

Advancing Global Public Health Surveillance and Emergency Preparedness *A Policy Dialogue Imagining Evidence-Based Prevention*

Background

This brief summarizes a policy dialogue on global pandemic surveillance, preparedness, and response that took place at the Duke in DC office on February 18, 2026, co-hosted by Duke's Center for Policy Impact in Global Health (CPIGH) and the Duke Margolis Institute for Health Policy (Margolis Institute). The dialogue was held under Chatham House rules, so this brief does not attribute any comments to named individuals. Attendees included members of the U.S. government, multilateral health agencies, think tanks, foundations, academia, and the pharmaceutical industry. The first half of the meeting focused on presentations on the America First Global Health Strategy (AFGHS) and on studies by Duke University researchers on the future of multilateralism and the public health impact of medical countermeasures. The second half was an open discussion on next steps.

Key Themes

The dialogue highlighted several interconnected themes shaping the future of global public health surveillance and emergency preparedness:

- **Multilateral coordination is under threat.** The COVID-19 pandemic showed how national prioritization, insufficient legal frameworks, and weak incentive structures undermined multilateral coordination and equitable access to vaccines. The result has been a lack of trust in multilateral leadership and a shift toward regional approaches.
- **Global pandemic preparedness systems still have weaknesses.** Such systems need pathogen-specific strategies and adaptable response frameworks; flexible, scalable manufacturing platforms for medical countermeasures (MCMs)—vaccines, therapeutics, and diagnostics—that can be regionally deployed; stronger governance anchored in credible, rule-based multilateral systems; and regulatory harmonization to reduce bottlenecks and accelerate review processes. There is broad, widespread recognition of the need to increase public trust in vaccines. Pandemic readiness should be stress-tested and improved using operational simulations and scenario planning. The multilateral system for pandemic preparedness needs more robust external evaluation and accountability mechanisms.
- **The private sector must be engaged, but there are inherent tensions.** One tension is attracting private capital into pandemic preparedness and response (PPR) while also advancing global health equity. Another is aligning industry self-interest with global public health goals, including the generation of global public goods. A tension can also be seen in the way that U.S. bilateral relationships are envisaged as a mechanism for building national and regional capacity while expanding U.S. industry access to emerging markets.

The America First Global Health Strategy

The [AFGHS](#) has three key pillars—making the U.S. safer, stronger, and more prosperous—with five goals across these three pillars.

Pillar	Goals
Safer (the lead priority)	<i>Goal 1:</i> Enable detection of an outbreak with epidemic potential within seven days of its emergence <i>Goal 2:</i> Contain outbreaks that originate outside of the U.S. rapidly at their source
Stronger	<i>Goal 3:</i> Strengthen bilateral relationships with key countries by entering multi-year bilateral agreements that contain the spread of infectious diseases, save lives, and enable economic growth
More prosperous	<i>Goal 4:</i> Promote American health innovations through health foreign assistance programs <i>Goal 5:</i> Create a conducive environment for American businesses to deploy their innovative health products and services globally

The State Department sees the AFGHS as advancing political, public health, and economic objectives, while aiming to ensure that the department remains a leader in global health. The strategy includes both bilateral and multilateral mechanisms, looking at both present and future possibilities for global health engagement.

- **The focus of pillar 1 is surveillance and response.** *Surveillance* will prioritize bilateral engagement to the maximum extent possible, supplemented with multilateral engagement. The emphasis is on bilateralism in light of the U.S. withdrawal from the WHO. The U.S. will need to use inter-agency and multisectoral approaches to bolster its relationships with countries with whom they do not have a memorandum of understanding (MOU). Three high-risk regions have been prioritized: sub-Saharan Africa, Southeast Asia, and South and Central America. The approach includes pathogen sharing and sample sharing strategies. The MOU with each bilateral partner country includes a data integration component intended to streamline parallel U.S. and partner-country reporting systems. An anticipated area of capital investment for the State Department will be a long-term global health security platform with increased surveillance. For *response*, the State Department aims to enable a response within 72 hours of outbreak detection using multisectoral platform engagement: (i) a global platform will support team coordination and multisectoral engagement; (ii) interagency engagement and processes will help support bilateral partnerships; and (iii) in countries where political or security constraints limit federal access, non-federal actors may engage.
- **The focus of pillar 2 is strengthening bilateral relationships.** The major mechanism will be multi-year MOUs based on a shared vision and co-investment framework. Agreements will vary by country and will be transparent. The State Department says that the multi-year bilateral agreements with co-investments

