

GOVERNING THE GLOBAL FIGHT AGAINST PANDEMICS: THE WHO, THE INTERNATIONAL HEALTH REGULATIONS, AND THE FRAGMENTATION OF INTERNATIONAL LAW

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I. GOVERNANCE MODELS FOR INFECTIOUS DISEASE CONTROL BEFORE THE 2005 INTERNATIONAL HEALTH REGULATIONS

Since the middle of the nineteenth century, the international community has been struggling to find an effective model to fight epidemics of infectious diseases, and it is still looking for the most suitable one.¹ As history and the COVID-19 pandemic demonstrate, international institutions and legal instruments designed to protect global health have failed to prevent devastating outbreaks, taking a huge toll on human lives. These outbreaks have caused considerable socio-economic disruption, triggered regional instability, and highlighted the dramatic vulnerability of national health systems.

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1. See DAVID P. FIDLER, INTERNATIONAL LAW AND INFECTIOUS DISEASES 21–57 (1999) (discussing the history of international legal control of infectious diseases by focusing on the objectives states wished to achieve).

Before the 1948 establishment of the World Health Organization (WHO), the international regime of infectious disease control rested on a fragmented regulatory and cooperation framework resulting from a century-long process of health diplomacy. This framework consisted of several sanitary conventions to prevent and control the international spread of specific infectious diseases and propose harmonized quarantine procedures.² Further, four permanent international health organizations were created during this period to enhance intergovernmental collaboration.³ The WHO's 1948 Constitution established it as the leading international agency in the field of public health, endowed with broad directing and coordinating powers. Several existing health institutions were subsumed into the WHO,⁴ creating a coherent governance model embedded in a broad, holistic constitutional mandate projected towards achieving global health security and universal enjoyment of the right to health.⁵

2. David P. Fidler, *Public Health and International Law: The Impact of Infectious Diseases on the Formation of International Legal Regimes, 1800–2000*, in *PLAGUES AND POLITICS: INFECTIOUS DISEASE AND INTERNATIONAL POLICY* 262, 265–69 (A.T. Price-Smith ed., 2001).

3. These were the Pan American Sanitary Bureau (1902), Office International d'Hygiène Publique (1907), Health Organization of the League of Nations (1923), and Office International des Epizooties (1924, now known as the World Organization for Animal Health). Makane Moïse Mbengue, *Public Health, International Cooperation*, in *MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW* (Rüdiger Wolfrum ed., 2010). For more information on international sanitary conferences and the international health organizations preceding the WHO, see Xavier Seuba Hernández, *Los Orígenes de la Cooperación Sanitaria Internacional [The Origins of International Sanitary Cooperation]*, in *SALUD PÚBLICA MUNDIAL Y DERECHO INTERNACIONAL* 67 (Xavier Pons Rafol ed., 2010).

4. For example, the Pan American Sanitary Bureau became the Pan American Health Organization, a regional committee of the WHO. NORMAN HOWARD-JONES, *WORLD HEALTH ORG., THE PAN AMERICAN HEALTH ORGANIZATION: ORIGINS AND EVOLUTION* 18–19 (1981).

5. See generally Constitution of the World Health Organization, July 22, 1946, 62 Stat. 2679, 14 U.N.T.S. 185 (“The objective of the World Health Organization . . . shall be the attainment by all peoples of the highest possible level of health.”) [hereinafter WHO Constitution]. For a systematic institutional overview of the WHO and its functions, see GIAN LUCA BURCI & CLAUDE-HENRI VIGNES, *WORLD HEALTH ORGANIZATION* 119–55 (2004). See also YVES BEIGBEDER, *THE WORLD HEALTH ORGANIZATION: ACHIEVEMENTS AND FAILURES* 1–36 (2018) (summarizing the mandate, programs, and governance of the WHO).

Consistent with its mission, the WHO took the lead in the management of the international disease control regime, taking regulatory steps aimed at the defragmentation and systematization of the existing conventional patchwork. This endeavor led the World Health Assembly (WHA), the WHO's plenary organ composed of all member states, to adopt the 1951 International Sanitary Regulations (ISR),⁶ the first universal legal regime of surveillance and control of "quarantinable diseases"⁷ binding on all WHO members.⁸ In fact, the ISR replaced all the sanitary conventions that member states adopted during the first half of the twentieth century. Despite improvements and updates in 1969, 1973, and 1981, including a change of name to the International Health Regulations (IHR), the Regulations fell short of their core mission to "ensure the maximum security against the international spread of disease with the minimum interference with world traffic."⁹ This failing resulted from a combination of problematic factors, prominently including the obsolescence of the maximum restrictive measures approach that conflicted with the need to adapt control measures to scientific developments and a contextual risk assessment, as well as the breakdown of the surveillance system due to a regular failure to report outbreaks.¹⁰ Further, as new infectious diseases such as HIV/AIDS emerged, the WHA failed to adapt the IHR and require mem-

6. World Health Organization [WHO], Assembly Res. WHA4.75 (May 25, 1951), in 35 Official Records of the World Health Organization, at 50 (1952).

7. The 1951 ISR defined a "quarantinable disease" as "plague, cholera, yellow fever, smallpox, typhus and relapsing fever[.]" WHO, Comm. on Int'l Sanitary Regulations, *WHO Regulations No. 2: International Sanitary Regulations*, at 6, WHO Doc. A4/60 (1951) [hereafter 1951 ISR]. Typhus and relapsing fever were removed in a 1969 amendment. See WHO, Assembly Res. WHA22.46, annex, International Health Regulations, art. 1 (July 25, 1969), in 176 Official Records of the World Health Organization, at 37 (1969) (defining "diseases subject to the Regulations" as cholera, plague, smallpox, and yellow fever). Smallpox was removed in 1981 after its eradication in the late 1970s. WHO, Assembly Res. WHA34.13 (May 20, 1981), in *Thirty-Fourth World Health Assembly: Resolutions and Decisions*, at 11, WHO Doc. WHA34/1981/REC/1 (1981).

8. WHO Constitution, *supra* note 5, arts. 21–22. These provisions grant the Assembly extraordinary and far-reaching normative powers. BURCI & VIGNES, *supra* note 5, at 131–32.

9. 1951 ISR, *supra* note 6, at 2.

