The Phase-Out and Sunset of Travel Restrictions in the International Health Regulations

Sarah R. Goldfarb

Follow this and additional works at: https://brooklynworks.brooklaw.edu/bjil

Part of the Comparative and Foreign Law Commons, Health Law and Policy Commons, Human Rights Law Commons, International Law Commons, Other Law Commons, Science and Technology Law Commons, Tax Law Commons, and the Transportation Law Commons

Recommended Citation
Available at: https://brooklynworks.brooklaw.edu/bjil/vol41/iss2/6

This Note is brought to you for free and open access by the Law Journals at BrooklynWorks. It has been accepted for inclusion in Brooklyn Journal of International Law by an authorized editor of BrooklynWorks.
THE PHASE-OUT AND SUNSET OF TRAVEL RESTRICTIONS IN THE INTERNATIONAL HEALTH REGULATIONS

INTRODUCTION

Proximity to nature, something that most people will travel hours and pay hundreds or thousands of dollars for, is not something we would ever consider a threat to international public health. A young boy from a small village in Guinea appeared to feel similarly, as he wandered into his backyard to play under a tree. The result of which was fever, black stool, vomiting, and proximate death. It was later discovered that this tree was ridden with bats, which were the likely origin of the Ebola virus—the disease that that ultimately killed the boy’s sister, mother, and grandmother.

The probable cause of the Ebola virus and subsequent horrific chain of events is deforestation. Scientists assert that deforestation in the Gueckedou District of Guinea led to increased contact between humans and wild animals, exposing the local populations to fatal animal-borne viruses. In the case of the Ebola virus, however, the devastation did not end in the small village in Guinea. Instead, the virus spread globally, killing over eleven thousand people in countries spanning from Africa to the United States and Europe.

The mounting number of deaths resulting from the 2014 Ebola outbreak sparked a tirade of international responses. More

2. Id.
specifically, many responses restricted the movement or travel of individuals. For example, large international airlines, such as Kenya Airways and British Airways, suspended all flights to Sierra Leone and Liberia, while Kenya prohibited entry into the country of persons visiting from Sierra Leone, Liberia, and Guinea. Additionally, outside of the African continent, Canada responded by halting its issuance of travel and permanent residency visas to persons from countries largely affected by the disease.

The restrictions put in place during the 2014 Ebola outbreak were not novel, but were consistent with previous international responses to global health emergencies. History has dictated that when the international community is confronted with a global epidemic that threatens both the health and safety of the world’s population, it is instinctive to implement health measures that restrict or halt the movement of both persons and goods within their country in order to protect their nations from contamination. Mechanisms commonly used in recent epidemics include flight suspension, border closure, and the deferment of visa issuances. These measures were most notably and widely utilized during the 2003 SARS outbreak and 2009 H1N1 epidemic. In response to the SARS outbreak, Russia and Kazakhstan sealed large portions of their borders with China to prevent any sort of border crossing by air or land. Additionally, the Taipei government halted its issuance of visas to persons visiting from SARS stricken coun-


12. SUSAN F. MARTIN ET AL., HUMANITARIAN CRISIS AND MIGRATION: CAUSES, CONSEQUENCES AND RESPONSES 102 (Susan F. Martin et al. eds. 2014) [hereinafter HUMANITARIAN CRISIS AND MIGRATION].
tries,\textsuperscript{13} while the Ministry of Health in Saudi Arabia prohibited persons visiting from infected countries from entering the country.\textsuperscript{14} Similarly, during the 2009 H1N1 epidemic, China suspended all direct inbound flights from Mexico, and Slovakia closed its borders with the Ukraine.\textsuperscript{15} Needless to say, responses such as these have an impact upon the spread of infectious disease.\textsuperscript{16} During times of crisis, however, the residual affects travel restrictions have upon international trade and human rights are often overlooked.\textsuperscript{17}

Despite the apparent lack of coordination among the various measures implemented by individual countries during past international health emergencies, such responses are currently coordinated by the World Health Organization (WHO), a “specialized agency” of the United Nations.\textsuperscript{18} In 2007, the WHO instituted the International Health Regulations (“IHR” or the “Regulation”) to provide a framework for coordinating an international response to infectious disease epidemics that is minimally invasive upon international trade, traffic,\textsuperscript{19} and human rights.\textsuperscript{20} Although this regulation has proven to be effective in several ways, it has also fallen short.\textsuperscript{21} Among its various shortcomings, is the IHR’s lack of effectiveness in regulating the use of travel restrictions\textsuperscript{22} as a measure.

\begin{itemize}
\item \textsuperscript{14} Ziad A. Memish & Annelies Wilder-Smith, Global Impact of Severe Acute Respiratory Syndrome, 11 J. TRAVEL MED. 127, 128 (2004).
\item \textsuperscript{15} HUMANITARIAN CRISSES AND MIGRATION, supra note 12, at 104; see Paolo Bajardi et al., Human Mobility Networks, Travel Restrictions, and the Global Spread of 2009 H1N1 Pandemic, 6 PLoS ONE, Jan. 2011, at 1, 1.
\item \textsuperscript{16} See infra Part V.
\item \textsuperscript{17} See MARK A. ROTHSTEIN ET AL., QUARANTINE AND ISOLATION: LESSONS LEARNED FROM SARS (2003), http://www.iaclea.org/members/pdfs/SARS%20REPORT.Rothstein.pdf.
\item \textsuperscript{18} WHO Const. pmbl.
\item \textsuperscript{19} For the purposes of this Note, “traffic” will have the same meaning as it does in the IHR: “the movement of persons, baggage, cargo, containers, conveyances, goods or postal parcels across an international border, including international trade.” International Health Regulations (2005), art. 1, June 15, 2007, 2509 U.N.T.S. 44861 [hereinafter IHR (2005)].
\item \textsuperscript{20} Id. art 1.
\item \textsuperscript{21} See Lawrence O. Gostin et al., The Normative Authority of the World Health Organization, 129 PUB. HEALTH 854, 857 (2015).
\item \textsuperscript{22} For the purposes of this Note, “travel restrictions” will refer to flight suspension and border closure as a manner to prevent the spread of international infectious disease epidemics (“IIDEs”).
\end{itemize}
to prevent the spread of infectious disease epidemics,\textsuperscript{23} which often produces outcomes adverse to the purpose of the Regulation.\textsuperscript{24} As such, this Note proposes that IHR implement a framework of regulatory provisions that both sunset and phase-out, which are mechanisms often seen in U.S. tax law. Sunset provisions are regulations that include a set expiration date and must be renewed or revised on a specified date or they will discontinue.\textsuperscript{25} On the other hand, phase-out provisions allow legislators to vary and refine the actual effect that certain tax code provisions will have upon taxpayers with different circumstances, including differences in income levels, eligibility for tax benefits, or the amount of losses incurred in the current tax year.\textsuperscript{26} As such, this Note advocates for the implementation of a framework of “sunsetting phase-out provisions,” which are provisions that both phase-out and contain a predetermined sunset date. This will allow the WHO to more precisely regulate the manner in which signatories to the IHR (“Member States” or individually “Member State”) respond to epidemics so that their response is both coordinated and tailored to the specific international health emergency at issue.

Part I will provide a background of the IHR and the institutional bodies that execute, govern, and support the IHR’s effective implementation. Part II will analyze the scope and effect of the IHR, discuss the major themes and values seen throughout the Regulation, and highlight its major issues that arguably have an impact on its effectiveness. Part III will explain where


the WHO derives its authority to regulate the use of health measures by the Member States, and describe in detail the ways in which the IHR regulates the use of travel restrictions as a measure to prevent the spread of infectious disease epidemics. It will then proceed to summarize the timeline of the 2014 Ebola outbreak, and describe how the WHO responded to and provided guidance regarding the outbreak and use of travel restrictions. Part IV will propose a solution that involves the use of sunsetting phase-out provisions as a method to implement limitations upon the use of travel restrictions as a measure to prevent the international spread of infectious disease epidemics. This proposal aims to be consistent with both the objectives and values of the IHR while also increasing its effectiveness.

I. THE IHR AND ITS SUPPORTING BODIES

The following Part will begin by illustrating the history of the IHR. It will first explain the origin, role, and significance of the WHO, World Health Assembly (WHA), and other agencies that support and interact with both the WHO and the WHA. It will then explain the circumstances from which the IHR arose and its history. The Part will then end with a brief analysis of the themes and values that are seen throughout the Regulation, and how the IHR balances them to create an idealized framework within which responses to international health crises should be carried out.

A. The WHO, WHA, and Other Related Agencies

The first International Sanitary Conference was instituted in 1851 in global recognition of the fact that the advancements of the industrial revolution, while essential to the growing economy, also presented risks to international public health as a result of the increased circulation of both persons and goods around the world.27 This recognition arose more specifically in

27. Charles Clift, The Role of the World Health Organization in the International System 14–15 (Ctr. on Glob. Health Sec., Working Paper No. 1, 2013), https://www.chathamhouse.org/sites/files/chathamhouse/public/Research/Global%20Health/0213_who.pdf. The first International Sanitary Conference (the “Conference”) was held in France in 1851 and was composed of participants from eleven different European countries as well as Turkey. The Con-
response to the perceived threat that such advancements could pose to efforts preventing subsequent outbreaks of cholera, plague, and yellow fever in Europe. As a result, it became essential for any regulation that was implemented to prevent the spread of infectious disease epidemics to also safeguard against the potential negative impacts that such regulations could have upon the newly globalized economy. In order to confront this potential problem, the International Sanitary Conferences sought to create a framework for preventing the international spread of infectious diseases without disturbing international trade. These conferences did not lead to an international treaty for the general protection of international public health, but instead led to various other treaties of a narrower scope.

After World War II, international health reemerged as a seminal issue for various countries. In 1945, during a conference for the establishment of the U.N., China and Brazil expressed a desire to establish an international health organization. As a result, the WHO Constitution was ultimately ratified during the 1948 International Health Conference. The WHO was es-

ference met a total of eleven times spanning from the late nineteenth century to early twentieth century. Id.


