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Global Legal Triage in Response to the 2009 H1N1 Outbreak

James G. Hodge, Jr.*

I. INTRODUCTION¹

Considered by many public health authorities to be a mere “glancing” blow to global health,² the 2009 H1N1 (swine) flu pandemic did not present the type of cataclysmic threat some initially feared.³ Still, the spread of H1N1 flu globally

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1. This article is based in part on James G. Hodge, Jr. & Evan D. Anderson, *Principles and Practice of Legal Triage During Public Health Emergencies*, 64 N.Y.U. ANN. SURV. AM. L. 249 (2008) and James G. Hodge, Jr., *Legal Triage During Public Health Emergencies and Disasters*, 58 ADMIN. L. REV. 627 (2006). While these articles provide an existing foundation for defining legal triage on a domestic level, this manuscript extends these concepts to the global arena, specifically in response to the H1N1 influenza pandemic. The author acknowledges the editing and research assistance of Ron Ordell, J.D., Brian Harel, J.D., PhD, and Aubrey Joy Corcoran, J.D., M.P.H, as well as Christopher Stringham and Sarah O'Keefe, J.D. Candidates, Sandra Day O'Connor College of Law, Arizona State University.

2. Although mortality related to H1N1 largely shifted to a different group than routine, annual flu outbreaks, deaths related to H1N1 may actually be less severe than those during a normal flu season. See Editor's Summary, Anne M. Presanis et al., *The Severity of Pandemic H1N1 Influenza in the United States, from April to July 2009: A Bayesian Analysis*, PLOS MED., Dec. 2009, at 1,12 (estimating 6,000 deaths from H1N1 in the U.S. through November 2009, which is lower than similar deaths caused by seasonal influenza in an average year, while explaining that H1N1 victims are younger, however, than the estimated 36,000 persons who die per year in the U.S. from seasonal influenza).

3. See Christophe Fraser et al., *Pandemic Potential of a Strain of Influenza A (H1N1): Early Findings*, 324 SCIENCE 1557, 1557 (2009) (reporting that H1N1 flu severity is less than the Influenza Pandemic of 1918

represents the first major communicable disease threat of the millennium. It resulted in the first ever declaration of a public health emergency of international concern (PHEIC) by the World Health Organization (WHO),⁴ the initial widespread use of the newly-revised international health regulations (IHRs),⁵ and an international response effort that featured multiple declarations of national or regional emergencies.⁶ The pandemic also offered an opportunity to assess how the global public health system responds to transnational communicable disease threats in the modern era.

In many ways, the global health system has triumphed. Within weeks of its detection in Mexico, H1N1 influenza became a global concern.⁷ International surveillance coordinated by WHO, the U.S. Centers for Disease Control and Prevention (CDC), and others began almost immediately.⁸

and comparable to flu in 1957); Donald G. McNeil, Jr., *U.S. Reaction to Swine Flu: Apt and Lucky*, N.Y. TIMES, Jan. 2, 2010, at A1 (describing the virus as “only rarely lethal”).

4. Press Release, Margaret Chan, Dir.-Gen., World Health Org., Swine Influenza, (Apr. 25, 2009) available at http://www.who.int/mediacentre/news/statements/2009/h1n1_20090425/en/index.html (announcing the declaration of a PHEIC); see also David P. Fidler, *The Swine Flu Outbreak and International Law*, 13 ASIL INSIGHTS Apr. 27, 2009, <http://www.asil.org/insights090427.cfm> (last visited Apr. 8, 2010).

5. See Lawrence O. Gostin, *Influenza A(H1N1) and Pandemic Preparedness Under the Rule of International Law*, 301 J. AM. MED. ASS'N 2376, 2376 (2009); Rebecca Katz, *Use of Revised International Health Regulations During Influenza A (H1N1) Epidemic, 2009*, 15 EMERGING INFECTIOUS DISEASES 1165, 1166–68 (2009); Fidler, *supra* note 4.