10. FIDLER, *supra* note 1, at 61–68.

ber states to notify the WHO about such outbreaks.¹¹ Eventually, these shortcomings triggered the search for a new governance model in 1995.¹²

The tipping point of this process was the outbreak of the Severe Acute Respiratory Syndrome (SARS) in 2003. The ensuing global crisis showed the ineffectiveness of a governance model based on containment of known diseases and served as a major catalyst for a thorough rethinking of the IHR. In the absence of a specific legal framework, the WHO responded to SARS with an unprecedented assertion of emergency powers. This marked a substantial shift in the WHO's practice, striking a new balance between sovereignty and collective interests, and suggesting a new model of governance (which would be later formalized in the revised IHR).¹³ This new model was based on expertise as a legitimizing factor, information asym-

11. See Lawrence O. Gostin, *International Infectious Disease Law: Revision of the World Health Organization's International Health Regulations*, 291 J. AM. MED. ASS'N 2623, 2625 (2004) ("The IHR are limited to the same 3 diseases originally discussed at the First International Sanitary Conference in 1851: cholera, plague, and yellow fever. This narrow scope means that the IHR are irrelevant for confronting most international threats, ranging from the HIV/AIDS pandemic to SARS.").

12. WHO, Assembly Res. WHA48.7 (May 12, 1995), in *Forty-Eighth World Health Assembly: Resolutions and Decisions*, at 7–8, WHO Doc. WHA48/1995/REC/1 (1995) (requesting the Director-General to "take steps to prepare a revision of the International Health Regulations").

13. See DAVID P. FIDLER, SARS, GOVERNANCE AND THE GLOBALIZATION OF DISEASE 186 (2004) (summarizing the argument that the SARS outbreak "revealed governance of infectious disease threats completing a transition from Westphalian to post-Westphalian strategies."); Gian Luca Burci, *La Gestion d'une Crise Sanitaire Internationale: Le Cas du SRAS [Management of an International Health Crisis: The Case of SARS]*, in LA SOCIÉTÉ INTERNATIONALE ET LES GRANDES PANDÉMIES 135, 138 (Rostane Mehdi & Sandrine Maljean-Dubois eds., 2007) (noting that "in the case of SARS, WHO quickly assumed a directing, rather than simply coordinating, role at the international level."). See also Michèle Poulain, *Révision du Règlement Sanitaire International, Réseau "Alerte et Action": L'Efficacité des Outils de Réaction de l'OMS à l'Épreuve du SRAS et de la Grippe Aviaire [Revision of the International Health Regulations, Network "Alert and Response": The Effectiveness of WHO Response Tools Tested by SARS and Avian Influenza]*, in LA SOCIÉTÉ INTERNATIONALE ET LES GRANDES PANDÉMIES 101, 117 (Rostane Mehdi & Sandrine Maljean-Dubois eds., 2007) (emphasizing that contemporary health emergencies have led the WHO to behave as a regulatory authority standing at the heart of the multilateral surveillance and response system, and that the revised Regulations have formalized this behavior).

metry, reliance on networks of partners, and aggressive use of the internet as a normative tool.¹⁴

II. THE IHR'S GLOBAL HEALTH GOVERNANCE MODEL AFTER 2005

The 2005 IHR acknowledge the global character of twenty-first century health risks by adopting a global alert and response system and a multi-hazard approach.¹⁵ The Regulations are based on the assumption that the natural diffusion of biological agents is not the only means by which disease spreads internationally. For instance, industrial accidents within one state may accelerate the occurrence of disease in other states.¹⁶ As a result, infectious diseases must be managed through a joint effort between states and the WHO, based on a dynamic and contextual risk management process coordinated by the latter. The underlying governance model is based on the depoliticization of risk management through science and public health principles managed by a technical organization. The ultimate aim is an effective collective response that

14. The WHO has used the internet to amplify the emergency powers inherent in its mission during times of crisis and to overcome the functionalist dogma typical of international organizations. See Gian Luca Burci, *The Outbreak of COVID-19 Coronavirus: Are the International Health Regulations Fit for Purpose?*, EJIL:TALK! (Feb. 27, 2020), www.ejiltalk.org/the-outbreak-of-covid-19-coronavirus-are-the-international-health-regulations-fit-for-purpose/ [<https://perma.cc/7XR7-A9TX>] (noting that, during the early stages of the COVID-19 outbreak, the Secretariat used the WHO website as “the main tool for guidance, awareness raising and information update.”).

15. WHO, Assembly Res. WHA58.3 (May 23, 2005), in *Fifty-Eighth World Health Assembly: Resolutions and Decisions*, at 10, WHO Doc. WHA58/2005/REC/1 (2005) [hereafter 2005 IHR].

16. See, e.g., Michael J. Howard et al., *Infectious Disease Emergencies in Disasters*, 14 *EMERGENCY MED. CLINICS N. AM.* 413, 421 (1996) (“Disasters may result in altered host defenses, promoting infectious diseases. The most obvious disruption of defenses are wounds, including major trauma, lacerations, chemical and thermal burns, and crush injuries.”); WORLD HEALTH ORG., INT’L PROGRAMME ON CHEM. SAFETY, *PRINCIPLES OF STUDIES ON DISEASES OF SUSPECTED CHEMICAL ETIOLOGY AND THEIR PREVENTION* 15 (1987) (“Exposure to chemicals may cause human disease in several ways. First, a certain disease may result directly from exposure to a specific chemical compound . . . Second, exposure to a chemical may be only one of several factors contributing to the development of a disease, and, thus, be part of a multi-causal relationship. . . . Chemical exposure may also aggravate a pre-existing disease. . . Thus, exposure to chemicals may constitute a leading factor in the development of a range of human diseases.”).

also “avoid[s] unnecessary interference with international traffic and trade.”¹⁷

The 2005 IHR also embody what can be considered a “grand bargain.”¹⁸ The aim was to delegate substantial authority to the Director-General and impose a demanding set of obligations on states parties while still leaving them with the final discretion to adopt national health measures necessary to prevent and control disease outbreaks within their territory.¹⁹

States parties have three main types of obligations under the IHR. Firstly, they must develop, strengthen, and maintain core capacities of surveillance, preparedness, and response to public health risks, as detailed in Annex 1.²⁰ These core capacity requirements are particularly intrusive of state sovereignty since they extend to national health systems and the ways that states use their structures and resources. Secondly, states are required to comply with key obligations of due diligence, transparency, good faith, non-discrimination, and cooperation. These obligations constitute the bedrock of the collective system of global health security enshrined in the 2005 IHR. They include the prompt assessment and notification of events that may constitute a public health emergency of international concern (PHEIC);²¹ the regular disclosure and sharing of all relevant information and evidence, which the WHO may disseminate;²² transparency and non-discrimination in the implementation of health measures;²³ and horizontal (intergovernmental) and vertical (WHO states) collaboration and assistance.²⁴ Thirdly, national public health measures adopted in response to a public health risk or PHEIC must be based on

17. 2005 IHR, *supra* note 15, art. 2.