30. Id.

31. Id.

32. Id. at 6; see also Origin and Development of Health Cooperation, WORLD HEALTH ORG. http://www.who.int/global_health_histories/background/en/ (last visited Feb. 21, 2016). The treaties formulated as a result of the International Sanitary Conferences were narrower in scope and were named the International Sanitary Conventions, which were initially formulated in 1892 and then revised in 1903. Clift, supra note 27, at 6, 15. The treaties did not result in regulation that was applicable to any and all IIDEs, but instead specifically addressed the international response to cholera, plague, and yellow fever. Id. Based on this influence, the Americas initiated their own International Sanitary Convention of the Americas in 1902, which also promulgated the Pan-American Sanitary Code in 1905 that required all parties to the treaty to notify each other of any instances of cholera, plague, or yellow fever. Clegg, supra note 28, at 443.

33. Gostin, supra note 21, at 854.

34. Clift, supra note 27, at 17.

35. Id. at 6; Origin and Development of Health Cooperation, supra note 32.
established as a “specialized agency” under Article 57 of the U.N. Charter, and sought to achieve “the attainment by all peoples of the highest possible level of health.” Soon after, the WHA was established to serve as the “decision-making body” for the WHO. The WHA annually hosts representatives from each Member State and functions primarily to conduct oversight of the WHO and its affairs by making policy determinations and decisions regarding appointments and budgeting. The WHA is supported and advised by the WHO Executive Board, which consists of a body of health experts designated by the Member States. Additionally, the WHO Executive Board submits both relevant topics of concern and resolutions for consideration by the WHA. The WHO Executive Board, subject to the WHA’s governance, coordinates and executes the policies established by the WHA.

The WHO has a number of different Global Alert and Response teams (“GARs”) that assist in furthering its purpose to promote universal public health by providing a variety of sup-

36. WHO CONST. pmbl.
37. Id. art. 1.
41. WHO Rules of Procedures, supra note 38, r. 2.
43. Id.
port mechanisms to help facilitate effective international responses to infectious disease epidemics. The Global Outbreak Alert & Response Network (GOARN) is a program within the WHO that seeks to assist Member States in their responses to international infectious disease epidemics (“IIDEs”) and to develop “long-term epidemic preparedness and capacity building.” The Emerging Dangerous Pathogens Laboratory Network (EDPLN) is a network of laboratories that, through knowledge and information sharing, seek to create “evidence-based strategies, tools and practices for rapid detection and containment of outbreaks of novel, emerging and dangerous pathogens in order to minimize their impact on public health, health systems and economies of affected areas.” Another GAR, the Department of Pandemic & Epidemic Diseases (PED), consists of “disease-specific and public health experts with field experience responding to outbreaks and emergencies under the International Health Regulations framework.” The PED works in conjunction with the EDPLN and other “expert networks” to authenticate and refine emerging health techniques, technologies, and strategies for implementation in Member States that are faced with international public health threats. Furthermore, the WHO is a member of the Travel and Transport Task Force, established in August of 2014, which specifically responded to the 2014 Ebola outbreak and the negative impact that travel bans have had upon “the trade, travel and tourism sector.”

44. ROTHSTEIN, supra note 17, at 29–30.
47. Department of Pandemic & Epidemic Disease Flyer, WORLD HEALTH ORG. (2013), http://www.who.int/csr/disease/WHO_PED_flyer_2013.PDF (“PED ensures that novel technologies, systems, and techniques are validated and adapted for disease intervention and control in all settings (e.g. introduction of new rapid diagnostic tests.”)).
48. Id.
B. The IHR

In 1951, the WHO established the International Sanitary Regulations, which were later renamed in 1969 the “International Health Regulations.” These regulations were established to combat the most threatening epidemics of the time: smallpox, typhus, relapsing fever, yellow fever, cholera, and plague. The first edition of the IHR used a “disease-specific approach,” making it applicable only to outbreaks of cholera, plague, and yellow fever.

The second edition of IHR entered into force in 2007, primarily in response to the fact that new infectious diseases began to emerge that were not enumerated in the original Regulation. Due to the exclusive “disease-specific approach” of the original IHR, the original IHR became ineffective with respect to these new infectious diseases. The current IHR is legally binding on 194 countries and aims “to prevent, protect against, control and provide public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade.” Additionally, the IHR employs a collaborative approach in which the Member States coordinate their efforts to prevent, protect, and respond to international health emergencies.

---

51. Clegg, supra note 28, at 443–44.
53. Id. at 327.
54. Id. at 338–39. The emergence of smallpox and HIV/AIDS in the years that followed the implementation of the original IHR made the regulation entirely useless in preventing the international spread of these infectious diseases. Id. at 338. More recently, China’s failure to report the first case of the SARS virus, which began the 2003 SARS epidemic, was said to be a deficiency in the first edition of the IHR by its failure to require Member States to notify the WHO of the emergence of infectious diseases. Id. at 325–26; Julie E. Fischer et al., Stimson Ctr. Glob. Health Security Program, Geo. Wash. U., The International Health Regulations (2005): Surveillance and Response in an Era of Globalization 8, 11, 29 (2011).
56. IHR (2005), supra note 19, art. 2.
57. See, e.g., id. art. 10.3.
States and the WHO share information to facilitate a collective and effective international strategy for combatting international health emergencies.\textsuperscript{58}

\textbf{C. IHR: The Balancing Act}

Although the initial intent behind the IHR was to protect against the impact that international health measures had upon the international economy,\textsuperscript{59} the IHR also evidences the WHO’s concern with the extent to which the IHR encroaches upon domestic public health policy (or, in other words, state sovereignty)\textsuperscript{60} and human rights.\textsuperscript{61} As such, the provisions of the IHR perform a balancing act, taking into consideration each of the following four values: (1) international public health, (2) international human rights, (3) international trade and traffic, and (4) state sovereignty (collectively referred to as “the four values”).\textsuperscript{62}

Although the IHR seeks to prevent both the hindrance of international trade and traffic and the violation of individual human rights by the health measures implemented by Member States, the IHR does contain some provisions that encroach upon certain aspects of state sovereignty. Therefore, despite its purpose and goals, the IHR contains some recommendations\textsuperscript{63} that provide for the violation of basic human rights, hindrance of international trade, and encroachment upon state sovereign-

\textsuperscript{58} Ten Things You Need to Do to Implement the IHR, supra note 55.
\textsuperscript{59} See Foreword to, IHR (2005), supra note 19.
\textsuperscript{61} Id. at 38; Fidler, supra note 52, at 45.
\textsuperscript{62} Fidler, supra note 52, at 45; see Miano, supra note 60, at 30; Foreword to IHR (2005), supra note 19.
\textsuperscript{63} This is not to say that the WHO, which, through the IHR, is the only authoritative body that recognizes that the violation or hindrance of certain rights and values that we consider to be fundamental is justified when there is a considerable threat to international public health. It is in fact a widely held notion. The Agreement on the Application of Sanitary and Phytosanitary Measures acknowledges that measures hindering international trade may be justified if there is a scientific basis for their implementation. Additionally, “international human rights law requires that measures infringing on civil and political rights must be necessary to achieve a compelling public interest, which—in the context of disease control—includes the mandate that the measure have a basis in science and public health.” Fidler, supra note 52, at 382.
ty, which are deemed necessary and justified to promote international public health under certain dire circumstances. The IHR attempts, however, to limit these hindrances, violations, and encroachments by restricting the use of such measures to particular instances in which certain criteria are met, as opposed to allowing their implementation whenever IIDEs are occurring.

The IHR attempts to limit such encroachments by imposing surveillance, notification, and verification requirements that mandate Member States to notify the WHO when they believe there is a risk to international health and provide scientific data to verify the perceived threat. In requiring Member States to furnish such information, the WHO tasks the Director-General, through its authority under the IHR, to provide Member States with temporary recommendations and to determine whether the use of standing recommendations is “necessary and appropriate” given the specific health threat. Standing recommendations, which are recommendations expressly enumerated in the IHR, are meant for “routine and periodic application,” while temporary recommendations are


65. Fidler, supra note 52, at 383.

66. In this Note, the term “IIDE” refers to international threats to human health generally, not just ones that have been deemed to be Public Health Emergency of International Concern (“PHEIC”).

67. Ten Things You Need to Do to Implement, supra note 55; see, e.g., IHR (2005), supra note 19, arts. 31, 32.

68. IHR (2005), supra note 19, art. 6.

69. The Director-General of the WHO is an elected member of the WHA who performs key functions within the WHA, which consist of calling the WHA to session, appointing his advisors (the “Emergency Committee”), declaring international health events as Public Health Emergencies of International Concern (“PHEICs”), promulgating and approving Temporary Recommendations, and acting as a liaison with the U.N. WHO Rules of Procedure, supra note 38, r. 1, 2, 8, 10; IHR (2005), supra note 19, art. 48; WHO Const. art. 31. (“The Director-General, subject to the authority of the Board, shall be the chief technical and administrative officer of the Organization.”).

70. IHR (2005), supra note 19, art. 15(1).

71. Id. art. 53. The IHR defines “recommendation” to “refer to temporary or standing recommendations issued under these Regulations.” Id. art 1.

72. Id. art. 16. See IHR (2005), supra note 19, art. 53 (setting forth procedures on implementing standing recommendations).
considered “non-binding advice issued by [the] WHO . . . for application on a time-limited, risk-specific basis, in response to a public health emergency of international concern.”

Once the WHO Director-General, with the assistance of the IHR Emergency Committee, establishes that an IIDE constitutes a Public Health Emergency of International Concern (PHEIC), the Director-General may issue, with the assistance of the Emergency Committee, temporary recommendations that provide insights and proposals to the Member States regarding the current PHEIC. Ideally, temporarily recommended responses to international public health emergencies are proportionate to the magnitude of the perceived threat and supported by scientific evidence, instead of an enumeration of the maximum extent to which Member States can utilize certain health measures to prevent the spread of IIDEs. These proportional responses seek to ensure that human rights violations and hindrances to international traffic only occur when there is an actual and confirmed threat to international health of sufficient consequence to warrant such interference.