have been received positively by partner countries; 16 were signed as of Feb 13, 2026, 20-30 more deals were being worked on at the time of this policy dialogue, and it is anticipated that there will be 40–50 MOUs in total. The U.S. contribution is expected to decline as each partner country's capacity increases, and then U.S. resources will be redirected to higher-need countries. KFF maintains a [tracker](#) that tracks U.S. bilateral MOUs for global health.

- **The focus of pillar 3 is innovation and industry.** The U.S. plans to co-fund advanced market commitments that increase regional and global capacity, with increased access to emerging markets for the U.S. industry. The State Department has expressed a preference for promoting the U.S. industry where feasible, and open solicitations and procurement announcements will be forthcoming.
- **The State Department sees artificial intelligence (AI) as an important tool in achieving its goals.** For example, it views AI as a potential asset in the data integration that underpins the bilateral MOUs and as a tool for pathogen detection during outbreaks by supporting [viral metagenomic next-generation sequencing](#). The department recognizes the need to adhere to inter-governmental standards on AI and to mitigate the risks of nefarious actors using AI. There needs to be a responsible implementation framework governing AI use in the global health space.

The Future of Multilateralism in Pandemic Preparedness and Response

A team of Duke researchers—Beth Boyer (Margolis Institute), Ipchita Bharali (CPIGH), and David McAdams (Fuqua School of Business)—presented their findings from a project funded by the Carnegie Foundation that explored the **key features of an equitable global vaccine strategy for the next pandemic**. The project included three key qualitative studies: (i) in-depth interviews with expert key informants working at the global level; (ii) a national study in Ghana; and (iii) a national study in India. The global study was [published](#), and the national studies are undergoing peer review.

- **Multilateralism fell short on equitable access to vaccines during the COVID-19 pandemic.** Prioritization of national interests prevented dose sharing and there was unequal market power between countries—high-income countries (HICs) had the power to enter into early bilateral deals with pharmaceutical companies to purchase enough doses to vaccinate their entire populations multiple times over. Vaccine production was also highly concentrated in HICs. Low- and middle-income countries (LMICs) with lower manufacturing and financing capacities were left behind. There was a lack of adequate incentives, legal structures, and upfront financing to promote equitable global vaccine access. Weaknesses in multilateral structures and lack of legislative barriers led to HICs “double-dipping”—buying doses through bilateral agreements with pharmaceutical companies while also receiving allocations of vaccines from COVAX.
- **There are 5 key approaches to averting vaccine inequity in the next pandemic.** First, it will be crucial to promote regional self-sufficiency in research and development (R&D) and vaccine manufacturing. Nevertheless, there were concerns among some pandemic control experts at the policy dialogue that regionalism may end up threatening the MCM supply chain and global R&D collaboration. Second, building global manufacturing capacity must start now; it cannot be deferred until the next pandemic. Third, while multilateralism showed its limits during the COVID-19 pandemic, international collective action will still be important, especially technology transfer agreements between large companies in the

Global North and partners in the Global South as well as South-South partnerships. Fourth, public funding for pandemic vaccine development should include conditionalities that support global access. Finally, new kinds of intellectual property (IP) agreements are essential in preparing for the next pandemic. While IP is crucial for incentivizing innovation, IP sharing does not need to be unconditional; for example, future agreements could be royalty-based and do not need to be a zero-sum game.