18. Kumanan Wilson, Opinion, *Populism and Pandemics: The IHR Was Meant to Address Outbreaks Like COVID-19, but Nations Have Ignored It*, CBC (Mar. 18, 2020), <https://www.cbc.ca/news/opinion/opinion-international-health-regulations-who-covid-1.5500166> [<https://perma.cc/9PQM-T88B>].

19. See WHO, Assembly Res. WHA73.1, *COVID-19 Response* (May 19, 2020) (stressing the “primary responsibility of governments for adopting and implementing responses to the COVID-19 pandemic that are specific to their national context, as well as for mobilizing the necessary resources to do so.”).

20. 2005 IHR, *supra* note 15, arts. 5, 13.

21. *Id.* arts. 6, 12.

22. *Id.* arts. 9–11.

23. *Id.* art. 42.

24. *Id.* art. 44.

necessity, proportionality, scientific evidence, and risk assessment, and they should not be “more restrictive of international traffic and not more invasive or intrusive to persons than reasonably available alternatives that would achieve the appropriate level of health protection.”²⁵ Such measures must be promptly reported to the WHO together with their public health rationale.²⁶

The 2005 IHR governance model, under which the WHO is delegated significant authority and plays a managerial role, emphasizes centralized risk assessment, alert, and guidance based strongly on the legitimacy of expertise. An intrinsic aspect of the governance model is the WHO’s reliance on networks of experts and collaborating institutions to develop guidance. Indeed, “emergency committees” composed of experts advise the Director-General on the declaration of PHEICs and the issuance of time-limited “temporary recommendations” of urgent measures to prevent or reduce the spread of the disease.²⁷ Another distinguishing feature is the requirement of coordination and complementarity between the WHO and other actors and partners.²⁸

However, there are several issues with the WHO’s current governance model. Recent crises, such as delays in declaring a PHEIC during the Ebola and COVID-19 outbreaks²⁹ and ex-

25. *Id.* art. 43.

26. *Id.*

27. *Id.* art. 48. Although these recommendations are non-binding, they nonetheless “generate accountability by serving as benchmarks to assess national responses, and engender an expectation of compliance and mutual reliance.” Gian Luca Burci, *The Legal Response to Pandemics: The Strengths and Weaknesses of the International Health Regulations*, 11 J. INT’L HUMANITARIAN LEGAL STUD. 1, 7 (2020).

28. 2005 IHR, *supra* note 15, art. 14 (mandating the WHO to “cooperate and coordinate its activities, as appropriate, with other competent intergovernmental organizations or international bodies in the implementation of these Regulations, including through the conclusion of agreements and other similar arrangements.”).

29. Due to the divergent views of the Emergency Committee members, the COVID-19 outbreak was only declared a PHEIC one month after China’s notification on December 31, 2019, and only characterized as a pandemic on March 11, 2020. *Statement on the Second Meeting of the International Health Regulations (2005) Emergency Committee Regarding the Outbreak of Novel Coronavirus (2019-nCoV)*, WORLD HEALTH ORG. (Jan. 30, 2020), [www.who.int/news/item/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-out-](http://www.who.int/news/item/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-out-)

cessive deference to governments in the Zika virus³⁰ and Mid-

break-of-novel-coronavirus-(2019-ncov) [<https://perma.cc/L5U6-U424>]; *WHO Director-General's Opening Remarks at the Media Briefing on COVID-19*, WORLD HEALTH ORG. (Mar. 11, 2020), www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020 [<https://perma.cc/U2K9-96ZQ>]. Some epidemiologists argued that the designation should have come sooner. *See, e.g., Elias Visontay, Coronavirus Health Emergency Declaration Delayed by a Week, Australian WHO Expert Panel Member Says*, GUARDIAN (May 20, 2020), www.theguardian.com/world/2020/may/20/coronavirus-health-emergency-declaration-delayed-by-a-week-australian-who-expert-panel-member-says [<https://perma.cc/J9H4-EQUS>] (noting that the Emergency Committee failed to reach agreement on declaring a PHEIC during its initial January 22–23 meeting). In the case of the Ebola outbreak in the Democratic Republic of the Congo, the Emergency Committee repeatedly determined that all three IHR requirements for a PHEIC had not been met, and the emergency was only declared at the Committee's fourth meeting, one year after the Congolese notification on August 1, 2018. *Statement on the Meeting of the International Health Regulations (2005) Emergency Committee for Ebola Virus Disease in the Democratic Republic of the Congo on 17 July 2019*, WORLD HEALTH ORG., www.who.int/ihr/procedures/statement-emergency-committee-ebola-drc-july-2019.pdf [<https://perma.cc/ES9F-H28D>] (last visited Nov. 3, 2020). For further discussion of the Ebola PHEIC declaration, see David P. Fidler, *To Declare or Not to Declare: The Controversy over Declaring a Public Health Emergency of International Concern for the Ebola Outbreak in the Democratic Republic of the Congo*, 14 ASIAN J. WTO & INT'L HEALTH L. & POL'Y 287 (2019).

30. The Zika Virus Emergency Committee was asked to consider the potential risks that mass gatherings, including the 2016 Rio de Janeiro Olympic and Paralympic Games, posed for transmission and international spread of the virus. While confirming that Zika virus was a PHEIC, the Committee concluded that there was a very low risk of further international spread of the virus as Brazil was hosting the Games during the winter and was intensifying vector control measures in and around venues. The Committee reaffirmed that no general restrictions on travel and trade should be applied in Zika-affected areas, including the cities in Brazil that would host the Games. *WHO Statement on the Third Meeting of the International Health Regulations (2005) (IHR (2005)) Emergency Committee on Zika Virus and Observed Increase in Neurological Disorders and Neonatal Malformations*, WORLD HEALTH ORG. (June 14, 2016), [www.who.int/news/item/14-06-2016-who-statement-on-the-third-meeting-of-the-international-health-regulations-\(2005\)-\(ihr\(2005\)\)-emergency-committee-on-zika-virus-and-observed-increase-in-neurological-disorders-and-neonatal-malformations](http://www.who.int/news/item/14-06-2016-who-statement-on-the-third-meeting-of-the-international-health-regulations-(2005)-(ihr(2005))-emergency-committee-on-zika-virus-and-observed-increase-in-neurological-disorders-and-neonatal-malformations) [<https://perma.cc/MKB2-NECM>]. *See also WHO Public Health Advice Regarding the Olympics and Zika Virus*, WORLD HEALTH ORG. (May 28, 2016), www.who.int/news/item/28-05-2016-who-public-health-advice-regarding-the-olympics-and-zika-virus [<https://perma.cc/TK4W-29UE>] (“Based on the current assessment of Zika virus circulating in almost sixty countries globally and thirty-nine countries in the Americas, there is no public health justification for postponing or cancelling the games.”). Not all scientists agreed with the WHO's decision. *Zika Crisis: WHO Rejects “Move Rio*

dle East Respiratory Syndrome (MERS) emergencies,³¹ show the limits and challenges of the WHO's managerial authority and of a non-political approach to managing highly political events. COVID-19 has highlighted the tension between the WHO's reliance on state cooperation and its attempts to exercise more independent authority. Recent disease outbreaks also show systemic failures by states to comply with core capacity obligations and accept international accountability for national health policies that may pose a direct risk to other states through the uncontrolled spread of disease.