73. Id.
74. The Emergency Committee is a group of expert advisors that the Director-General is obligated to appoint under Article 48 of the IHR (2005), supra note 19. The expertise of the Emergency Committee is to be at the Director-General’s disposal to “provide its views on: (a) whether an event constitutes a public health emergency of international concern; (b) the termination of a public health emergency of international concern; and (c) the proposed issuance, modification, extension or termination of temporary recommendations.” IHR (2005), supra note 19, art. 48.1.
75. IHR Procedures Concerning Public Health Emergencies of International Concern (PHEIC), WORLD HEALTH ORG., http://www.who.int/ihr/procedures/pheic/en/ (last visited Mar. 26, 2016). Annex 2 of the IHR includes a “decision instrument” for determining whether the threat constitutes a PHEIC. IHR (2005), supra note 19, at Annex 2. The IHR defines a PHEIC as an “extraordinary event which is determined, as provided in these Regulations: (i) to constitute a public health risk to other States through the international spread of disease and (ii) to potentially require a coordinated international response.” IHR (2005), supra note 19, art. 1.
76. IHR Procedures Concerning Public Health Emergencies of International Concern (PHEIC), supra note 75; IHR (2005), supra note 19, art. 48.1.
77. Ten Things You Need to Do to Implement the IHR, supra note 55.
II. THE SCOPE AND EFFECT OF THE IHR

The IHR, like any other international regulation, faces challenges in regards to the ways in which the Regulation interacts with Member States’ domestic policies.\(^79\) Furthermore, due to the nature of the IHR as a regulation for the protection of public health, the IHR must also tread lightly when it encounters potential human rights infringements.\(^80\) It is a well-recognized principle, however, that the limitation of certain fundamental values, such as state sovereignty and human rights, are “necessary” under certain circumstances.\(^81\) This concept is recognized in the U.N. Siracusa Principles, which state,

[w]henever a limitation is required in terms of the Covenant to be ‘necessary,’ this term implies that the limitation: (a) is based on one of the grounds justifying limitations recognized by the relevant article of the Covenant, (b) responds to a pressing public or social need, (c) pursues a legitimate aim, and (d) is proportionate to that aim.\(^82\)

Therefore, the WHO’s ability to take actions that may go beyond those that persons or states might deem reasonable is not impermissible if the action purports to promote the international public good.

A. The IHR and Human Rights

The IHR addresses human rights concerns through its general purpose “to prevent, protect against, control, and provide public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade.”\(^83\) The IHR defines “international traffic” as “the movement of persons, baggage, cargo, containers, conveyances, goods or postal parcels across an in-

\(^79\) Miano, supra note 60, at 36–38.
\(^80\) See Foreword to IHR (2005), supra note 19.
\(^83\) IHR (2005), supra note 19, art. 2.
ternational border, including international trade." The U.N. declares such movement as an inherent right of all persons in the Universal Declaration of Human Rights, as it includes "the right to freedom of movement and residence within the borders of each State," and "the right to leave any country, including his own, and to return to his country." Therefore, through the IHR’s purpose to avoid interference with international traffic, and by extension the movement of persons, it explicitly recognizes the protection of some human rights as part of the general purpose of the Regulation.

In the second edition of the IHR, the WHO added additional human rights principles, thereby making them essential to the accurate interpretation of the Regulation. Specifically, the IHR makes clear that “[t]he implementation of these Regulations shall be with full respect for the dignity, human rights and fundamental freedoms of persons,” and shall be applied indiscriminately. The Regulation also provides for confidentiality with regard to personal data collected by Member States, and mandates that personal data should only be maintained where it is “adequate, relevant and not excessive to [the] purpose” of “assessing and managing public health risk[s].”

The IHR further provides that both medical examination and treatment shall not be imposed upon travelers without their informed consent, whereby the person or guardian is made aware of the risks associated with medical examination or treatment and the potential dangers of refusing such medical intervention. Although provisions related to personal data

84. Id. art. 1.
87. Foreword to IHR (2005), supra 19.
88. Fidler & Gostin, supra note 78, at 87.
89. IHR (2005), supra note 19, art. 3.1.
90. Id. art. 42; see also id. art. 3.3.
91. Id. arts. 45.1, 45.2(b).
92. This Note, when using medical “treatment” in this context, is referencing the use of “vaccination and other prophylaxis” as available health measures set forth in the IHR. See, e.g., id. arts. 23.4, 31.2(b).
93. Id. arts. 23.3, 23.4.
and medical exams seem to implement human rights principals by requiring informed consent, there are also provisions of the IHR indicating that “compulsory health measures”\textsuperscript{94} may be justified when concerns for public health rise to a level where intervention is necessary.\textsuperscript{95} Although the IHR permits the implementation of compulsory health measures when Member States are faced with “imminent public health risk[s],” the Regulation attempts to limit human rights violations by providing for the use of “the least invasive and intrusive medical examination[s]” and for the humane and proper treatment of travelers.\textsuperscript{96}

Despite the apparent emphasis that the IHR seems to place upon the preservation of human rights, there are some holes in

\textsuperscript{94} For purposes of this Note, “compulsory health measures” refers to health measures that permit Member States to require or compel an individual to undergo medical examination, medical treatment, or any other health measure that would cause or prevent an individual from taking certain action. Such measures are deemed permissible under Article 31.2 of the IHR which states that:

[if] there is evidence of an imminent public health risk, the State Party may, in accordance with its national law and to the extent necessary to control such risk, compel the traveller to undergo: (a) the least invasive and intrusive medical examination that would achieve the public health objective; (b) vaccination or other prophylaxis; or (c) additional established health measures that prevent or control the spread of disease including isolation, quarantine, or placing the traveller under public health observation.

\textit{Id.} art. 31.2.

\textsuperscript{95} See \textit{id.}

\textsuperscript{96} \textit{Id.} art. 32. When effecting health measures pursuant to these regulations, States Parties have an obligation under the IHR to

treat travellers with respect for their dignity, human rights and fundamental freedoms and minimize any discomfort or distress associated with such measures, including by: (a) treating all travellers with courtesy and respect; (b) taking into consideration the gender, sociocultural, ethnic or religious concerns of travellers; and (c) providing or arranging for adequate food and water, appropriate accommodation and clothing, protection for baggage and other possessions, appropriate medical treatment, means of necessary communication if possible in a language that they can understand and other appropriate assistance for travellers who are quarantined, isolated or subject to medical examinations or other procedures for public health purposes.

\textit{Id.}
the Regulation that create significant potential for human rights violations under circumstances when compulsory health measures are considered justified.\footnote{Fidler & Gostin, supra note 78, at 87–88.} This risk only increases when ambiguous phrases such as “imminent public health risk,” “to the extent necessary to control such risk,” and “the least invasive and intrusive,” are the only mechanisms through which the use of compulsory health measures is limited. It is here where the IHR’s attempt to adhere to each of the four values results in the protection of some values at the expense of others.\footnote{See Miano, supra note 60, at 40.}

\section*{B. The IHR & State Sovereignty}

The IHR also incorporates articles that acknowledge states’ sovereignty.\footnote{Id. at 36.} Despite the IHR’s international reach and force in imposing duties and obligations upon Member States,\footnote{See, e.g., IHR (2005), supra note 19, arts. 6, 10, 32.} the IHR also grants some leeway in the implementation of certain provisions of the IHR.\footnote{Miano, supra note 60, at 38; see also, e.g., IHR (2005), supra note 19, arts. 23.2, 43.1.}

\subsection*{1. Member States’ Discretionary Power under the IHR}

The discretionary power granted by the IHR to the Member States arose in response to the Member States’ concerns that the IHR’s limitations on the use of public health measures would encumber their ability to prevent the spread of IIDEs within their respective countries.\footnote{Fidler, supra note 52, at 379.} Additional concerns originated from the WHO’s reluctance to institute regulations that would make it increasingly difficult for Member States to make public health decisions when faced with substantial public health risks.\footnote{Miano, supra note 60, at 41.} Moreover, the WHO was aware of the fact that countries were unlikely to sign onto the IHR,\footnote{Id.} and that Member States were unlikely to comply with the IHR, if their sovereign authority was heavily compromised as a result.\footnote{David P. Fidler, \textit{Return of the Fourth Horseman: Emerging Infectious Diseases and International Law}, 81 \textit{Minn. L. Rev.} 771, 848 (1997).}
such, both Member States and the WHO, through their mutual goal to create a useful and effective legal framework for a global response to international health threats, also have a common interest in defining clear and unambiguous boundaries signifying where the WHO’s authority under the IHR ends and state sovereignty begins. This delineation of authority is mutually desirable by both the WHO and Member States as it fosters “a balance between the need for [the] WHO to exercise its authority and the legitimate concerns Member States had about the revised IHR impinging on their sovereignty.”

However, any unified framework that requires cooperation and collaboration between different governing bodies proves difficult where uniform and transparent administration might favor a singular authoritative body, but instead requires the balancing of authority between the regulating body itself and the States it was formed to regulate.

