. Expand pathogen surveillance at interfaces between humans, domestic animals, and wildlife;
 - g. Create an international scientific and policy advisory body charged with translating the latest evidence on pandemics, including spillover risk reduction, into action-oriented policy;
 - h. Require that States create national action plans for pandemic prevention, preparedness, and response and that these national action plans include measures to reduce risk of spillover;
 - i. Establish a reporting mechanism to evaluate each State’s compliance with the international instrument.

6. A dedicated fund for pandemic prevention and preparedness should be established since ultimate success of the international instrument is contingent on availability of funding to pursue its provisions and this should not draw upon existing funding streams.
7. States are encouraged to engage with multilateral organizations (e.g., UNEP, OIE, FAO) and existing environmental conventions (e.g., CBD, CITES, CMS) during the international instrument negotiations to create synergies on actions to reduce risk of spillover and ensure consistency. States should also engage with civil society to ensure broad representation.
8. The interventions needed to reduce risk of spillover will also help to mitigate climate change and biodiversity loss and can support rural livelihoods.

Background

The World Health Assembly (WHA) negotiations for an international instrument provide a once-in-a-generation opportunity for global leaders to protect the world from future pandemics. The Preventing Pandemics at the Source Coalition—a group of leading organizations focused on conservation, public health, human rights, science, health justice and Indigenous peoples’ rights—urges States to prioritize an action-oriented One Health approach with a focus on reducing the risk of pathogen spillover from animals to people.¹

One Health has been defined by the World Health Organization (WHO), Food and Agriculture Organization of the United Nations (FAO), the World Organization for Animal Health (OIE), and the United Nations Environment Programme (UNEP) as “an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.”² There is growing recognition of the importance of One Health in the global health community, as evidenced by the creation of the One Health High Level Expert Panel and recent formation of the Quadripartite partnership for One Health.^{3,4} Failure to firmly adopt a One Health approach in the international instrument will seriously undermine its future success.

Most emerging infectious diseases—from HIV/AIDS to Ebola virus disease to anthrax—are caused by pathogens that spill over from animals, particularly wildlife, to people.⁵ Indeed, every viral pandemic since the start of the 20th century has had zoonotic origins. This indicates that the most likely cause of the next pandemic will be spillover. Furthermore, pathogen emergence is expected to increase in the near future.⁶ The international instrument must therefore include substantial provisions to address spillover.

Unfortunately, the public health sector has historically placed little attention on reducing risk of spillover, and instead has focused on containing the spread of a pathogen once it has already spilled over into humans.⁷ Examples of containment measures include “lockdowns”, travel bans, contact tracing, and pharmaceutical interventions (e.g., vaccines, therapeutics). While these measures are critical, experience over the past two years with COVID-19 demonstrates that they are insufficient for reducing harm from pandemics for at least five reasons:

¹ <https://www.preventingfuturepandemics.org/>

² <https://www.who.int/news/item/01-12-2021-tripartite-and-unep-support-ohhlep-s-definition-of-one-health>

³ <https://www.who.int/groups/one-health-high-level-expert-panel/members>

⁴ <https://www.who.int/news/item/18-03-2022-un-environment-programme-joins-alliance-to-implement-one-health-approach>

⁵ <https://www.nature.com/articles/nature06536>

⁶ <https://www.pnas.org/doi/10.1073/pnas.2105482118>

⁷ [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(21\)00260-6/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(21)00260-6/fulltext)



1. Access to containment measures such as vaccines and healthcare is often inequitable, whereas preventing spillover benefits all people. Excluding spillover prevention within the international instrument will signal that wealthy countries are tolerant of outbreaks in poorer countries, so long as those outbreaks do not grow into epidemics and pandemics that impact their countries.
2. No public health intervention is completely effective, as evidenced by the failed efforts to limit damage from COVID-19 even in wealthy countries with advanced public health systems.
3. A future pathogen is likely to emerge that will defy conventional public health and clinical wisdom, as has happened repeatedly in the past decade such as with Ebola virus, Zika virus, and SARS-CoV-2.
4. We live in an age of misinformation and disinformation that can quickly undermine public health recommendations. Take, for example, the widespread resistance among some members of the public to masks and vaccines in response to COVID-19. With the growing prevalence of social media and distrust of government, this problem will likely grow.
5. Containment measures do not address the threat of recurring spillback—in which humans transmit zoonotic pathogens back to animals—and those pathogens then spill back into humans, this time with pathogenic recombinations and mutations. One of the leading theories for how the Omicron variant of SARS-CoV-2 emerged is through spillback.

All this underscores the need for a layered approach to pandemics that addresses the upstream factors that drive spillover alongside containment measures. Risk of spillover could be meaningfully reduced with global annual investment of approximately US\$20 billion, which is a fraction of the cost of the millions of lives and trillions of dollars lost from pandemics of zoonotic origin such as HIV/AIDS and COVID-19.⁸ The benefits of implementing interventions to reduce risk of spillover extend beyond pandemics; some of these interventions will also significantly help to mitigate climate change and biodiversity loss, which in turn will provide other health benefits and can also support rural livelihoods.