Additionally, under Article 43, states retain wide discretion—subject to the substantive and procedural requirements noted above—to adopt national control measures in response to public health risks or PHEICs that may deviate not only from the WHO's recommendations but also from several requirements of the 2005 IHR.³² Much attention and criticism has been paid to such measures, particularly when they disrupt international travel and trade or significantly restrict human rights.³³ However, a state does not necessarily breach the IHR simply by restricting international travel and trade or implementing health measures in addition to the WHO's temporary recommendations. Violations of Article 43 should be assessed on a case-by-case basis for their arbitrary or discriminatory nature (e.g. travel restrictions targeting individuals of a particular nationality irrespective of their provenance), lack of prompt notification to the WHO, or lack of an appropriate public health rationale.³⁴ Overly restrictive public health mea-

Olympics" Call, BBC News (May 28, 2016), www.bbc.com/news/world-latin-america-36401150 [<https://perma.cc/4PT9-997K>] ("In an open letter to the WHO, more than one hundred leading scientists had said new findings about Zika made it 'unethical' for the Games to go ahead.").

31. The Emergency Committee on MERS-CoV voiced concern about the spread of the disease and issued advice to interested states, but it never declared MERS a PHEIC. *MERS-CoV Emergency Committee*, WORLD HEALTH ORG., www.who.int/groups/mers-cov-ihr-emergency-committee [<https://perma.cc/8PQ9-TZT2>] (last visited Nov. 3, 2020).

32. 2005 IHR, *supra* note 15, art. 43.

33. For a detailed analysis, see Roojin Habibi et al., *The Stellenbosch Consensus on Legal National Responses to Public Health Risks: Clarifying Article 43 of the International Health Regulations*, 17 INT'L ORGS. L. REV. (advance version published Dec. 2, 2020).

34. See also Roojin Habibi et al., *Do Not Violate the International Health Regulations During the COVID-19 Outbreak*, 395 LANCET 664, 664 (2020) (arguing

asures that disproportionately encroach upon human rights could also qualify as violations, as measures must be implemented “with full respect for the dignity, human rights and fundamental freedoms of persons.”³⁵

Article 43 also allows states a wide margin of appreciation based on their national risk assessments, which are not always adequately disclosed and explained.³⁶ The Event Information Site on the WHO’s webpage where these assessments are posted is only accessible to member states, leading to a lack of public scrutiny. Moreover, the WHO Secretariat’s annual reports to the WHA only provide aggregate statistics on addi-

that countries “imposing travel restrictions against China during the current outbreak of 2019 novel coronavirus disease (COVID-19)” are violating the 2005 IHR).

35. 2005 IHR, *supra* note 15, art. 3(1). This means that measures must be lawful, necessary, proportionate, time-bound, and justified by public health objectives, in line with the legitimacy requirements imposed by human rights treaties for limitations and derogations. See Stefania Negri, *Communicable Disease Control*, in RESEARCH HANDBOOK ON GLOBAL HEALTH LAW 265, 284–90 (Gian Luca Burci & Brigit Toebes eds., 2018) (discussing human rights limitations and derogations during public health emergencies, the IHR, and potential improvements of WHO monitoring functions).

36. During the Nipah virus outbreak in Kerala, India (May–June 2018), for which WHO advised against application of any travel or trade restrictions, five states temporarily banned produce imports from Kerala without explaining their risk assessment. Following WHO interaction with these states, two lifted the ban and one provided a public health rationale. WHO Director-General, *Annual Report on the Implementation of the International Health Regulations (2005)*, ¶ 14, WHO Doc. A72/8 (Apr. 4, 2019) [hereinafter *IHR Report 2019*]. During the 2017 Ebola outbreak in the Democratic Republic of the Congo and the plague outbreak in Madagascar, states implemented additional measures that significantly interfered with international traffic without providing a public health rationale or making such information available to the WHO in a timely fashion. WHO Director-General, *Annual Report on the Implementation of the International Health Regulations (2005)*, ¶ 7, WHO Doc. A71/7 (Apr. 5, 2018). During the 2014 West Africa Ebola outbreak, the Director-General advised against general bans on travel and trade. Despite the WHO’s recommendation, a large number of non-affected countries, mostly in Africa and Central America, imposed such restrictions, including compulsory quarantine of travelers, refusal of entry visas, cancellation of flights, and closure of air, land, or sea borders. The WHO sent requests for verification of public health rationales, but only forty percent of the relevant states responded, mostly arguing “that the measures were not ‘health-related’ and hence did not fall under the IHR.” WHO Director-General, *Report of the Review Committee on the Role of the International Health Regulations (2005) in the Ebola Outbreak and Response*, ¶¶ 69–75, WHO Doc. A69/21, annex (May 13, 2016) [hereinafter *Ebola Report 2016*].

tional health measures and shy away from any naming and shaming.³⁷ While this choice may be explained by the WHO's general depoliticization of disease governance, it nonetheless creates issues of transparency, accountability, and good governance. Therefore, the grand bargain of the 2005 IHR in fact codifies a subsidiarity regime wherein the WHO's recommendations act as a non-binding default around which states enjoy a wide margin of appreciation. This is coupled with the virtual absence of accountability mechanisms that could serve as a deterrent for noncompliance or arbitrary and disproportionate measures. COVID-19 has illuminated these problems and the nationalist approach to public health response.³⁸

III. THE 2005 IHR AND COVID-19

COVID-19 has underscored some of the IHR's major problems. After the H1N1 influenza pandemic and West Africa Ebola outbreak, the Director-General convened two IHR Review Committees, both of which concluded that the WHO did not respond to IHR violations with sanctions.³⁹ The committees concluded that this shortcoming adversely affects the successful performance of the IHR and strongly undermines their effectiveness.⁴⁰ In fact, when addressing the WHO's lack of reaction to IHR noncompliance, the Ebola Review Committee advocated for a stronger role of the Secretariat in assessing compliance and making the relevant information public.⁴¹ In

37. E.g., *IHR Report 2019*, *supra* note 36, ¶¶ 13–16 (noting that six States Parties implemented “additional health measures that significantly interfered with international traffic and movement of people” but not naming them).