6. See, e.g., Press Release, Charles E. Johnson, Acting Sec'y, U.S. Dep't of Health & Human Servs., Determination that a Public Health Emergency Exists (Apr. 26, 2009), available at <http://www.flu.gov/professional/federal/h1n1emergency042609.html>; see generally Pub. Health L. & Pol'y Program, Ariz. St. Univ., Global Legal Triage and the 2009 H1N1 Outbreak, <http://www.law.asu.edu/?id=2036> (last visited Jan. 30, 2010) (providing a list of state, federal, and international declarations of emergency or public health emergency).

7. *Focus: Swine Flu, Timeline: H1N1 Outbreak*, ALJAZEERA.NET, June 15, 2009, <http://english.aljazeera.net/news/americas/2009/05/200952105136198276.html> (last visited Apr. 8, 2010).

8. See Katz, *supra* note 5, at 1166–67 (describing contact between Mexico, Canada, the United States and WHO during the early detection of the illness); Press Release, World Health Org., Influenza-like Illness in the United States and Mexico (Apr. 24, 2009), available at http://www.who.int/csr/don/2009_04_24/en/index.html (stating that since Mexican authorities began detecting the illness on March 18, “the World

Isolates of the H1N1 virus were shared internationally.⁹ Sources of transmission were rapidly detected. Those at greatest risks of morbidity or mortality from H1N1 were identified.¹⁰ National pandemic flu plans and interjurisdictional agreements developed by WHO member countries over the prior decade were operationalized.¹¹ Public and private sector response efforts were well-coordinated in many countries. Treatment protocols were developed and antiviral resources like oseltamivir¹² were allocated to ensure medical care for those at risk of serious complications.¹³ People with natural immunities, stemming most likely from their exposure to the Spanish flu of 1918 or other flues, were identified.¹⁴ A safe and effective vaccine was quickly prepared, tested for human use, and available on the market within months.¹⁵ And perhaps most importantly, public health education led to temporary changes in individual behaviors to stymie the flu's spread and impact.¹⁶ Countless infections were

Health Organization has been in constant contact" with Mexican health authorities).

9. Margaret Chan, Dir.-Gen., World Health Org., Opening Remarks at the Intergovernmental Meeting on Pandemic Influenza Preparedness: Sharing of Influenza Viruses, Access to Vaccines and Other Benefits (May 15, 2009) (transcript available at http://www.who.int/dg/speeches/2009/pandemic_influenza_preparedness_2009_0515/en/index.html).

10. See Press Release, World Health Org., Clinical Features of Severe Cases of Pandemic Influenza: Pandemic (H1N1) 2009 Briefing Note 13 (Oct. 16, 2009) available at http://www.who.int/csr/disease/swineflu/notes/h1n1_clinical_features_20091016/en/index.html (describing the groups most at risk from H1N1 as "pregnant women, . . . children younger than 2 years of age, and people with chronic lung disease, including asthma").

11. Katz, *supra* note 5, at 1166.

12. U.S. National Library of Medicine, Medline Plus, <http://www.nlm.nih.gov/medlineplus/druginfo/meds/a699040.html> (last visited May 5, 2010).

13. See *id.* at 1168. But see David Boutolleau et al., Letter to the Editor, *Detection of Pandemic (H1N1) 2009 Virus in Patients Treated with Oseltamivir*, 16 EMERGING INFECTIOUS DISEASES 351, 351 (2010) (raising questions about "potential virus transmission during antiviral treatment and the possible resistance of pandemic (H1N1) to oseltamivir").

14. See Donald G. McNeil, Jr., *U.S. Says Older People Appear Safer from Virus*, N.Y. TIMES, May 21, 2009, at A30.

15. See Denise Grady, *Review Shows Safety of H1N1 Vaccine, Officials Say*, N.Y. TIMES, Dec. 5, 2009, at A13.

16. See Rick Hampson, *H1N1 Flu Spreading Changes in Behavior:*

avoided and thousands of lives were saved through these and other efforts.