Recommendations for the international instrument

We urge States to incorporate action-oriented One Health measures to reduce risk of spillover in the international instrument. To do this, the international instrument should:

- a. Promote protection, conservation, and stewardship of tropical and subtropical forests;
Rationale: Tropical and subtropical forests have high terrestrial biodiversity (and pathogen diversity) and should be prioritized for protection, other effective area-based conservation measures, and/or Indigenous land tenure and management. Heightened pandemic risk does not result from biodiversity that these forests contain themselves; rather, opportunities for spillover are created during the process of anthropogenic destruction and degradation of these forests and related exploitation of wildlife.
- b. Support shutting down or strictly regulating commercial wildlife trade and markets that contribute to zoonotic spillover, particularly commercial trade in birds and mammals, both domestically and internationally;

⁸ <https://www.science.org/doi/10.1126/sciadv.abl4183>

Rationale: Commercial markets and trade, particularly of live and freshly butchered wild birds and mammals, create abundant opportunities for transmission of pathogens across species, and subsequent accumulation of pathogen recombinations and mutations that can increase pathogenicity and the potential for human-to-human transmission. By focusing on commercial trade and markets—particularly commercial trade in birds and mammals for food, pets, and medicine, much of which is for the luxury market—this threat can be addressed while respecting the rights and needs of Indigenous peoples and local communities and would be consistent with recent recommendations from WHO.⁹

- c. Support universal health care, particularly for communities living in emerging infectious disease hotspots;

Rationale: Healthcare is essential in reducing risk of spillover because it improves population-level immunity (e.g., fewer immunosuppressed individuals because they have access to treatment) and can reduce reliance on risky behaviors that lead to pathogen spillover (e.g., engaging in deforestation or forest degradation to generate income for healthcare).¹⁰

- d. Support alternative livelihoods for people whose current livelihood puts them in contact with wildlife, whether intentional or not;

Rationale: People engage in activities to generate income that put them in contact with wildlife, whether intentional or not, thus creating opportunities for spillover. Access to alternative livelihoods, particularly in rural areas, can reduce opportunities for contact with wildlife, thus decreasing risk of spillover.

- e. Support strengthened veterinary care and biosecurity during animal husbandry;

Rationale: Significant mitigation of spillover risk could be achieved through strengthened veterinary care, including control of vaccine-preventable diseases in domestic animals. This would provide a direct benefit to animals and their owners through reduced animal morbidity and mortality; additionally, this would improve timeliness of recognizing emerging infectious diseases in animals. To further enhance biosecurity, participatory surveillance (e.g., engagement of animal caretakers and owners in identifying animal illnesses of public health concern) should be encouraged. Paramount to improving biosecurity during animal husbandry is humane treatment of animals, as this would reduce stress-induced immunosuppression and therefore decrease opportunities for pathogen transmission and spillover.

- f. Expand pathogen surveillance at interfaces between humans, domestic animals, and wildlife;

Rationale: Surveillance is the backbone of public health and enables program implementation, evaluation, and research for prevention of outbreaks, epidemics, and pandemics. Most surveillance systems today do not include coordinated multisectoral (human and animal) surveillance. Integrated surveillance systems can offer an informative and comprehensive view of potential outbreaks, epidemics, and pandemics.

- g. Create an international scientific and policy advisory body charged with translating the latest evidence on pandemics, including spillover risk reduction, into action-oriented policy;

Rationale: The evidence on pandemic prevention and preparedness has not been well translated into policy and program at a global level, particularly with regards to reducing risk of spillover. As this field

⁹ <https://www.who.int/publications/i/item/WHO-2019-nCoV-Food-safety-traditional-markets-2021.1>

¹⁰ <https://www.pnas.org/content/early/2020/10/22/2009240117.abstract>



is rapidly evolving, regular assessments of the latest evidence need to be conducted and translated into policy. This advisory body could be modeled after the Intergovernmental Panel on Climate Change (IPCC) or the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

- h. Require that States create national action plans for pandemic prevention, preparedness, and response and that these national action plans include measures to reduce risk of spillover;

Rationale: COVID-19 has made clear that a “health threat anywhere is a health threat everywhere”. Any lapses in pandemic prevention, preparedness, and response at the national level has global implications. These action plans should be fully integrated with countries’ National Biodiversity Strategic Action Plans (NBSAPs) under the Convention on Biological Diversity and Nationally Determined Contributions (NDCs) under the Paris Agreement to enhance synergies.

- i. Establish a reporting mechanism to evaluate a State’s compliance with the international instrument.

Rationale: Having an independent accountability mechanism, similar to that which exists for chemical weapon risks, would improve the probability of a successful outcome from the international instrument.

Conclusion

Addressing pandemics requires an all-of-society and all-of-government approach, and there must be a trans-sectoral approach to pandemic prevention, preparedness, and response. As such, States negotiating the international instrument should engage with multilateral organizations including UNEP, FAO, and OIE, among others. They should also engage with existing conventions such as the UN Convention against Transnational Organized Crime (UNTOC), the Convention on the Conservation of Migratory Species of Wild Animals (CMS), the Convention on Biological Diversity (CBD), and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Doing so will maximize the chances for a successful outcome of the international instrument negotiations by creating synergies and ensuring consistency. States are also encouraged to engage with civil society organizations with extensive field, scientific, and policy expertise in wildlife conservation and health.

Reducing risk of spillover has historically been omitted from public health approaches to pandemics. The stakes are too high to keep pursuing incomplete solutions to this catastrophic threat to humanity; provisions to reduce risk of spillover must be incorporated into the final international instrument.

April 15th, 2022.

The members of the Coalition for Preventing Pandemics at the Source are: Conservation International, Dalberg Catalyst, EcoHealth Alliance, Health in Harmony, IFAW, INCT EECBio, Management Science for Health, Marked by Covid, PIVOT, Rainforest Alliance, Right to Health Action, The Association of Zoos and Aquariums, The Jane Goodall Institute, The Nature Conservancy, The Tenure Facility, Wildlife Conservation Society, World Resource Institute, WWF

For more information, please visit the [Preventing Pandemics at the Source](https://preventingfuturepandemics.org) website or contact secretariat@preventingfuturepandemics.org