38. For a comparative legal analysis of national responses in more than thirty states around the globe and their implications for human rights and democracy, see Symposium, *Global Responses to COVID-19: Rights, Democracy and the Law*, BILL OF HEALTH (May 12, 2020), <https://blog.petrieflom.law.harvard.edu/symposia/-covid19-rights-democracy-law/> [<https://perma.cc/5WQR-P5DH>].

39. WHO Director-General, *Report of the Review Committee on the Functioning of the International Health Regulations (2005) in Relation to Pandemic (H1N1) 2009*, WHO Doc. A64/10, annex, at 81 (May 5, 2011) [hereinafter *H1N1 Report 2011*]; *Ebola Report 2016*, *supra* note 36, ¶ 77.

40. *H1N1 Report 2011*, *supra* note 39, at 129–30. For further discussion and proposals for reform, including the possible establishment of an IHR Compliance Committee, see Negri, *supra* note 35, at 297–302.

41. *Ebola Report 2016*, *supra* note 36, at 36.

particular, it considered public disclosure as the best way to discourage unnecessarily disruptive response measures, with a view to increasing accountability through greater transparency.⁴² This is exactly what is still missing today, as evidenced by the Director-General's report on the implementation of the 2005 IHR to the seventy-third WHA. Like previous such reports, it only reports compliance with core capacity obligations or the adoption of additional health measures in aggregate or statistical terms.⁴³

At the same time, COVID-19 has confirmed the dramatic effects of health measures on many other governance and legal regimes such as human rights, trade, transport, investment, international finance, and migration.⁴⁴ It has also highlighted a lack of coordination, complementarity, and mutual learning among the institutions and regimes concerned. This gap facilitates disproportionate and disruptive reactions and weakens the integrity of the health response by pitting health protection against economic and social survival. Institutional and legal fragmentation create systemic challenges that must be addressed as a matter of priority. Indeed, possible conflicts with other legal regimes were considered during the IHR review process.⁴⁵ The proposed solution was the requirement of an evidence- and science-based assessment for risk management measures adopted by both states and the WHO.⁴⁶ This ap-

42. *Id.* at 80.

43. WHO Director-General, *Annual Report on the Implementation of the International Health Regulations (2005)*, ¶¶ 15, 17, WHO Doc. A73/14 (May 12, 2020).

44. See, e.g., Armin von Bogdandy & Pedro Villarreal, *International Law on Pandemic Response: A First Stocktaking in Light of the Coronavirus Crisis* 16 (MPIL Research Paper No. 2020-07) (noting the “expansive, cross-cutting nature of human health”).

45. Possible conflicts were identified with the Codex Alimentarius and some WTO agreements, notably Article XX(b) of the General Agreement on Tariffs and Trade and some provisions of the Agreements on the Application of Sanitary and Phytosanitary Measures and on Technical Barriers to Trade. Modifications were accordingly introduced into the draft revised Regulations in order to correct possible conflicts with these and other international instruments. WHO, Inter-Governmental Working Grp. on Revision of the Int'l Health Regulations, *Review and Approval of Proposed Amendments to the International Health Regulations: Relations with Other International Instruments*, WHO Doc. A/IHR/IGWG/INF.DOC./1 (Sept. 30, 2004) [hereinafter *IHR Relations with Other International Instruments*].

46. See 2005 IHR, *supra* note 15, arts. 12, 17, 43.

proach is consistent with other bodies of international law that similarly justify restrictions on rights, such as the human rights and trade law regimes.⁴⁷ Another suggestion was to rely on inter-institutional cooperation and coordination as mandated by IHR Article 14.⁴⁸ The WHO has concluded agreements and arrangements at various levels of formality with a number of organizations, including private bodies like the International Air Transport Association (IATA).⁴⁹ The WHO also established a multilateral cooperation framework with the Food and Agriculture Organization (FAO) and World Organization for Animal Health (OIE).⁵⁰ The 2018 Memorandum of Understanding among these organizations aims to “combat health threats associated with interactions between humans, animals, and the environment.”⁵¹ Even this network of institutional arrangements, however, has not been effective in coordinating and harmonizing national responses to COVID-19.

47. For example, the WTO’s Sanitary and Phytosanitary Agreement requires measures taken by states to protect human, animal, or plant health to be based on “available scientific evidence.” Agreement on the Application of Sanitary and Phytosanitary Measures, art. 5(2), Apr. 15, 1994, 1867 U.N.T.S. 493.

48. See *IHR Relations with Other International Instruments*, *supra* note 45, ¶¶ 12, 16 (discussing the application of Article 12 of the proposed IHR (now Article 14) to food safety and environmental protection regimes).

49. Int’l Civil Aviation Org. [ICAO], *IATA Views on Response to Pandemics and Public Health Events*, ICAO Doc. A40-WP/132, ¶ 1.2 (Aug. 1, 2019) (“IATA is a non-State actor with the WHO and as such has a workplan agreed with the WHO, the current edition of which is valid until end of 2020.”).

50. Both the FAO and OIE concluded formal bilateral cooperation agreements with the WHO, respectively in 1948 and 2004. WORLD HEALTH ORG., BASIC DOCUMENTS 57–60, 81–84 (49th ed., 2020), https://apps.who.int/gb/bd/pdf_files/BD_49th-en.pdf [<https://perma.cc/SZ33-L5K7>].

51. *International Partnership to Address Human-Animal-Environment Health Risks Gets a Boost*, WORLD HEALTH ORG. (May 30, 2018), www.who.int/zoonoses/Tripartite-partnership/en/ [<https://perma.cc/TS2H-UX8V>]. For additional information on FAO-OIE-WHO collaboration, see FOOD & AGRIC. ORG. [FAO] ET AL., THE FAO-OIE-WHO COLLABORATION: SHARING RESPONSIBILITIES AND COORDINATING GLOBAL ACTIVITIES TO ADDRESS HEALTH RISKS AT THE ANIMAL-HUMAN-ECOSYSTEMS INTERFACES (2010), www.who.int/influenza/resources/documents/_concept_hanoi_042011_en.pdf?ua=1 [<https://perma.cc/89VY-48V9>]; FAO ET AL., THE TRIPARTITE’S COMMITMENT: PROVIDING MULTI-SECTORAL, COLLABORATIVE LEADERSHIP IN ADDRESSING HEALTH CHALLENGES (2017), www.oie.int/Home/eng/Media_Center/docs/pdf/Tripartite_2017.pdf [<https://perma.cc/LBN5-BQWP>].