To account for this tension, the IHR contains multiple provisions that contemplate the sovereignty of the Member States. The most significant recognition of state sovereignty in the IHR is illustrated by the Regulations’ allowance of Member States to use both compulsory health measures and “additional health measures,” and the accompanying ambiguity regarding these provisions’ limitations. As previously mentioned, compulsory health measures are only minimally restricted by the IHR, and “additional health measures” under the IHR are regulated only to the extent that they “shall not be

106. See Fidler, supra note 52, at 381.
107. Id.
108. See Miano, supra note 60, at 36, 39.
109. See, e.g., IHR (2005), supra note 19, art. 3.4. (“States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to legislate and to implement legislation in pursuance of their health policies. In doing so they should uphold the purpose of these Regulations.”).
110. See Fidler, supra note 52, at 369.
111. See IHR (2005), supra note 19, arts. 31.2, 43.1. Because the Regulation uses nondefinitive language to describe limitations on the use of additional or compulsory health measures, ambiguity exists about how exactly those measures are limited. Member States can use compulsory health measures “to the extent necessary to control such risk,” id. art. 31.2, and additional health measures “shall 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,” id. art. 43.1.
112. See Fidler & Gostin, supra note 78, at 87–88.
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.”\textsuperscript{113} The lack of clarity in the Regulation, with regards to the extent to which compulsory and additional health measures may be utilized, creates an inference of deference to the Member States and effectively grants the Member States the discretion to implement health measures without the WHO’s substantial interference.\textsuperscript{114} As such, it becomes clear that the WHO balances its authority with the sovereignty of the Member States by granting them substantial leeway in the implementation of such health measures, provided that the Member States’ utilization of such health measures is in accordance with the IHR’s purpose.\textsuperscript{115}

\textbf{C. Obligations Imposed by the IHR upon Member States}

Some articles of the IHR, however, do impose certain duties on the Member States that encroach upon their state sovereignty.\textsuperscript{116} The IHR mandates that the Member States create and maintain sufficient infrastructure to ensure their capability of complying with the Regulations’ surveillance require-

\footnotesize{\textsuperscript{113} IHR (2005), supra note 19, art. 43.1.}

\footnotesize{\textsuperscript{114} See Statement on the 5th Meeting of the International Health Regulations Emergency Committee Regarding the 2014 Ebola Outbreak in West Africa, WORLD HEALTH ORG. (Apr. 10, 2015) [hereinafter 5th Meeting of the IHR Regarding the Ebola Outbreak], http://www.who.int/mediacentre/news/statements/2015/ihr-ec-ebola/en/ (“The Committee discussed the issue of inappropriate health measures that go beyond those in the temporary recommendations issued to date. The Committee was very concerned that additional health measures, such as quarantine of returning travellers, refusal of entry, cancellation of flights and border closures significantly interfere with international travel and transport and negatively impact both the response and recovery efforts. Although some countries are reported to have recently rescinded these additional health measures, and some regional airlines have resumed flights to affected countries, about 40 countries are still implementing additional measures and a number of airlines have not resumed flights to these countries.”).}

\footnotesize{\textsuperscript{115} Fidler, supra note 52, at, 382; see also World Health Org., Revision of the International Health Regulation, WHA58.3 (2005), http://www.who.int/ipcs/publications/wha/ihr_resolution.pdf.}

\footnotesize{\textsuperscript{116} Arielle Silver, Obstacles to Complying with the World Health Organization’s 2005 International Health Regulations, 26 WIS. INT’L L. J. 229, 237 (2008).}
ments in Article 5. Member States must, within five years of joining the IHR, establish “the capacity to detect, assess, notify and report events in accordance with these Regulations.” Member States are also subject to notification requirements, which mandate Member States to “communicate to the WHO timely, accurate and sufficiently detailed public health information” regarding the health threat.

The WHO also reserves the right to request verification information from a Member State regarding the perceived PHEIC, which must be acknowledged and complied with within twenty-four hours of the WHO’s request. Furthermore, the IHR maintains the WHO’s ability to acquire information regarding the spread of IIDEs in Member States through sources other than the Member States themselves. As a result, the WHO maintains its ability to take action without receiving official verification that the current threat to international health constitutes a PHEIC from the Member State itself.

D. The WHO’s Enforcement Power of the IHR

The implementation of these positive duties into the IHR upon its revision in 2005 has made complying with the Regulation even more onerous for the Member States than before, and has thus been said to “privilege global health governance over state sovereignty.” However, although the WHO proclaims the IHR to be legally binding on the Member States, the term “binding” is not applied in the traditional legal sense. This is for two identifiable reasons. First, the WHO Constitution fails to grant the WHO either the authority to impose sanctions for noncompliance or to compel compliance with its binding recommendations and regulations. Second, the

---

117. IHR (2005), supra note 19, art. 5.1.
118. Id. art. 5.1.
119. Id. art. 6.2.
120. Id. art. 10.2.
121. Id. art. 9.1.
122. Silver, supra note 116, at 238.
123. Fidler & Gostin, supra note 78, at 87, 90.
124. Ten Things You Need to Do to Implement the IHR, supra note 55.
125. Fidler, supra note 105, at 848; Silver, supra note 116, at 244. Article 7 of the WHO Constitution provides for the suspension of voting privileges when Member States fail to meet financial obligations to the WHO, but this issue is beyond the scope of this Note. This Note focuses on the nonexistence.
WHO’s deference to the principle of state sovereignty under the IHR has weakened the effectiveness of the Regulation due to the WHO’s nonenforcement of the IHR and use of nonbinding recommendations in the IHR. Consequently, this has resulted in noncompliance by the Member States with the IHR.

However, the lack of the WHO’s legal enforcement of the IHR is considered to be inevitable, beneficial, and nondetrimental to the IHR in terms of its administration and effect. The lack of legal enforcement is first inevitable, because the ability of international institutions to apply any legal pressure or to impose any legal sanctions upon members of the international community is notoriously weak. On the other hand, the lack of enforcement is also beneficial, because it allows the IHR to be dynamic by allowing the WHO to update its recommendations in accordance with the relevant PHEIC, new scientific discoveries, and new strategies for promoting international health.

Lastly, the lack of enforcement of the IHR by the WHO is ultimately nondetrimental to the IHR’s initiative to regulate international response to IIDEs, for several reasons. First, even though the provisions of the IHR do not explicitly bind Member States to take certain action, they ultimately encourage Member States to comply with the Regulation. For example, before the IHR permitted the WHO to collect information regarding IIDEs from sources other than the Member States themselves, Member States affected by an IIDE would

of sanctions for noncompliance with nonfinancial obligations in the IHR. WHO Const. art. 7.

126. Silver, supra note 116, at 244.
127. Fidler, supra note 105, at 848.
128. Silver, supra note 116, at 234.

When skeptics claim that international legal institutions have little power, what they typically point to is inability to directly enforce international decisions. If a country were to ignore a World Court decision, for example, there would be no international analog to seizure or attachment . . . . Thus, it is possible to argue that international law has little weight because it is not backed by force.

130. Volansky, supra note 129, at 249.
131. See Fidler & Gostin, supra note 78, at 90.
often violate notification and verification requirements for fear that it would result in other Member States implementing health measures restrictive to international trade, which would be economically damaging to them.\textsuperscript{132} As such, the ability of the WHO to seek information about IIDEs from nongovernmental sources\textsuperscript{133} functions to incentivize Member States to comply with notification and verification requirements, since the WHO has GARs with the resources and capabilities to monitor IIDEs closely.\textsuperscript{134}

Another avenue through which the WHO is able to encourage compliance with the IHR, without direct enforcement, is through its image of “organizational legitimacy.”\textsuperscript{135} Member States are more likely to comply with the IHR because their goals and values are consistent with those embodied in the Regulation,\textsuperscript{136} and due to the diplomacy fostered between WHO officials and government officials in the Member States.\textsuperscript{137} Furthermore, the WHO as an international institution is unaffected by political influence and is thus presumably impartial in issuing its recommendations.\textsuperscript{138} As such, the Member States possess a degree of confidence in the WHO and its ability to promote international health in a manner that effectively addresses all of its economic and human rights concerns,\textsuperscript{139} allowing the IHR to not be undermined by its lack of legal enforcement.

III. TRAVEL RESTRICTIONS AS A MEASURE TO PREVENT THE SPREAD OF IIDEs

The following Part will analyze the IHR and its various commingled provisions to examine whether the use of travel

---

\textsuperscript{132} Id.
\textsuperscript{133} Id.
\textsuperscript{134} Silver, supra note 116, at 245–46.
\textsuperscript{135} See Allyn Lise Taylor, Making the World Health Organization Work: A Legal Framework for Universal Access to the Conditions for Health, 18 AM. J. L. & MED. 301, 320–21 (1992) (“WHO also exerts leverage on some member nations’ policies through its organizational legitimacy. According to Ernst B. Haas, ‘[o]rganizational legitimacy exists when the membership values the organization and generally implement[s] collective decisions because they are seen to serve the members’ values.’”).
\textsuperscript{136} Volansky, supra note 126, at 249.
\textsuperscript{137} Taylor, supra note 135, at 322.
\textsuperscript{138} See Silver, supra note 116, at 245.
\textsuperscript{139} See id.
restrictions during IIDEs is permissible under the IHR and to what extent. The Part will then go on to provide an extensive analysis of the 2014 Ebola outbreak, the role that travel restrictions played during this particular health emergency, and how the IHR and the WHO functioned to prevent Member States from implementing such measures.

A. Travel Restrictions and the IHR

Travel restrictions are health measures implemented by countries to prevent infected persons from travelling to and from infected regions and thereby fostering the spread of IIDEs. In order to determine whether the use of travel restrictions is provided for and subject to limitation under the IHR, it is necessary to determine whether travel restrictions, such as flight suspension and border closure, fall into any of the categories of health measures enumerated in the Regulation.

The WHO Constitution grants the WHA the broad discretion and authority to implement regulations regarding, among other things, “sanitary and quarantine requirements and other procedures designed to prevent the international spread of disease.” As such, the IHR explicitly enumerates thirteen different health measures that the WHO may recommend with regards to persons during international health emergencies, which include:

[N]o specific health measures [being] advised; review[ing] travel history in affected areas; review[ing] proof of medical examination and any laboratory analysis; requir[ing] medical examinations; review[ing] proof of vaccination or other prophylaxis; requir[ing] vaccination or other prophylaxis; plac[ing] suspect persons under public health observation; implement[ing] quarantine or other health measures for suspect persons; implement[ing] isolation and treatment where necessary of affected persons; implement[ing] tracing of contacts of suspect or affected persons; refus[ing] entry of suspect and affected persons; refus[ing] entry of unaffected persons to

140. Y.L. Huizer et al., Usefulness and Applicability of Infectious Disease Control Measures in Air Travel: A Review, 13 TRAVEL MED. & INFECTIOUS DISEASE 19, 26 (2015).

141. WHO Const. art. 21. The WHO Constitution pertains to the WHO and the WHA with regard to all of the regulations they establish and therefore does not only apply to the IHR.
affected areas; and implement[ing] exit screening and/or restric-
tions on persons from affected areas.\(^\text{142}\)

Although the IHR does not mention explicitly flight suspension
or border closure as travel restrictions that can be recommend-
ed by the WHO, the IHR does provide for the “refus[al] [of] en-
try of suspect\(^\text{143}\) and affected\(^\text{144}\) persons” into a country, and the
“implement[ation] [of] exit screening and/or restrictions on per-
sons from affected areas”\(^\text{145}\) as permitted health measures.

