

From locked down to unlocked: Strengthening Collaborative Surveillance for Emerging Epidemic Threats



*Sharing lessons on multilateral
collaborations to avert emerging
military and public health threats.*

*Findings from a collaborative roundtable hosted by the **Jameel Institute**
and the **WHO Hub for Pandemic and Epidemic Intelligence** at the
Munich Security Conference, 15 February 2025.*

Setting the scene

Infectious hazards remain a threat to global health and national, and international security. In the UK, pandemics are one of only a handful of risks qualified as ‘catastrophic’ in the national risk register. The COVID-19 pandemic has demonstrated that infectious hazards not only affect countries’ health, but also their economy and security. Indeed, these events can cause serious civil unrest as well as diplomatic clashes, with consequences that may last over years.

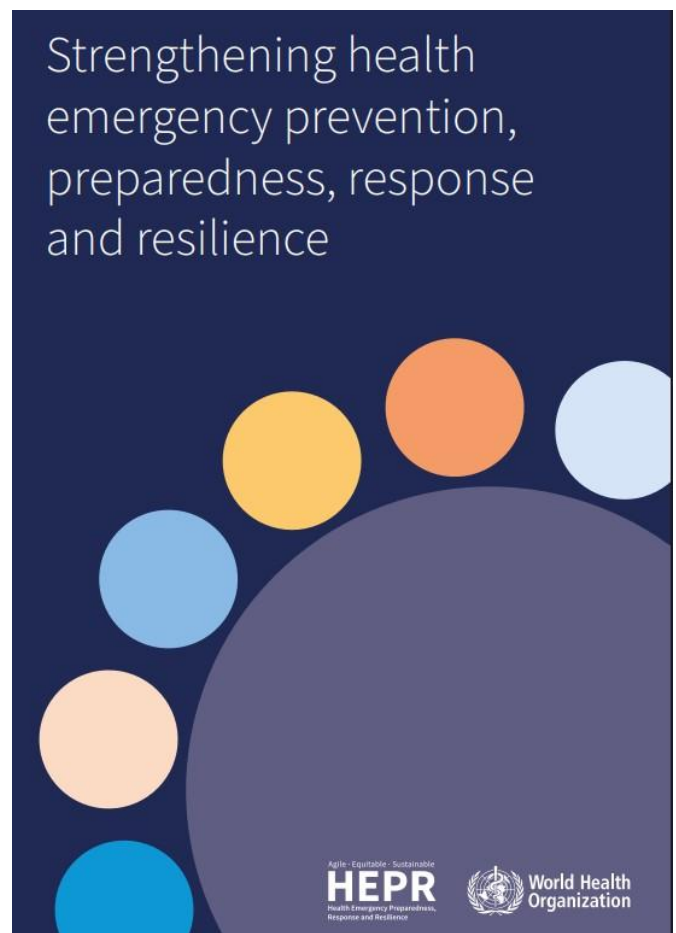
While many countries of the Global North turned inwards and scrambled a national response to the emerging pandemic threat in early 2020, African Union countries established the ‘[Joint Task Force for Coronavirus](#)’. They shared data and analytic expertise and coordinated mitigation strategies across the continent.

[WHO makes collaborative surveillance a key pillar of its new global architecture for health emergencies.](#)

The roundtable focused on:

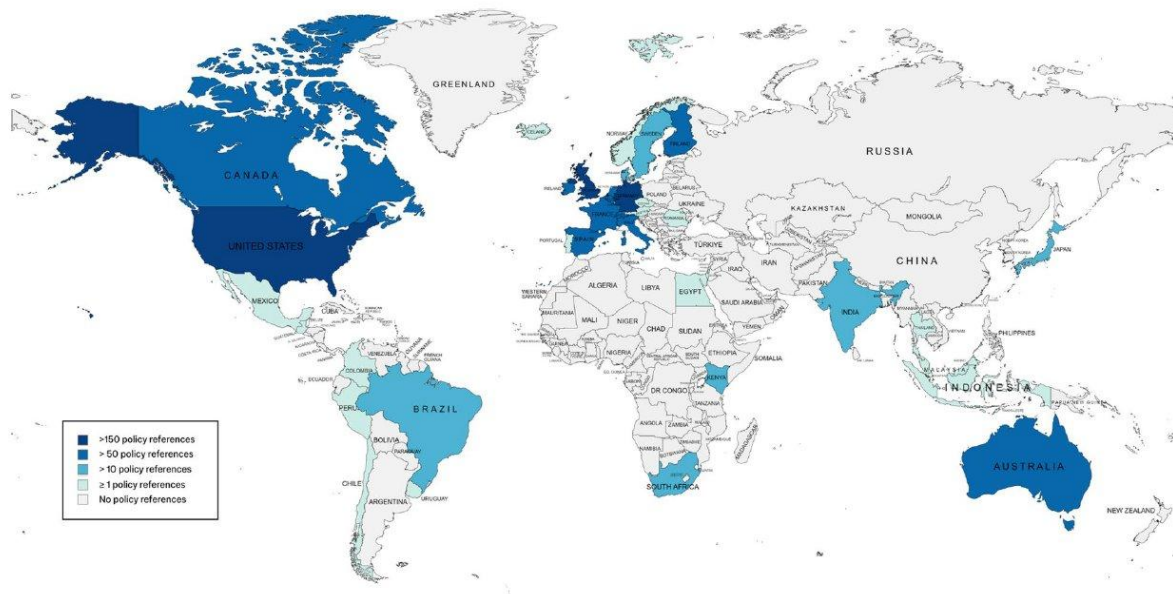
- *Balancing routine and emergency disease surveillance*
- *Developing data and analytical standards for rapid epidemic data analysis*
- *Building multisectoral collaboration of expertise*
- *Ensuring safe and ethical flow of intelligence across national borders*

Strengthening the global architecture for health emergency prevention, preparedness, response and resilience | WHO Technical Document.



Objective

The objective of this roundtable was to bring together experts from epidemiology, data analytics, economics, defence, health policy and international law to explore how to overcome challenges in institutionalising collaborative surveillance agreements to effectively prepare for emerging epidemic threats.



van Elsland, S.L., O'Hare, R.M., McCabe, R. et al. Policy impact of the Imperial College COVID-19 Response Team: global perspective and United Kingdom case study. Health Res Policy Sys 22, 153 (2024)

Drawing on examples of successful [defence cooperation agreements](#) between countries – the bilateral and multilateral agreements that enable the sharing of intelligence to coordinate responses to emerging military threats – the discussion was focused on fundamental questions such as:

- *How can the global health community learn from defence-style cooperation agreements for pandemic threats?*
- *What are the specific political, economic, legal, analytical and epidemiological challenges of establishing collaborative agreements in intelligence for pandemic threats?*
- *How should such agreements be structured for better pandemic prevention, preparedness, response and resilience?*

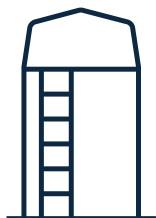
What did the roundtable uncover?

The speakers, leaders and experts in their respective fields, set a thorough view of the challenges, strengths, weaknesses and opportunities that exist, to establish cooperative agreements for pandemic threats.



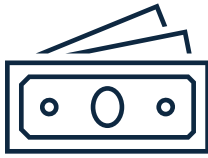
Global surveillance | Enhancement, maintenance, action and incentives

- Currently, global surveillance is lacking in many lower-and-middle-income countries, as well as in high-income countries, such as the US, where public health surveillance is not supported or prioritised as it should be. In turn, this creates a blind spot that increases the risk of global pandemics. Population-specific surveillance data provides critical evidence to inform decision makers on contextually relevant health issues, if this is lacking, outbreaks will be compounded
- The versatility of the surveillance is critical to ensuring it can be used for endemic threats, but also, adapted immediately when an unusual signal is detected to cover epidemic risk.
- Academics are often at the forefront of research into new pathogens, vaccines, and surveillance methods. Their involvement is essential for creating evidence-based policies and informing public health strategies
- A critical takeaway was the need to make surveillance actionable. Participants emphasized that once a potential threat is detected, clear plans and triggers for action should be established to ensure a rapid, coordinated response.