Lack of coherence and coordination in international responses have prompted calls for strengthened and renewed multilateral cooperation in the fight against the COVID-19 pandemic. Importantly, both the WHA⁵² and the U.N. General Assembly made such appeals in their respective resolutions.⁵³

In sum, COVID-19 has generated a widespread feeling that the current system is inadequate. The WHA resolution request for a comprehensive evaluation on the “WHO-coordinated international health response to COVID-19”⁵⁴ invites reflections that shouldn’t be confined to WHO opinions. Instead, the international community should take a holistic approach in substantially reconsidering the governance of global health security.

IV. FUTURE GOVERNANCE MODELS FOR THE GLOBAL FIGHT AGAINST PANDEMICS

In response to COVID-19, scholars have resumed the criticism of the 2005 IHR governance model that started after the 2014 Ebola outbreak.⁵⁵ At the same time, they have been exploring more effective and “fit for purpose” mechanisms to address future global health emergencies of the magnitude of

52. Assembly Res. WHA73.1, *supra* note 19, ¶ 1. After recalling “the importance of strengthened multilateral cooperation in tackling the COVID-19 pandemic,” the WHA asked the Director-General to continue working with the U.N. Secretary-General and multilateral organizations on a “comprehensive and coordinated response across the United Nations system to support Member States in their responses to the COVID-19 pandemic in full cooperation with governments, as appropriate, demonstrating leadership on health in the United Nations system,” and to continue leading the U.N. humanitarian health response.

53. G.A. Res. 74/270, Global Solidarity to Fight the Coronavirus Disease 2019 (COVID-19), ¶¶ 1, 5 (April 2, 2020). The General Assembly emphasized “its commitment to international cooperation and multilateralism and its strong support for the central role of the United Nations system in the global response to the coronavirus disease” and called for “intensified international cooperation to contain, mitigate and defeat the pandemic, including by exchanging information, scientific knowledge and best practices and by applying the relevant guidelines recommended by the World Health Organization.”

54. Assembly Res. WHA73.1, *supra* note 19, ¶ 9(10).

55. *See, e.g.*, Von Bogdandy & Villarreal, *supra* note 44, at 11–12 (qualifying the IHR governance model as “governance by information.”).

COVID-19.⁵⁶ Scholars have scrutinized the WHO governance model of “epistemic authority”⁵⁷ and “managerial approaches”⁵⁸ and advanced proposals for reform and improvement.⁵⁹

COVID-19’s strain on the international community’s capacity to respond to major global health threats has opened a Pandora’s box of latent political, economic, financial, and technical problems. These problems affect the WHO’s directing and coordinating authority as well as international cooperation in general.

COVID-19 has unquestionably proved that uncoordinated, unilateral public health measures can have destabilizing effects on trade, investment, and economic and financial relations. The pandemic has also fueled nationalist and authoritarian sentiments, as governments have used the crisis as a cover for overly restrictive limitations of human rights and personal freedoms, and discrimination against those alleged to carry the virus. Finally, the COVID-19 pandemic has unveiled the lack of an effective international mechanism to facilitate collaboration, minimize risk, and neutralize the over-politicization of national responses.

Against this background, two reflections may guide the international community’s future action.⁶⁰ Firstly, any reform should strengthen the WHO and the IHR as dedicated lines of defense driving public health responses. COVID-19 shows that

56. See, e.g., Burci, *supra* note 14 (advocating for the introduction of a system of intermediate alert before declaring a PHEIC, a reconsideration of the concept of the PHEIC, and the extension of monitoring and compliance mechanisms to WHO’s “soft” guidance provided outside the scope of the 2005 IHR).

57. Jan Klabbbers, *The Normative Gap in International Organizations Law*, 16 INT’L ORGS. L. REV. 272, 277 (2019).

58. JOSÉ E. ALVAREZ, *THE IMPACT OF INTERNATIONAL ORGANIZATIONS ON INTERNATIONAL LAW* 225–26 (2017).

59. See, e.g., Lawrence O. Gostin et al., *Has Global Health Law Risen to Meet the COVID-19 Challenge? Revisiting the International Health Regulations to Prepare for Future Threats*, 48 J. L. MED. & ETHICS 376 (2020) (suggesting four major reforms: enhanced surveillance and mandatory reporting, transparency in PHEIC deliberations, rapid and public monitoring of state measures, and global funding mechanisms).

60. This article does not make detailed proposals, but rather is limited to suggesting the main features and requirements of possible governance models, supported by examples to provoke further reflection.

prevention, preparedness, sustainable health systems, and early containment are key. The IHR were not meant as a legal framework for sustained response to a full-scale pandemic. Their main purpose is to avoid full-scale health crises through a coordinated surveillance, prevention, and containment approach. This shift of emphasis will require significant structural, political, and normative adjustments. As far as prevention and containment are concerned, for example, the WHO's surveillance authority should be strengthened by decreasing its dependence on state cooperation. The WHO should be enabled to use even incomplete and indirect information to formulate analyses and risk assessments based on a precautionary approach.⁶¹ Moreover, a gradual alert system reflecting the complexities of public health emergencies must be developed to replace the rigid IHR binary approach of PHEIC or no PHEIC.⁶² Compliance with core capacity requirements remains at the very heart of effective preparedness and response. This requires nothing less than a paradigm shift in the perception of public health, changing the issue of managing national health systems from one of domestic jurisdiction to one of international concern. Ensuring adequate core health capacities also requires transparent compliance assessments, effective assistance, and accountability mechanisms as well as stronger incentives for compliance. Fundamentally, whatever governance model emerges from a future revision of the IHR, it must enable states and the WHO to coordinate their actions at an earlier stage of a disease outbreak and equip states to effectively prevent and contain national outbreaks before they spread.

Secondly, the international community needs to define viable network governance models that incorporate the WHO and IHR with other regimes and institutions. This approach should influence crucial political economy calculations about trade, transport, migration, and finance. The ultimate goal is to deter excessive or arbitrary national health measures and reduce their impact on travel, trade, human rights, and other legitimate interests. Appropriate health measures should be more economically and politically sustainable during pro-

61. 2005 IHR, *supra* note 15, arts. 6–11 (detailing the WHO's approach to gathering and verifying information from affected states and showing a preference for official reporting).