In other ways, however, the global public health system has failed despite widespread international planning, preparedness, and response efforts. While international surveillance commenced immediately, accurate assessments of the prevalence of H1N1 remain sketchy.¹⁷ Global counts of persons infected with this strain of flu are mere estimates. At-risk individuals in many countries, including pregnant women and children in developed countries like the United States, were not able to access preventive measures, including vaccines, when they needed them most.¹⁸ Persons at risk in developing countries had essentially no chance to be vaccinated.¹⁹²⁰ Antiquated techniques slowed vaccine manufacturing, leading to an immediate global allocation crisis.²¹ Even when vaccines became available, their distribution was marred by international battles over who would receive supplies first, infighting over its allocation within countries, and gross failures to distribute to those most at risk.²² In essence, emergency response efforts could not stop the natural spread of flu, nor could public health interventions protect those most at risk in many countries. Had H1N1 resembled a more potent strain capable of killing victims with

Prevention-minded Adopt New Policies, USA TODAY, Oct. 30, 2009, at A1.

17. See Press Release, World Health Org., Pandemic (H1N1) 2009–Update 83 (Jan. 15, 2010), available at http://www.who.int/csr/don/2010_01_15/en/index.html.

18. See Andrew Pollack & Donald G. McNeil, Jr., *Road to Flu Vaccine Shortfall, Paved with Undue Optimism*, N.Y. TIMES, Oct. 26, 2009, at A1 (describing the shortfalls in the United States government’s original estimates for vaccine supply availability).

19. See, e.g., Gboyega Akinsanmi & Steve Dada, *Nigeria: Swine Flu–Vaccine Not Available*, ALLAFRICA, Jan. 20, 2010, <http://allafrica.com/stories/201001200317.html> (noting that as of January 20, 2010, government authorities in Lagos, Nigeria, had “no vaccine to treat the flu virus in stock” despite the recent death of a thirty-eight-year-old woman and the positive tests of eight other people in the area).

20. See Martin Enserink, *Developing Countries to Get Some H1N1 Vaccine–But When?*, 326 SCIENCE 782, 782 (2009).

21. See Pollack & McNeil, Jr., *supra* note 18, at A13.

22. See Enserink, *supra* note 20; Tan Ee Lyn, *Asia Worries over H1N1 Flu Vaccine Production*, REUTERS, May 18, 2009, <http://www.reuters.com/article/idUST208264> (last visited Apr. 8, 2010) (reporting that Indonesia and India were worried about their access to vaccine produced predominantly in Europe and the United States).

the ease of H5N1 (avian) flu, the global health impact would have been considerably worse.²³

If H1N1 was a “test” run of the modern global public health system,²⁴ then the system has fallen short. Significant response efforts globally could not stop the inevitable march of a highly communicable and potentially deadly virus. Millions contracted H1N1 within weeks of its detection,²⁵ hundreds were reported dead,²⁶ and others have suffered economically,²⁷ emotionally, or mentally.²⁸ Lingered questions remain as to the reasons for these failures to control infectious diseases globally during public health emergencies. Many factors are at play— inadequate or non-existent public health surveillance systems in many countries, pre-existing lack of access to medical services, insufficient medical personnel, lack of medical treatment and supplies, and ill-designed vaccine distribution systems. Costs and public apathy in some countries are also to blame. Greece, for example, recently cancelled orders for an additional 12 million doses of H1N1 vaccine in the face of national budget deficits,²⁹ even though only approximately 3%

23. *Accord* Presanis, *supra* note 2, at 9 (stating that study estimates placed the H1N1 epidemic “within the lowest category of severity considered in pandemic planning conducted prior to the appearance of [the virus] in the United States”).

24. See Thom Patterson, *Canada’s Olympic-Sized Plan to Fight H1N1*, CNN, Jan. 18, 2010, <http://www.cnn.com/2010/HEALTH/01/13/olympics.flu.preps/> (last visited Apr. 8, 2010) (warning that the potential for H1N1 to re-emerge in the Spring of 2010 remains a possibility especially during international gatherings like the Winter Olympics in Vancouver).