Silos | Why these are preventing good health surveillance?

- Participants discussed the detrimental impact of silos between one health surveillance systems. Human health agencies often lack the mandate to sample farmed animals, leading to gaps in early detection of zoonotic diseases. The need for greater integration across human, animal, and environmental health surveillance was emphasized, as such integration could significantly improve the identification and mitigation of cross-species transmission



Incentivisation | Health threats and how to report them

- Another critical issue is the challenge of ensuring protection and incentives for those reporting health threats. This spans from a farmer in the US reporting a case of avian influenza (H5) on their farm to countries like South Africa, which have advanced genomic surveillance systems and report new variants of SARS-CoV-2. Currently, there are few incentives for reporting these threats, and the repercussions for doing so can be severe and detrimental. The discussion focused on how to create mechanisms that protect and incentivize these critical reports at both the national and international levels.



Strengthening links with military | Connecting industry and military to reinforce capacity

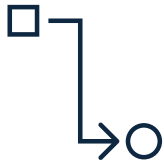
- The military was seen as having dual potential in supporting public health efforts. Firstly, by being mobilized in a coordinated manner during threats, they can assist frontline workers without taking over the response. Secondly, recognising the impact of endemic and epidemic infections on deployed military forces could raise attention to infectious diseases as a security issue. Drawing parallels to the introduction of free school meals in the US in response to malnutrition among military recruits, it was noted that addressing a threat to the military could trigger broader health responses.



Communication | Education and advocacy – we must get it right!

- The importance of communication and advocacy—both to the public and to experts and decision-making bodies across various sectors, cannot be underestimated. Drawing on the example of H5, participants noted many people outside of the US, are unaware of the ongoing outbreak, which poses a significant global threat. Additionally, public memory is short, as evidenced by the

resurgence of anti-vaccine sentiments, with some forgetting the devastation of diseases like polio. The need for clear and effective language, including “soft power” messaging was noted as essential in promoting better awareness and understanding of health risks.



Impact assessments | Broadening the scope

- Has there been sufficient change in the evolution of how epidemic mitigation strategies are measured? Historically the focus was on the number of cases or deaths, today the cost-effectiveness of responses is considered, allowing for a more nuanced understanding of both health impacts and economic costs. It was suggested that future assessments should also consider broader impacts, including effects on military personnel, geopolitical security, and other far-reaching consequences, such as orphanhood during the Ebola outbreak or the COVID-19 pandemic. Assessing the whole picture, not just one element.



Come together | Why global health must be integrated into security and aid discussions

- A recurring theme was the need to broaden the discussion on global health. The intersection of global health, aid, and security needs to be highlighted more clearly, as seen with the increased attention to food security at the conference. Despite this, there was disappointment at the low level of focus on epidemic and pandemic risks. The need for a task force dedicated to infectious diseases and emerging outbreaks is key to thorough prevention and preparedness going forward.

What next? Report summary

It is now widely acknowledged that the discussion on global health must be at the forefront of the intersection between aid and security.

The roundtable underscored the critical need for stronger surveillance systems, the protection and incentivization of health threat reporters, and a more integrated approach to animal and human health surveillance. The urgent need for collaboration with military and industry sectors was also highlighted, along with broader, more comprehensive impact assessments. Furthermore, communication, education, and advocacy strategies must be improved to foster greater global cooperation in addressing infectious hazards.

With existing Munich Security Conference Task Forces assigned to topics, such as food security, this year's conference made it clear that establishing a global health and infectious disease task force was vital to bring heightened awareness of these being a significant security risk.

Ultimately, there was a strong consensus that global health and epidemic risk should be a central priority in security discussions and not given limited attention as an afterthought. The call to action was clear: We must elevate health security and epidemic preparedness within international security frameworks to build a more resilient and coordinated global response to emerging threats. Investments in health are investments in competitiveness, innovation, security and economic growth.

Acknowledgments

Our thanks go to:

- *The Munich Security Conference team*
- *The WHO Hub for Pandemic and Epidemic Intelligence researchers*
- *The Jameel Institute researchers*
- *Community Jameel – for enabling participation and hosting of this roundtable*