62. Burci, *supra* note 14.

tracted health crises like the COVID-19 pandemic. One option is to create an institutional platform for dynamic and regular dialogue to promote mutual learning, consultation, and comparison of national risk assessments and experiences. This would help states manage the unavoidable political aspects of pandemic response while coordinating appropriate national responses.

In light of the above, a new governance model should be characterized by early, regular, and mandatory consultations at both intra-organization and inter-institutional levels. In both cases, available institutional mechanisms should have clear triggering criteria. A governance model should also involve relevant international institutions and include an intergovernmental forum which can be flexibly tailored to the states or regional bodies most concerned. This dual dimension would reconcile the need for political commitment with decision-making based on science, evidence, and contextual risk assessment. Furthermore, international organizations could also defuse political controversies among states and try to channel them back into a technical discussion.

Prior consultation for risk assessment and risk management should take place at the intra-organizational level, between WHO member states and the Director-General. This collaboration could be institutionalized in different ways. Member states could use the WHA to create a new dedicated mechanism for this purpose, or the Executive Board could exercise its emergency powers under the WHO Constitution,⁶³ as it did for the first time during the 2014–2016 Ebola crisis.⁶⁴ While prior consultation within the WHA plenary guarantees an inclusive discussion of all possible member state ap-

63. WHO Constitution, *supra* note 5, art. 28(i) (authorizing the Board “to take emergency measures within the functions and financial resources of the Organization to deal with events requiring immediate action. In particular it may authorize the Director-General to take the necessary steps to combat epidemics, to participate in the organization of health relief to victims of a calamity and to undertake studies and research the urgency of which has been drawn to the attention of the Board by any Member or by the Director-General.”).

64. WHO, Exec. Bd. Res. EBSS3.R1, *Ebola: Ending the Current Outbreak, Strengthening Global Preparedness and Ensuring WHO’s Capacity to Prepare for and Respond to Future Large-Scale Outbreaks and Emergencies with Health Consequences* (Jan. 25, 2015), in Executive Board: Special Session of the Ebola Emergency, at 3, 7, WHO Doc. EBSS/3/2015/REC/1 (2015).

proaches and positions, the advantage of involving the Executive Board is that, in case of emergency, the Director-General can rapidly convene a special session.⁶⁵ Rather than being alternative or mutually exclusive, these solutions can be complementary. Both organs can be involved in the consultation mechanism, with the WHA deciding policies and the Executive Board guaranteeing emergency management and implementation.

A notable example of intra-organization consultation is the European Union's joint risk assessment and management system for communicable disease control established by Decision No. 1082/2013/EU.⁶⁶ The system enables the European Union and its members to improve preparedness and strengthen their capacity for coordinated response to health emergencies, improved risk assessment and management, and strengthened communications coordination through the Early Warning and Response System.⁶⁷ The Decision notably formalized the role of the Health Security Committee, which is comprised of representatives from member states and the E.U. Commission. These representatives share best practices and experience in preparedness and response planning to promote interoperability of national preparedness plans, address intersectoral dimensions of preparedness and response, and support the implementation of core capacity requirements for surveillance and response under the IHR.⁶⁸ Another relevant characteristic of this mechanism concerns the adoption of national public health measures in response to cross-border emergencies. In contrast to IHR Article 43, the adoption of such measures within the European Union requires coordination at Union level.⁶⁹ Member states who intend to adopt mea-

65. "If events occur requiring immediate action under Article 28(i) of the Constitution the Director-General may, in consultation with the Chair, convene the Board in a special session and shall fix the date and determine the place of the session." WHO, Exec. Bd., *Rules of Procedure of the Executive Board of the World Health Organization*, r. 6, in BASIC DOCUMENTS, *supra* note 50, at 207.

66. Decision No. 1082/2013/EU of the European Parliament and of the Council of 22 October 2013 on Serious Cross-Border Threats to Health and Repealing Decision No. 2119/98/EC, 2013 O.J. (L293) 1.

67. *Id.* art. 9.

68. *Id.* art. 4.

69. *Id.* art. 11(2). For a comparative analysis between the two regimes and the need for enhanced coordination, see Stefania Negri, *Communicable*

asures to combat a serious cross-border threat to health must first inform and consult other member states and the Commission in order to ensure a common European response.⁷⁰

In addition to intra-organizational coordination, early and regular consultation must take place at the inter-institutional level between the WHO and other U.N. agencies or international organizations with jurisdiction over issue areas implicated in health measures. Consultation requirements should be extended to non-state actors (e.g. airlines and shipping companies) to ensure a multisectoral and multi-stakeholder dialogue.⁷¹ Such a governance model already exists in other fields of multilateral cooperation, such as nuclear safety, humanitarian assistance, and the environment. These regimes are comparable to that of health security, where surveillance, early detection, and response to collective threats are key to protect common values and global public goods. For example, the global nuclear safety regime relies on binding legal instruments implemented through international safety standards.⁷² These standards establish fundamental safety measures to protect life, health, and the environment from nuclear risks. The International Atomic Energy Agency adopts the instruments in

Disease Control in International and European Union Law: Enhancing Global Health Security Through Interaction and Coordination between the International Health Regulations (2005) and Decision No. 1082/2013/EU, in *LOOKING FOR A ROAD MAP TO ADDRESS THE RIGHT TO HEALTHCARE: COMPARATIVE FRAMES* (Joaquín Cayon De Las Cuevas ed., forthcoming).

70. The Health Security Committee has held frequent meetings during the COVID-19 crisis involving the Commission and its Directorates-General, member states, E.U. agencies, and the WHO. See *Health Security Committee Reports on COVID-19 Outbreak*, EUR. COMM'N, https://ec.europa.eu/health/_covid19_en [<https://perma.cc/W97S-4PCD>] (last visited Nov. 3, 2020) (archiving these meeting reports). For more information on the European Commission's response to the coronavirus pandemic, see *Overview of the Commission's Response*, EUR. COMM'N, https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/overview-commissions-response_en [<https://perma.cc/JQ28-DQDD>] (funding recovery through the E.U. budget, issuing guidelines for border management, and ensuring the flow of workers and goods throughout the European Union).

71. See Lawrence Susskind et al., *Multistakeholder Dialogue at the Global Scale*, 8 INT'L NEGOT. 235, 237 (2003) (noting the legitimacy and information-gathering benefits of including non-state actors).