▪ **Game theory can help make the proposed PABS system mutually beneficial and credible.** McAdams and Gavin Yamey [proposed](#) a game theory-inspired approach that could help break the impasse over the Pathogen Access and Benefit Sharing (PABS) annex of the Pandemic Agreement. They argue for a voluntary PABS program that offers vaccine manufacturers a choice: commit a portion of real-time production to LMICs in return for pre-agreed partnerships in frontline countries to test vaccine candidates and establish effectiveness during the earliest outbreaks. LMICs would then have a credible prospect of receiving some of the first doses, strengthening their incentive to share pathogen data and collaborate in trials. Manufacturers and their home countries would gain a faster path to a marketable vaccine and the national protection that comes with it. This approach would make global access part of a grand bargain that enables faster vaccine development, rather than simply a constraint imposed on HIC vaccine producers.

▪ **Country experiences from Ghana and India can help inform future PPR efforts.** Research led by CPIGH's international research partners in Ghana (the University of Ghana) and India (the Public Health Foundation of India) has provided insights into their own national experiences of trying to vaccinate their populations during the COVID-19 pandemic. Key informants (KIs) in both studies were from government, donor agencies, academia, non-governmental organizations, and the private sector. In the Ghana study, KIs argued that the multilateral system, including COVAX, failed them. To avoid similar failures in the future, it will be crucial for Ghana to prioritize national and regional health and vaccine sovereignty, the financing of vaccine procurement and manufacturing efforts, and sustained collaboration towards capacity building and preparedness. In the study in India, KIs highlighted achievements and shortcomings of India's pandemic response. Achievements included the rapid scale-up of testing capacity, expansion of treatment infrastructure, mobilization of public and private sector resources, and implementation of a large-scale vaccination campaign. The shortcomings included fragmented governance, limited coordination across levels of government, inadequate risk communication, and insufficient preparedness financing, all of which led to disruptions to essential health services, with a disproportionate impact on vulnerable populations. Financing mechanisms were perceived as largely reactive, relying on resource reallocation rather than dedicated emergency preparedness funding. An improved response in future emergencies will require strengthened emergency coordination, surveillance, primary healthcare, risk communication, emergency financing, and social protection systems.

A Policy Framework for Exploring the Public Health Impact of Medical Countermeasures

Brian Canter (Margolis Institute) gave an overview of the institute's [policy framework on transmission reduction](#) during outbreaks, which emphasizes the need for direct and indirect benefits of a medical product, including through boosting individual immunity and reducing disease transmission. Such products may provide greater indirect benefits to individuals through "spillover health benefits" (herd effects). In other words, compared to being the only person in a community who has received a vaccine

or treatment, there may be a greater reduction in risk of infection when being around others who have been vaccinated or treated.

▪ **These indirect benefits of medical countermeasures should be incorporated into regulatory and reimbursement pathways.** As Canter and colleagues at the Margolis Institute have previously [argued](#), “emphasizing the combination of indirect and direct benefits provides policy makers, providers, patients and other stakeholders a more complete understanding of the value generated by use of vaccines, therapeutics, and diagnostics.” Premarket research capacity on indirect benefits and population level health outcomes should be boosted. There is an opportunity for the U.S. Food and Drug Administration to work with the National Institutes of Health and Centers for Disease Control and Prevention to build platforms to generate real world evidence (RWE) on spillover health benefits and population health outcomes, acknowledging that RWE capacity is currently spread throughout different federal agencies. Federal agencies can also consider how product labels may reflect indirect benefits, which would have implications for coverage decisions and quality improvement initiatives. Future considerations include how the Centers for Medicare and Medicaid data interoperability initiatives can work with other organizations towards the creation of localized public health information.

Open Policy Dialogue on Next Steps to Advance PPR

▪ **New kinds of market incentives are needed to attract companies to make pandemic vaccines.** There is a persistent tension between developing such vaccines in the public interest and the financial incentives required to advance vaccine R&D and production. There has been little interest in vaccines from private capital and the venture capital space. One way to mitigate the ongoing tension might be to assure biotechnology groups access to new markets as a benefit from developing pandemic vaccines.