These provisions appear to evidence the fact that the use of
travel restriction aligns with the categories of health measures
that the IHR contemplates as permissible and potentially use-
ful tools in combatting the international spread of an IIDE.

WHO temporary recommendations from the last four major
Public Health Emergencies of International Concern, however,
have advised against the use of travel restrictions to prevent
the spread of each epidemic and have instead recommended
measures such as the use of exit screening, information shar-
ing, capacity building, and “isolation of suspect and probable
cases.”\(^\text{146}\)

\(^{142}\) See IHR (2005), supra note 19, art. 18.1.

\(^{143}\) The IHR defines “suspect” as “those persons, baggage, cargo, contain-
ers, conveyances, goods or postal parcels considered by a State Party as hav-
ing been exposed, or possibly exposed, to a public health risk and that could
be a possible source of spread of disease.” IHR (2005), supra note 19, at art. 1.

\(^{144}\) The IHR defines “affected” as “persons, baggage, cargo, containers,
conveyances, goods, postal parcels or human remains that are infected or
contaminated, or carry sources of infection or contamination, so as to consti-
tute a public health risk.” IHR (2005), supra note 19, art. 1.

\(^{145}\) See IHR (2005), supra note 19, art. 18.1.

\(^{146}\) The Director-General advised against the use of travel restrictions dur-
ing the 2003 SARS outbreak, the 2009 H1N1 outbreak, the 2014 Ebola out-
break, and the 2015 MERS-CoV outbreak. WHO Statement on the Tenth
Meeting of the IHR Emergency Committee Regarding MERS, WORLD HEALTH
ORG. (Sept. 3, 2015), http://www.who.int/mediacentre/news/statements/2015/ihr-emergency-
committee-mers/en/; Third Meeting of the IHR Emergency Committee, WORLD
(last visited Feb. 27, 2016); Statement on the 2nd Meeting of the International
Health Regulations Emergency Committee Regarding the 2014 Ebola Out-
break in West Africa, WORLD HEALTH ORG. (Sept. 22, 2014) [hereinafter
Statement on the 2nd Meeting of the IHR EC Regarding Ebola],
http://www.who.int/mediacentre/news/statements/2014/ebola-2nd-ihr-
meeting/en/; Summary of WHO Measures Related to International Travel,
WORLD HEALTH ORG. (Jun. 24, 2003),
Nevertheless, Member States continued to implement travel restrictions147 and did so legally, since temporary recommendations are nonbinding advice,148 and pursuant to the binding IHR,149 Member States are permitted to implement “additional health measures,” which are those that “(a) achieve the same or greater level of health protection than WHO recommendations; or (b) are otherwise prohibited under” other articles of the Reg-


147. See, e.g., Statement on the 6th Meeting of the International Health Regulations Emergency Committee Regarding the 2014 Ebola Outbreak in West Africa, WORLD HEALTH ORG. (July 7, 2015) [hereinafter Statement on the 6th Meeting of the IHR EC Regarding Ebola], http://www.who.int/mediacentre/news/statements/2015/ihr-ebola-7-july-2015/en/ (“The Committee noted that although some improvements have been observed, inappropriate travel and transport measures continue to be implemented by numerous countries and a number of international airlines have still not resumed flights to the affected countries.”); Statement on the 7th Meeting of the International Health Regulations Emergency Committee Regarding the 2014 Ebola Outbreak in West Africa, WORLD HEALTH ORG. (Oct. 5, 2015) [hereinafter Statement on the 7th Meeting of the IHR EC Regarding Ebola], http://www.who.int/mediacentre/news/statements/2015/ihr-ebola-7th-meeting/en/ (“The Committee was concerned that although some improvements have been observed in the rescinding of excessive or inappropriate travel and transport measures, 34 countries continue to enact measures that are disproportionate to the risks posed, and which negatively impact response and recovery efforts. Furthermore, a number of international airlines have yet to resume flights to the affected countries.”); Lawrence O. Gostin, Influenza A(H1N1) and Pandemic Preparedness Under the Rule of International Law, 301 JAMA 2376, 2378 (2009) (“WHO suggested travel restrictions would have ‘very little effect on stopping the virus from spreading, but would be highly disruptive to the travel community.’ Despite this, many countries, including the United States, have advised against all nonessential travel to Mexico. Some countries have implemented outright travel bans. For example, China suspended all flights between the 2 countries and chartered a plane to pick up Chinese nationals within Mexico. Additionally, Latin American countries (Argentina, Peru, Ecuador, and Cuba) suspended flights from Mexico.”); S. Korean Airlines to Resume Suspended Flights as MERS Wanes, REUTERS, Jul. 21, 2015, http://www.reuters.com/article/2015/07/21/southkorea-airlines-mers-idUSL3N1012YQ20150721; China Facing Big SARS Spread-WHO, CNN.COM, Apr. 22, 2003, http://www.cnn.com/2003/WORLD/asiapcf/east/04/21/sars.wrap/ (“Singapore Airlines’ regional Asian carrier SilkAir announced it will suspend some flights to Indonesia, China and Thailand in May because of the impact of SARS.”).

148. See IHR (2005), supra note 19, art. 1.

149. Ten Things You Need to Do to Implement the IHR, supra note 55.
ulation. Not to mention, the IHR further permits Member States to utilize additional health measures that rise to the level of “significantly interfer[ing] with international traffic,” provided that the Member States furnish the WHO with “the public health rationale and relevant scientific information for it” within forty-eight hours of their implementation. Once a Member State implements those additional health measures that “significantly interfere with international traffic,” the only course of action that the WHO purports to take against them, is to “request that the [Member] State [] concerned reconsider the application of the measure.” As a result, although the WHO has continuously advised against the use of travel restrictions as a method of thwarting the spread of IIDEs, Member States have and can maneuver around these advisements through the provisions of the IHR.

B. The 2014 Ebola Outbreak and Travel Restrictions

The 2014 Ebola outbreak was among the most significant international events of 2014, and has been declared the largest Ebola outbreak to date, resulting in 28,457 cases and 11,312 deaths worldwide. The 2014 Ebola outbreak began in Guinea in December of 2013 and continued to spread to Liberia, Sierra Leone, Italy, Mali, Nigeria, Senegal, Spain, the United Kingdom, and the United States—with Guinea, Liberia, and

---

150. See IHR (2005), supra note 19, art. 43.1.
151. Article 43.3 of the IHR defines “significant interference” as the “refusal of entry or departure of international travelers, baggage, cargo, containers, conveyances, goods, and the like, or their delay, for more than 24 hours.” IHR (2005), supra note 19, art. 43.3.
152. See id.
153. Id. art. 43.5.
154. Id. art. 43.4.
Sierra Leone experiencing the greatest incidence of the disease.\textsuperscript{158} The 2014 outbreak was declared a PHEIC by the WHO Director-General on August 8, 2014.\textsuperscript{159}

The Emergency Committee first met on August 8, 2014, and proposed recommendations to combat the international spread of Ebola, which the Director-General endorsed and determined to be temporary recommendations under the IHR.\textsuperscript{160} Included in these temporary recommendations was a specific advisement against the use of travel restrictions.\textsuperscript{161} The second and third meetings of the Emergency Committee held on September 22, 2014, and October 23, 2014, respectively, reiterated the importance of not instituting restrictions on international travel. During the September meeting, it was stated that: “Flight cancellations and other travel restrictions continue to isolate affected countries resulting in detrimental economic consequences, and hinder relief and response efforts risking further international spread of the disease.”\textsuperscript{162} During the October meeting it was repeated that:

\begin{quote}
A general travel ban is likely to cause economic hardship, and could consequently increase the uncontrolled migration of people from affected countries, raising the risk of international spread of Ebola. The Committee emphasized the importance of normalizing air travel . . . to and from the affected areas, to reduce the isolation and economic hardship of the affected countries.\textsuperscript{163}
\end{quote}

Additionally, a statement by the Travel and Trade Task Force, which was involved with this particular emergency, supported this advisement against travel bans, due to the fact that the manner in which Ebola is communicated provides for a low risk of transmission during travel.\textsuperscript{164} However, the inappropriate

\begin{footnotesize}
\textsuperscript{158} Ebola Situation Report, supra note 156.
\textsuperscript{160} Statement on the 1st IHR EC Meeting Regarding Ebola, supra note 155.
\textsuperscript{161} Id.
\textsuperscript{162} Statement on the 2nd IHR EC Meeting Regarding Ebola, supra note 146.
\textsuperscript{163} Statement on the 3rd IHR EC Meeting Regarding Ebola, supra note 24.
\textsuperscript{164} Statement from the Travel and Transport Task Force on Ebola Virus Disease Outbreak in West Africa, supra note 49.
\end{footnotesize}
use of travel restrictions continued to take place through October 5, 2015, and was noted during the seventh meeting of the IHR Emergency Committee, which stated that travel measures were still being utilized in thirty-four countries.

Despite temporary recommendations encouraging the contrary, the 2014 Ebola outbreak provoked various countries and airlines to restrict travel into their territories through flight suspension, border closure, visa suspension, entry screening, and travel bans. As of August 31, 2014, Ghana, Chad, Cote D'Ivoire, Nigeria, Gambia, Kenya, Guinea Bissau, and Togo implemented flight bans. Among these eight countries, all are signatories to the IHR. As such, these Member States violated the temporary recommendations issued during all seven Emergency Committee meetings regarding the 2014 Ebola outbreak.