72. *Codes of Conduct*, INT'L ATOMIC ENERGY AGENCY, <https://www.iaea.org/topics/codes-of-conduct> [<https://perma.cc/T4B2-U232>] (last visited Nov. 3, 2020).

consultation and, where appropriate, in collaboration with competent U.N. organs and other specialized agencies.⁷³ The Inter-Agency Standing Committee (IASC), the “longest-standing and highest-level humanitarian coordination forum of the U.N. system,”⁷⁴ provides another relevant example. The IASC brings together executive heads of eighteen U.N. and non-U.N. organizations to formulate policy, ensure coherent preparedness and response efforts, and agree on humanitarian priorities.⁷⁵ Moreover, specific U.N. inter-agency collaboration mechanisms exist in the field of environmental protection, notably U.N.-Oceans,⁷⁶ U.N.-Water,⁷⁷ and U.N.-Energy.⁷⁸ These platforms all strengthen and promote the coordination, coherence, and effectiveness of U.N. action and facilitate the exchange of information, experience, best practices, tools, and methodologies. Finally, UNAIDS provides another valid example of inter-institutional and multi-stakeholder cooperation in

73. See *History*, INT’L ATOMIC ENERGY AGENCY, <https://www.iaea.org/about/overview/history> [<https://perma.cc/NQW6-SV8P>] (last visited Nov. 3, 2020) (noting the IAEA’s mandate to “work with its Member States and multiple partners worldwide to promote safe, secure and peaceful nuclear technologies.”).

74. *The Inter-Agency Standing Committee*, IASC, <https://interagencystandingcommittee.org/the-inter-agency-standing-committee> [<https://perma.cc/2VTE-FCC7>] (last visited Nov. 3, 2020).

75. *Id.* In April 2019, IASC adopted the Humanitarian System-Wide Activation Protocol for the Control of Infectious Disease Events, which it scaled up in April 2020 in response to the COVID-19 pandemic. INTER-AGENCY STANDING COMMITTEE [IASC], HUMANITARIAN SYSTEM-WIDE SCALE-UP ACTIVATION: PROTOCOL FOR THE CONTROL OF INFECTIOUS DISEASE EVENTS (2019), https://reliefweb.int/sites/reliefweb.int/files//190404_iasc_infectious_disease_scale-up_activation_protocol_web.pdf [<https://perma.cc/V3HZ-YPD4>]; IASC, IASC SYSTEM-WIDE SCALE-UP PROTOCOLS: ADAPTED TO RESPOND TO THE COVID-19 PANDEMIC (2020), https://interagencystandingcommittee.org/system/files/2020-11/IASC%20System-Wide%20Scale-Up%20Protocols%20-%20Adapted%20to%20Respond%20to%20the%20COVID-19%20Pandemic_0.pdf [<https://perma.cc/8VSQ-3QYN>].

76. G.A. Res. 68/70, annex, Terms of Reference for U.N.-Oceans (Dec. 9, 2013).

77. *About United Nations Water*, UNITED NATIONS, <https://www.unwater.org/about-unwater/> [<https://perma.cc/3WRF-J6YM>] (last visited Feb. 4, 2021).

78. *About UN-Energy*, UNITED NATIONS, <https://unsceb.org/content/un-energy> [<https://perma.cc/5SZH-KBSG>] (last visited Feb. 4, 2021).

the field of public health.⁷⁹ In fact, UNAIDS may offer a replicable format that can be broadly applied to infectious diseases.⁸⁰ UNAIDS constitutes an independent inter-agency coordination mechanism established by the U.N. Economic and Social Council (ECOSOC) and governing bodies of participating agencies.⁸¹ Its operating model offers a number of promising features, in particular a dedicated intergovernmental organ providing policy input, a separate coordinating body for participating agencies to operationalize policy decisions, and a governance model open to non-state stakeholders (such as organizations representing communities affected by HIV/AIDS).⁸²

All these experiences may provide suitable models to be adopted *mutatis mutandis* to the field of global health security. Indeed, these models build on flexible and inclusive inter-institutional mechanisms involving states, agency secretariats, and non-state stakeholders. Prominent among their common features is the aim to both enhance coordination and collaboration over cross-cutting issues and to reconcile political considerations with scientific evidence and technical support.

V. CONCLUSION

The COVID-19 pandemic illuminated major shortcomings in the management of international health emergencies under the 2005 IHR, most notably the lack of coordination, cooperation, and coherence in the international response.

Prominent among these problems is the national adoption of additional public health measures overriding the

79. See Joint U.N. Programme on HIV/AIDS [UNAIDS], *The UNAIDS Governance Handbook*, at 3, UNAIDS Doc. JC2984 (2020) (noting the U.N. Economic and Social Council (ECOSOC)'s decision to invite NGOs to the Programme Coordinating Board) [hereinafter *UNAIDS Governance Handbook*].

80. See Allyn Taylor & Roojin Habibi, *The Collapse of Global Cooperation Under the WHO International Health Regulations at the Outset of COVID-19: Sculpting the Future of Global Health Governance*, 24 ASIL INSIGHTS (June 5, 2020), www.asil.org/insights/volume/24/issue/15/collapse-global-cooperation-under-who-international-health-regulations [https://perma.cc/7P4T-K2C] (arguing that UNAIDS “provides an innovative model for the collaborative governance needed to address the wide-ranging economic, social, and health consequences of major global disease outbreaks.”).

81. UNAIDS Governance Handbook, *supra* note 79, at 3.

82. *Id.* at 9.

WHO's temporary recommendations. Based on disjointed risk assessments and nationalist approaches, this uncoordinated reaction has led to a patchwork of disruptive national health measures that have betrayed the spirit of the IHR. Furthermore, they have seriously impinged on human rights, threatened the economic survival of several states, and seriously interfered with international traffic and trade. This fragmentation has undermined the integrity and efficacy of the international health response and prompted calls for enhanced cooperation and coordination. It has also revitalized criticism of the WHO as the lead international institution for directing and coordinating action for global health security.

The IHR governance model has itself been the subject of several reform proposals. As this article elucidates, any revision of the IHR should foster early coordination between state and WHO actions as well as the establishment of appropriate networking mechanisms between the WHO and other relevant institutions. Such a framework would resolve legal and institutional fragmentation and allow enhanced multilateral cooperation.

To this end, a successful governance model should rely on early, regular, and mandatory consultations on risk assessment and management, both within the WHO and between the WHO and other international organizations and U.N. agencies. Appropriate consultation mechanisms at intra-organization and inter-institutional levels would reconcile the tension between the political and scientific dimensions of global health governance and lead to common, coordinated responses to global health risks, while also deterring noncompliance with the IHR and preventing international disputes.

Similar models have been successfully adopted at regional and universal levels in other key fields of international cooperation. These models show that it is possible to design effective governance that addresses the systemic and cross-cutting nature of health risks and ensures the optimal response to global health threats, all the while respecting national political processes and scientific best practices.