▪ **The PABS system aims to ensure equitable access to pandemic-related health products but faces resistance from industry and HICs.** Participants in the dialogue argued that R&D obligations and conditionalities may deter biotechnology companies from investing in pandemic-related product development. These kinds of political interests are unlikely to disappear, and so one approach going forward would be to prioritize decentralized manufacturing rather than assuming these political barriers can be overcome. However, sponsors of pandemic R&D often maintain monopoly control in HICs, creating challenges for effective technology transfer to LMICs. Investments in HICs could be maintained (“warm capacity”) and then mobilized during emergency response periods. Expanding access does not require eliminating HIC or MIC profits (e.g., regional manufacturing models, such as Brazil supplying Latin America, could be profit-based). In some scenarios, development of biologics may precede vaccine development, so product categories should not be treated as monolithic.

▪ **For rapid development of diagnostics in a pandemic, it would be valuable to keep testing platforms “warm” between pandemics to maintain readiness.** Testing products during emergencies is not “one size fits all,” but depends on the specific pathogen, scenario, and affected population; for vaccines, for example, CEPI’s 100 Days Mission reinforces the need for pathogen- or pathogen-family-specific approaches. Flexible platforms that allow for pivoting to different pathogens are essential. As we saw with COVID-19, for rapidly spreading respiratory infections, strengthening local rapid response capacity is critical, and diagnostics are an important component, along with therapeutics and vaccines. Building

national and regional capacity to manufacture these MCMs would boost local pandemic control. Demand signals for emerging and future pathogens must be incorporated into preparedness planning.

▪ **Prioritizing first-line countries for receiving MCMs may provide greater global containment benefits than national allocation.** Our shared vulnerability to circulating pathogens underscores global interdependence. While it is understandable that, in a pandemic, there may be a call for all nations to receive MCMs equally and simultaneously, in fact prioritizing first-line countries could make more sense from a global containment perspective. There is a “period of scarcity”—the time between product availability and sufficient global supply—which represents the most inequitable stage of distribution, one in which HICs use their greater purchasing power to shore up the supply. If HIC self-interest and capital structures continue to dominate, then equity models based on compelled sharing and rules may not succeed. But framing national self-interest as inherently unjust may complicate cooperation and alignment.

▪ **COVAX showed the constraints of multilateralism.** Political constraints were a structural reality in global vaccine coordination during the COVID-19 pandemic. Companies prioritized domestic political obligations. There was untapped manufacturing capacity in many countries, and technology transfer opportunities were underused. Regional coordination can be challenging unless there is strong trust in regional organizations. Multilateral institutions should undergo external evaluation and implement operational simulations and scenario testing to strengthen coordination mechanisms. Stress testing market shaping strategies may improve resilience. While Geneva-based organizations are not currently conducting operational simulations, CEPI is running exercises to identify bottlenecks in vaccine operations and stakeholder coordination. Regulatory harmonization is critical to prevent bottlenecks and improve review efficiency. Dialogue participants also discussed the role of shifting seasonal influenza production toward pandemic strains and noted that prematurely shifting production could end up increasing seasonal influenza mortality and disease burden.

▪ **The U.S. bilateral approach provides opportunities outside the multilateral system.** The AFGHS provides an opportunity to test vaccine effectiveness in frontline countries where the pathogen is causing illness prior to the pathogen spreading to the U.S. However, data sharing partnerships face less capacity limits than partnerships formed for pathogen-testing. Partner countries will have to have pre-established pathogen testing protocols. LMICs must also trust U.S. partnerships to allow U.S. vaccines to be produced at scale.

▪ **Improved pandemic response in the future will need efforts now to boost public trust in medical products, including innovative products.** During the COVID-19 pandemic, some U.S. regions experienced worse health outcomes than parts of Africa, highlighting domestic preparedness gaps as well as anti-vaccine beliefs. By mid-April 2022, an analysis by KFF estimated that over a quarter of a million COVID-19 deaths in the U.S. could have been [prevented](#) if unvaccinated people had received the primary series. Current preparedness systems tend to prioritize technological advancement over trust-building and community engagement.

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