165. *Statement on the 7th Meeting of the IHR EC Regarding Ebola*, supra note 147.
166. Id.
168. Id. As of August 31, 2014, the countries that had prohibited the entry of its citizens or visitors from Ebola-infected regions included Zambia, Mauritania, Botswana, and South Africa. Countries that had instituted border closure measures included Cape Verde Islands, Cameroon, Senegal, Rwanda, Gabon, and Namibia. Id. See generally Nick Thompson & Inez Torre, *Ebola Virus: Countries with Travel Restrictions in Place*, CNN.COM (Nov. 4, 2014), http://www.cnn.com/2014/11/04/world/ebola-virus-restrictions-map/ (listing and mapping the countries that instituted any type travel restriction during the 2014 Ebola outbreak).
170. See *Statement on the 1st Meeting of the IHR EC Regarding Ebola*, supra note 155; *Statement on the 2nd Meeting of the IHR EC Regarding Ebola*, supra note 146; *Statement on the 3rd Meeting of the IHR EC Regarding Ebola*, supra note 24; *Statement on the 4th Meeting of the IHR EC Regarding Ebola*, supra note 22. The WHO reported:

The Committee was very concerned that additional health measures, such as quarantine of returning travellers, refusal of entry, cancellation of flights and border closures significantly interfere with international travel and transport and negatively impact both the response and recovery efforts. Although some countries are reported to have recently rescinded these additional health measures, and some regional airlines have resumed flights to affected countries, about 40 countries are still implementing additional measures and a number of airlines have not resumed flights to these countries.
The failure of the IHR to limit the extent to which Member States utilized travel restrictions during the 2014 Ebola outbreak is highlighted in a WHO Review Committee report regarding the role that the IHR played in the outbreak’s response. Among the three primary weaknesses that the WHO Review Committee discussed, was the IHR’s inability to prevent “States Parties’ imposition of measures, such as restrictions on travel and trade, that go beyond temporary recommendations issued by the IHR Emergency Committee.”

IV. RECOMMENDATIONS TO IMPROVE THE EFFECTIVENESS OF THE IHR THROUGH SUNSETTING PHASE-OUT PROVISIONS

The IHR is criticized for its vagueness and permissiveness in defining and enforcing if, when, and how Member States should implement certain health measures. These criticisms are in response to the WHO’s attempts to provide Members States with recommended responses to international public health emergencies that are proportionate to the magnitude of the perceived threat rather than restricting the extent to which Member States may utilize certain health measures. Although this is a clear flaw in the execution of the IHR, which has led to notable noncompliance with the Regulation, it is also the means by which the IHR defers to the Member States on the grounds of state sovereignty. However, due to the effects that certain health measures (such as the

---

5th Meeting of the IHR Regarding the Ebola Outbreak, supra note 114; see also Statement on the 6th Meeting of the IHR EC Regarding Ebola, supra note 144; Statement on the 7th Meeting of the IHR EC Regarding Ebola, supra note 147.


172. Id.

173. Maccarone, supra note 64, at 800.


175. See Maccarone, supra note 64, at 800; Schloenhardt, supra note 174, at 469.

176. IHR (2005), supra note 19, arts. 15–18.

177. Ten Things You Need to do to Implement the IHR, supra note 55.

178. See Miano, supra note 60, at 40.
restriction of international traffic) can have upon the interests of international health, human rights, state sovereignty, and the international economy, the vagueness of the IHR presents a problem that must be addressed in order to refine both the Regulation and Member States’ responses to international health emergencies. Thus, when addressing the vagueness issue, the IHR must properly balance these interests, assigning them the appropriate weights.

Scientific studies based upon data collected from prior IIDEs have come to conflicting conclusions about the effectiveness of travel restrictions during international health emergencies. What is ultimately evident from these studies is that health measures restrictive of travel can either be effective, detrimental, or inconsequential to the effort to prevent the spread of IIDEs, depending upon several factors that include the nature of the relevant IIDE, the preparedness of region in which it emerges, the political and socioeconomic climate of the infected region, the rate of spread of the epidemic, and the extent to which the IIDE has already spread. Studies have found that even though travel restrictions can delay the spread of an IIDE, this delay is often negligible—spanning from a couple of days to a couple of weeks depending on the extent to which travel is actually restricted. Additionally, travel restrictions are often counterproductive in that such delay in travel only disrupts international response by making it more difficult for the expedient transportation of response teams and resources to infected regions. However, other studies have

---

179. See Hollingsworth et al., supra note 10, at 498.
180. See Gomes et al., supra note 10.
181. See Bajardi et al., supra note 15.
182. See Hollingsworth, supra note 10, at 497–98.
186. See Bajardi et. al., supra note 15.
187. See Gomes et al., supra note 10.
found that travel restrictions implemented in an affected country can be beneficial if implemented when the epidemic is contained in the affected country before the number of cases reaches a certain threshold amount.\textsuperscript{188} Despite the clear positive, negative, or nonexistent effects that travel restrictions have upon the spread of IIDEs—depending upon the circumstances surrounding the outbreak, and the residual effects that they have upon human rights, the international economy,\textsuperscript{189} and the autonomy of Member States\textsuperscript{190}—they are very minimally regulated in the IHR.

To the extent that the IHR does regulate travel restrictions, the lack of specificity in the Regulation weakens compliance with and the effectiveness of the IHR during international health emergencies.\textsuperscript{191} As such, the IHR is not the WHO's most effective mechanism for coordinating and regulating international response to IIDEs due to the IHR's ambiguity and the WHO's lack of enforcement power.\textsuperscript{192} One of the assets that the WHO possesses in regards to promoting compliance with the IHR, however, is its reputation as a prestigious and legitimate organization that Member States have come to trust.\textsuperscript{193} Additionally, the various resources that the WHO has at its disposal, including GOARN and EDPLN, presumably instill the Member States with additional confidence in the WHO, because of its ability to find the most effective strategies for combatting IIDEs.\textsuperscript{194}

\textbf{A. The Proposal: Sunsetting Phase-Out Provisions to Refine the IHR}

Rather than legislating in a manner that idealizes the international response to IIDEs, the IHR should instead implement a framework of sunsetting phase-out provisions that instruct Member States on when and to what extent to implement cer-

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{188} See Hollingsworth et. al., \textit{supra} note 10, at 498. This study found that "containment [(through travel restrictions)] of a pandemic influenza strain is probably only feasible when there are less than 50 cases." \textit{Id.}
\item \textsuperscript{189} \textsc{Rothstein, supra} note 17, at 7.
\item \textsuperscript{190} See Miano, \textit{supra} note 60, at 40.
\item \textsuperscript{191} See Maccarone, \textit{supra} note 64, at 800.
\item \textsuperscript{192} See Schloenhardt, \textit{supra} note 174, at 469; Maccarone, \textit{supra} note 64, at 800.
\item \textsuperscript{193} Taylor, \textit{supra} note 135, at 320–21.
\item \textsuperscript{194} See \textsc{Rothstein, supra} note 17, at 30.
\end{itemize}
\end{footnotesize}
tain travel restrictions.\textsuperscript{195} The use of sunsetting phase-out provisions would allow the WHO to more closely and precisely regulate Member States’ responses to IIDEs by providing a workable framework from which the Member States can deduce the appropriate responses to IIDEs, based upon the actual nature of the outbreak. In other words, by having a regulation that contains scientifically grounded provisions that are proven to be effective in eradicating outbreaks of diseases with similar transmission profiles, Member States will be better equipped to respond effectively to the current outbreak. This method of regulation would preserve the flexibility of the IHR, while also increasing its effectiveness and the Member States’ degree of compliance with the Regulation, without the burden of implementing an unrealistic enforcement regime. Although Member States might not specifically comply with every provision of this revised IHR, its empirical basis would presumably increase the chances that Member States’ responses would be within a range of reasonableness and effectiveness, given what would be most fitting and appropriate for the specific outbreak. Furthermore, it would keep interferences with human rights, state sovereignty, and the international economy to a minimum.


Phase-out provisions are often utilized in American tax legislation.\textsuperscript{196} They serve various purposes within the U.S. Tax Code (the “Tax Code”), including incentivizing certain taxpayer behaviors and promoting horizontal equity.\textsuperscript{197} This essentially allows tax legislators to refine the Tax Code so that it has the exact effect that is intended.\textsuperscript{198} Phase-out provisions come in various forms; however, for the purposes of this Note, they are provisions that are limited in their application based upon

\textsuperscript{195} This recommended solution can also be easily applied to other health measures besides those restrictive upon travel. However, for the purposes of this Note, this solution will only be examined in regards to travel restrictions as a measure to prevent the international spread of infectious disease epidemics.

\textsuperscript{196} Hartman, supra note 26, at 188.


\textsuperscript{198} Hartman, supra note 26, at 188–89.
some sort of referent provided for in the provision.\textsuperscript{199} For instance, a phase-out provision in a tax code may make it so that a benefit such as a tax credit increases or decreases (“phases in” or “phases out”) at a rate that is dependent upon how much income or other benefits the taxpayer receives (the referent).\textsuperscript{200}

A more concrete example of this is found in §195(b)(1) of the Tax Code, which provides a tax benefit to taxpayers starting new businesses in the form of a deduction.\textsuperscript{201} This deduction enables new business owners to offset a certain amount of the costs they incur in entering into a new trade or business, by reducing their taxable income by that amount. Under this provision, such taxpayers are permitted to deduct up to $5000 of their start-up expenses “for the taxable year in which the active trade or business begins.”\textsuperscript{202} Once their start-up expenses begin to exceed $50,000, however, the amount of the allowable deduction begins to decrease by the amount by which the taxpayer’s start-up expenses exceed $50,000.\textsuperscript{203} This feature is referred to as a “phase-out”; decreasing the amount of a tax benefit depending upon the extent to which a taxpayers’ start-up expenses exceed a certain threshold amount.\textsuperscript{204}

In the United States, “Congress believes that phase-outs assist with ‘the goal of personalizing the [f]ederal income tax based on each individual’s ability to pay taxes.’”\textsuperscript{205} Similarly, regulations governing international health response must be personalized to the current IIDE and the context within which it arises.\textsuperscript{206} As previously mentioned, during the 2014 Ebola outbreak, the Travel and Trade Task Force held the view that one of the reasons why travel bans were not an effective means of limiting the spread of the Ebola virus was because the virus had a low risk of transmission during travel—since the means of transmission was only transferred through direct exposure to bodily fluids of an infected person who had the virus and was

\textsuperscript{199} Id. at 189.
\textsuperscript{200} Id.
\textsuperscript{201} A deduction is a mechanism that allows a taxpayer to reduce or offset their taxable income (the amount of income upon which the income tax is levied) by a certain amount, thereby providing tax savings or benefits.
\textsuperscript{202} I.R.C. § 195(b)(1) (2010).
\textsuperscript{203} Hartman, supra note 26, at 189.
\textsuperscript{204} I.R.C. § 195 (2010).
\textsuperscript{205} Hartman, supra note 26, at 192.
\textsuperscript{206} See Hollingsworth, supra note 10, at 497–98.
symptomatic.\textsuperscript{207} As such, it is evident that depending on the nature of the disease, the use of travel restrictions may be more or less useful. The ability of phase-out provisions to allow policy makers to customize regulatory provisions would clearly be useful in this context. Therefore, phase-out provisions can be a tool that the WHO can utilize to refine its provisions to have the exact effect that they choose by drafting them in a way that would make them more specialized to the particular IIDE at issue.

The process of implementing this framework would entail the WHA and its supporting agencies analyzing the types of health measures and the degrees of those health measures that are effective in combatting different classes of diseases that have similar characteristics. What would ultimately come of this analysis would be phase-out provisions that indicate under what circumstances travel bans and other travel restrictions are both feasible and scientifically proven to be effective. They would indicate that once the veracity of a particular IIDE reaches a certain threshold, then the provision allowing for a particular health measure—in this instance, a travel restriction—will or will not be effective, and thus mandated or forbidden by the IHR. The referent in such provisions, which would determine whether the provision is applicable given the relevant IIDE, would be, for example, one or several of the following: the number of disease cases,\textsuperscript{208} the manner in which the IIDE is communicated,\textsuperscript{209} the number of affected countries, the rate of spread of the IIDE, or the nature of the contaminated region or regions.

Another manner in which phase-out provisions could be utilized within the IHR is by using characteristics of infected countries as referents. A meeting on improving the public health regime in Ebola-affected countries in December of 2014, stated the importance of “[t]he required actions . . . be[ing] tailored to each countries specific context.”\textsuperscript{210} As such, factors such

\begin{itemize}
\item \textsuperscript{207} Statement from the Travel and Transport Task Force on Ebola Virus Disease Outbreak in West Africa, supra note 49.
\item \textsuperscript{208} See Hollingsworth, supra note 10, at 498.
\item \textsuperscript{209} See Statement from the Travel and Transport Task Force on Ebola Virus Disease Outbreak in West Africa, supra note 49.
\item \textsuperscript{210} High Level Meeting on Building Resilient Systems for Health in Ebola-Affected Countries, WORLD HEALTH ORG. (Dec. 10–11, 2014),
\end{itemize}
as the geographical character, infrastructure, socioeconomics of the infected regions, or a country’s proximity to the infected region, could be used as referents for determining when a particular health measure is appropriate.

The use of actual figures and thresholds in structuring the IHR would provide more specificity in regards to when and how Member States should implement certain health measures. This method of regulating would help to ensure that the health measures implemented by Member States are not only consistent with the purpose of the Regulation, but also consistent with the most up-to-date findings of the WHO, the WHA, and the GARs. Even if a Member State fails to precisely follow these phase-out provisions, they will still be provided with a useful tool, as these phase-out provisions would act as a framework illustrating when a specific health measure will or will not be effective.


An additional feature of the proposed provisions, which will increase both the effectiveness and integrity of the IHR, is that the provisions would sunset. Sunset provisions are statutory provisions that have an expiration date, and will thus not remain in effect after such date, unless they are renewed by the relevant legislative or governing body. Examples of these provisions were seen during the Bush Administration, when President George W. Bush instituted a tax cut in 2001, which was set to expire in 2010, and another tax cut in 2003, which was set to expire in 2013.

Sunset provisions are both an encouraged and criticized method of legislating. On one hand, sunset provisions are seen as beneficial because they force legislative bodies to reconsider laws that they have previously passed and initiate conversation about the successes, failures, and potential improvements of a


211. See id.

212. Finn, supra note 25, at 445.

particular piece of legislation.\textsuperscript{214} Supporters of such provisions have also advocated for their use due to the “flexibility they offer to legislators when dealing with temporary or uncertain problems.”\textsuperscript{215} On the other hand, sunset provisions have been criticized for creating a system by which legislators are in more frequent contact with lobbyists, thereby exposing them to greater influence from interest groups than from ordinary citizens.\textsuperscript{216} An advantage of using sunset provisions within the context of an international treaty such as the IHR, however, is that such a prevailing political atmosphere does not exist.\textsuperscript{217} as it does within the politically charged realm of tax legislation.\textsuperscript{218} Therefore, the use of sunset provisions in the IHR would solely function to maintain the dynamic nature of the Regulation by setting dates upon which certain provisions expire and new and updated provisions are developed to replace them.

The WHO already does, however, employ a form of sunset provisions through its use of temporary recommendations to regulate the actions of Member States “temporarily” in the wake of an international health emergency on a “risk specific” basis.\textsuperscript{219} For purposes of this Note, however, sunset provisions will not refer to temporary regulations published by a legislative body during a state of emergency like those utilized in the WHO’s temporary recommendations. Sunset provisions will instead refer to fully developed provisions formulated in advance of any type of health emergency, which will have an amply considered sunset date that takes into consideration the pace at which new scientific developments arise that modify and enhance international response to IIDEs. This way, instead of Member States scrambling to abide by the temporary recommendations published by the WHO when a state of emergency already exists, they will have more time to properly deliberate and consider the appropriate methods of preventing the spread of an IIDE.

\textsuperscript{215} Kysar, \textit{supra} note 214, at 1041.
\textsuperscript{216} Id. at 1051.
\textsuperscript{217} See Silver, \textit{supra} note 116, at 245.
\textsuperscript{218} See Kysar, \textit{supra} note 214, at 1051.
\textsuperscript{219} See Finn, \textit{supra} note 25, at 450; IHR (2005), \textit{supra} note 19, art. 1 (defining “temporary recommendation”).
Furthermore, Member States will also have sufficient time to both implement measures and create domestic policies with the guidance of an increasingly specific framework of phase-out provisions, thus promoting a more globalized and coherent international approach. This additional time would also allow countries to coordinate their response strategies in conjunction with one another in advance, which has been a heavily criticized area of international health response that health officials emphasized after analyzing the effectiveness of the IHR during the 2014 Ebola outbreak.\footnote{Health Partners Unite to Build Stronger Systems for Health in Ebola-Affected Countries, WORLD HEALTH ORG. (Dec. 12, 2014), http://www.who.int/mediacentre/news/releases/2014/health-systems-ebola/en/.
}

This increased coordination in advance of a health emergency would promote preparedness, which, in this context, would decrease human rights infringements by decreasing the level of urgency that exists during such times. It would also promote meaningful discussions and cooperation between neighboring Member States and Member States that collectively engage in international commerce, so that their reactions to health emergencies are less detrimental to the political and economic relationships that exist between them. Essentially, with additional time allocated to protecting human rights, state sovereignty, and the international economy before a threat to international health arises, these important tenets will no longer fall to the wayside during times of crisis, but instead will be firmly rooted by the time an international health crisis emerges.

**B. Scientific Application of the Sunsetting Phase-Out Provisions in the Context of the SARS, H1N1, and Ebola Crises.**

In attempts to provide a concrete context to understand how this framework would increase the effectiveness of the IHR, the following section will compare characteristics of the last three major health emergencies: the 2003 SARS outbreak, the 2009 H1N1 outbreak, and the 2014 Ebola outbreak. Using these prior outbreaks as a basis, this section will then simulate how this Note's individualized approach would better cater to different types of IIDEs and present an overview of the various scientific studies that provide support for the validity of this Note's proposal.
1. SARS

In 2002, the SARS epidemic commenced in Guangdong, China. As a respiratory illness, the disease is transmitted through “respiratory droplets” that are expelled by infected persons when they cough or sneeze. The disease has an incubation period of two to seven days, meaning that it would take from the time of a person’s first contact with the infection until the end of the incubation period to actually experience the symptoms of the disease, and in the case of SARS, transmit it.

The emergence and spread of SARS throughout the world was heavily linked to air travel. The outbreak originated with a doctor who was exposed to the disease while treating a patient that was infected. The doctor then stayed in a hotel in Hong Kong, where he was believed to have infected roughly sixteen other hotel guests who then proceeded to spread the disease across borders to airplane passengers on their respective flights home. These hotel guests are believed to have infected multiple people while in flight, causing SARS to spread to Vietnam, Singapore, and Canada. Researchers also found that the passengers on the plane who were most at risk of contracting the disease from the infected person were those that were seated within three rows in front of them. The SARS outbreak was eventually tempered in July of 2003, but caused 8098 to be infected and 774 deaths.

221. At the time the 2002 SARS epidemic took place, the original unrevised version of the IHR was in force, and it was the events that occurred in response to the epidemic that actually spurred the revision process. Fidler supra note 52, at 343.
224. Id.
226. Id.
227. Id.
228. Id.
230. Frequently Asked Questions About SARS, supra note 228.
2. H1N1

H1N1, also known as “swine flu,” is a respiratory illness caused by a specific strain of the influenza virus that is ordinarily found in pigs. Symptoms of the disease are very similar to those of the seasonal flu including: fever, headache, cough, sore throat, body aches, fatigue nausea, and runny nose. What made H1N1 particularly threatening, however, was its ability to ignite or complicate dormant or preexisting health conditions, causing other fatal diseases such as pneumonia and respiratory or kidney failure. The average incubation period for the disease is four days, and becomes contagious one day before the onset of symptoms and continues to be contagious for up to five to seven days after such date.

The most recent outbreak of pandemic influenza (H1N1) took place in 2009 and was first detected in Mexico. Within roughly a month, the disease had spread to the United States, Canada, Spain, and the United Kingdom. While the outbreak turned out to be much less severe than the international community and the WHO expected, recorded deaths were still significant as they reached 18,500 deaths. The Director-General declared the H1N1 outbreak to be a PHEIC on April 25, 2009, and on September 23, issued temporary recommendations, which included the advisement that “countries should not close borders or restrict international traffic and trade.” However,

235. Id.
236. International Health Regulations Report, supra note 240, at 49.
238. International Health Regulations Report, supra note 240, at 60.
notwithstanding this recommendation, many countries instituted travel restrictions in hopes they would protect their populations from contamination.\textsuperscript{239}

3. Ebola

Ebola, an often-fatal virus, first emerged in Africa in 1976.\textsuperscript{240} Although curable if properly treated, it can lead to wide-spread fatal epidemics.\textsuperscript{241} Symptoms of the virus include the following: fever, vomiting, muscle pain, and internal and/or external bleeding.\textsuperscript{242} The disease is contagious once an infected person becomes symptomatic and is transmitted to others through their contact with the bodily fluids of an infected person.\textsuperscript{243} The incubation period for Ebola ranges from two to twenty-one days. However, an infected person is not incapable of spreading the disease during the incubation period.\textsuperscript{244}

4. Support

The scientific findings of prior outbreaks provide support for the proposed framework of sunsetting phase-out provisions. As previously evidenced, each disease, its effects, and its transmission, is unique.\textsuperscript{245} As such, it is apparent that the probability that different diseases will spread during air travel is staggered depending on the method of and susceptibility to transmission. For example, a disease like Ebola, which is not susceptible to airborne transmission, would have a lesser chance of

\begin{footnotesize}
239. See HUMANITARIAN CRISES AND MIGRATION, supra note 12, at 104; Bajardi et al., supra note 15.
240. Ebola Virus Disease, supra note 159.
241. Id.
242. Id.
243. Id.
244. Id.
245. For example, Ebola is spread through contact with the bodily fluids of an infected person that is symptomatic, SARS is transmitted through airborne respiratory droplets of an infected person after the incubation period, and H1N1 is spread through close contact with infected persons or contact with the respiratory droplets of an infected person that may or may not be symptomatic. Id.; Frequently Asked Questions About SARS, supra note 228; Interim Guidance on Infection Control, Measures for 2009 H1N1 Influenza in Healthcare Settings, Including Protection of Healthcare Personnel, supra note 240; No Rationale for Travel Restrictions, WORLD HEALTH ORG. (May 1, 2009), http://www.who.int/csr/disease/swineflu/guidance/public_health/travel_advice/en/.
\end{footnotesize}
spread during travel\textsuperscript{246} than other diseases, such as SARS, which is spread through the airborne respiratory droplets of a symptomatic individual, which may have an increased chance of spread during air travel. Further complicating the issue are situations like H1N1 where someone can be contagious even before someone becomes symptomatic.\textsuperscript{247}

As a result, the measures to prevent such worldwide epidemics must be made adaptable to these distinct traits. The Director-General of the WHO expressed a similar sentiment during her address to the Review Committee in August of 2015, regarding the 2014 Ebola outbreak when she stated that “[p]reparedness for the future means preparedness for a very severe disease that spreads via the airborne route or can be transmitted during the incubation period, before an infected person shows tell-tale signs of the illness.”\textsuperscript{248} With this statement, the Director-General acknowledges that the IHR does not sufficiently equip the Member States to respond effectively to every type of IIDE, and that a disease susceptible to airborne spread, during its incubation period, would be particularly threatening given the lack of tools that the Member States currently possess.

Analyzing more closely these discrepancies and metrics are various studies that evaluate the ultimate effects of travel restrictions upon the spread of IIDEs, given different disease epidemics and surrounding circumstances. For example, one study utilized data from the 2009 H1N1 pandemic and the implementation of travel bans in Mexico, to simulate the effect that reductions in travel to and from regions affected by IIDEs have upon the spread of IIDEs during international health emergencies. This study found that such travel restrictions resulted in a 40 percent decrease in travel and only delayed the

\begin{footnotesize}


\textsuperscript{247} No Rationale for Travel Restrictions, supra note 245. Although the WHO stated that there was no purpose for instituting travel restrictions in response to the 2009 H1N1 outbreak, they said so based on the rationale that the disease had already spread to numerous countries, not on the grounds that the disease had a low risk of transmission during air travel per se. \textit{Id.}


\end{footnotesize}
import of the first case of H1N1 from Mexico to other countries for less than three days.\textsuperscript{249} The study solidified its conclusions about the insignificant effects of the use of travel restrictions during IIDEs by further adding that “even given the unlikely assumption of a 90\% travel reduction, the resulting delay [in the import of the first case of H1N1 from Mexico to other countries] would be on the order of 2 weeks, confirming results from previous studies.”\textsuperscript{250} The WHO appeared to support this finding during the 2009 H1N1 pandemic by reporting that “[s]cientific research based on mathematical modeling indicates that restricting travel will be of limited or no benefit in stopping the spread of disease. Historical records of previous influenza pandemics, as well as experience with SARS, have validated this point.”\textsuperscript{251}

Another study, however, which sought to determine “the utility of travel bans to slow the spread of Ebola,” used data regarding the use of travel bans and flight suspensions by airlines in response to the 2014 Ebola outbreak to simulate the effect that an 80 percent reduction in the amount of airline passenger traffic would have upon the spread of the virus.\textsuperscript{252} The study found that:

\begin{quote}
[al]though the current travel restrictions postpone the spread of . . . [Ebola] to other countries by at most a few weeks, they can impose heavy logistical constraints on the management of the epidemic in the countries severely hit by the disease and ill-equipped to cope with its alarming spread . . . . Similar to what happened during the severe acute respiratory syndrome (SARS) outbreak in 2003, adverse effects on local economies of the same countries implementing the bans may also occur, as a reduced connectivity and the increased apprehension may induce a considerable reduction in the demand for service industries (business travel, tourism, and associated services).\textsuperscript{253}
\end{quote}

Scientific studies, however, have not collectively concluded that the negative to non-existent impact of travel restrictions upon the spread of IIDEs is universal or consistent. A study using mathematical modeling to research the effect travel reductions
have in infected countries upon the spread of IIDEs found that where “containment efforts are underway” and the number of infected persons has not yet reached the thousands, travel restrictions can be beneficial in that they would decrease the probability that an infected person would travel to another country and spur another outbreak.\(^{254}\)

As such, scientific studies and modeling have come to show that the effectiveness of travel restrictions is dependent not only upon the extent to which travel restrictions strain the movement of persons and goods around the world, but also upon various other factors that define the context within which the epidemic arose. Thus, the use of the proposed framework of sunsetting phase-out provisions in the IHR would allow Member States to tailor their responses to each IIDE in a manner that more specifically caters to the specifics of the particular epidemic, and the circumstances surrounding it.

5. Implementation

To provide a clear illustration of how this framework would function in practice, consider the following. In order to determine the rates at which travel restriction provisions in the IHR should phase in or phase out, infectious diseases that have swept the international community in the past should be grouped together according to relevant characteristics such as method of transmission, rate of spread, and incubation period. Once the appropriate groupings have been established, the provision of the IHR mandating the use of travel restrictions would be modified to phase in or phase out based on the presence of particular characteristics that would place the relevant IIDE within a specific class of disease whose spread would only be decreased by the implementation of a certain degree of travel restriction. Therefore, in the event that a disease outbreak, such as the H1N1 pandemic, were to occur, the subsection of the travel restriction provision Member States should refer to would be the section that applies to the category of diseases that are spread through close contact with an infected person who does not need to be symptomatic to be contagious.\(^{255}\)

\(^{254}\) Hollingsworth et. al., supra note 10, at 498.

\(^{255}\) See Interim Guidance on Infection Control, Measures for 2009 H1N1 Influenza in Healthcare Settings, Including Protection of Healthcare Personnel, supra note 240; No Rationale for Travel Restrictions, supra note 245.
sumably, considering the high probability of a disease such as H1N1 to spread during air travel, that category of diseases would permit the highest permissible use of travel restriction. Whereas in the case of a disease such as Ebola, that has a much lower probability of being spread during air travel, the permitted degree of travel restriction would begin to phase out (or decrease) since the utility of that health measure no longer exists in that context.

The sunsetting aspect of these phase-out provisions will take effect when the existing framework is no longer current or applicable, considering the strategic and scientific advancements in the response to and treatment of IIDEs. Therefore, after a specified number of years, the framework will expire, be modified, and reinstated in accordance with such advancements.

CONCLUSION

The IHR takes many steps in the right direction in coordinating an effective international response to IIDEs that upholds fundamental notions of human rights, respects states’ sovereignty, and limits the disruption of the international economy. However, the IHR’s lack of enforcement and vagueness has proven problematic and has effectively limited the usefulness of the IHR during international health emergencies. The proposed framework of sunsetting phase-out provisions would provide a resource that Member States can extrapolate from in formulating their immediate responses to international public health threats in a manner that is consistent with the most

256. See WHO: Air Travel is Low-risk for Ebola Transmission, supra note 246.

257. This is an oversimplified explanation of how the framework of phase-out provisions would function, however, since other factors such as the preparedness of the region that is affected, the political and socioeconomic climate of the infected region, and the extent to which the IIDE has already spread, should also be taken into account in determining when and at what rate a provision should phase in or out. See Hollingsworth, supra note 10, at 497–98. Tiffany Bogich et al., Preventing Pandemics Via International Development: A Systems Approach, PLoS MED., Dec. 2012, at 1; Mark J. Siedner et al., Strengthening the Detection of and Early Response to Public Health Emergencies: Lessons from the West African Ebola Epidemic, PLoS MED., Mar. 24, 2015, at 2; Ana LP Mateus et al., Effectiveness of Travel Restrictions in the Rapid Containment of the Human Influenza: A Systematic Review, 92 BULL. WORLD HEALTH ORG. 868 (2014), http://www.who.int/bulletin/volumes/92/12/14-135590.pdf.
novel and effective methods of combatting the spread of IIDEs. This transformation of the IHR into a resource for the Member States will further increase their confidence in the Regulation and sway Member States away from instinctually shutting down their borders in favor of implementing health measures that are most effective in combatting the spread of IIDEs, and in limiting interferences with the international economy and human rights.

Sarah R. Goldfarb*