25. Mick Stobbe, *CDC Reports 20 Percent of Americans Got Swine Flu Vaccine*, WASH. POST, Jan. 16, 2010, at A5. (estimating 55 million became ill and 246,000 were hospitalized); Centers for Disease Control and Prevention, *2009 H1N1 Early Outbreak and Disease Characteristics*, (Oct. 27, 2009), <http://www.cdc.gov/h1n1flu/surveillanceqa.htm> (last visited Apr. 8, 2010) (estimating that over 1 million became ill between April and June 2009).

26. Stobbe, *supra* note 25.

27. See P.J. Huffstutter, *Swine Flu? Please Don’t Call It That: Hog Farmers, Already Hurting from the Recession, Say H1N1 Paranoia Has Devastated Business*, L.A. TIMES, Dec. 5, 2009, at A22 (reporting that the pork industry has lost \$1.5 billion since the virus was reported in April).

28. See James G. Hodge, Jr. et al., *A Hidden Epidemic: The Legal Environment Underlying Mental and Behavioral Health Preparedness in Public Health Emergencies*, __ ST. LOUIS UNIV. L. REV __ (2010) (forthcoming) (on file with author).

29. Harry Papachristou, *Greece Halts Purchases of H1N1 Flu Vaccines*, REUTERS, Jan. 19, 2010,

of its population is vaccinated.³⁰ Despite H1N1's potential to kill, many people in developed countries like the United States chose to forego vaccination even when vaccines became plentiful.³¹ Elsewhere, countries, where population threats like malaria, HIV/AIDS, tuberculosis, and malnourishment are mainstays, did not prioritize H1N1 prevention.³²

At least partially responsible for global inadequacies in H1N1 responses are divergent legal responses authorizing a range of antiquated, inconsistent, and uncoordinated public health prevention and control measures. As explained in **Part II**, while WHO and multiple member countries declared various emergencies in response to H1N1, these declarations authorized an array of measures that were not always well-targeted or well-implemented in controlling pandemic flu. Worse still, some WHO member countries' emergency laws authorized government to act in ways that diverge from principles of public health practice, science, ethics, and human rights. WHO's implementation of the IHRs, intended to provide internationally-consistent standards for public health emergency responses, did not necessarily guide the independent exercise of national or regional emergency powers among sovereign governments. Significant global health objectives became mired in disputes over legal responsibility, national sovereignty, and trade policies. **Part III** explains that the resulting global legal quagmire is attributable in part to failures in what I refer to as "global legal triage." Defined essentially as those efforts among international and national leaders, legal counsel, and others to identify, prioritize, and

<http://www.reuters.com/article/idUSLDE60I0RI20100119> (last visited Apr. 8, 2010).

30. S. Tsiodras et al., *The Vaccination Campaign Against 2009 Pandemic Influenza A(H1N1) and Its Continued Importance in View of the Uncertainty Surrounding the Risk Associated with the Pandemic*, EUROSURVEILLANCE, Jan. 21, 2010, at 10, 10.

31. See Perri Klass, *Fearing a Flu Vaccine, and Wanting More of It*, N.Y. TIMES, Nov. 10, 2009, at D5 (describing public fear of the H1N1 vaccine).

32. See Luis Gomes Sambo, Reg'l Dir. for Afr., World Health Org., Address at the Opening of the African Conference on Pandemic Influenza A (H1N1) 2009 (Aug. 11, 2009) (transcript available at <http://www.afro.who.int/en/rdo/speeches/1858-speech-by-dr-luis-gomes-sambo-at-the-opening-of-the-african-conference-on-pandemic-influenza-ah1n1.html>) (noting the difficulty of shifting funds to H1N1 preparedness from competing public health priorities).

solve transnational public health legal issues to improve global health outcomes in real-time emergencies,³³ global legal triage is essential to protecting global health. National laws are core to emergency responses, but do not allow for the type of sustained, organized international responses that lead directly to improved global health outcomes. What is missing internationally is an enforceable global legal strategy that prioritizes key decisions designed to protect the health of populations beyond national borders. A brief conclusion follows.

II. INTERNATIONAL DECLARATIONS OF EMERGENCIES

Laws are indispensable to effective emergency response efforts.³⁴ On the national level, country-specific laws create the public health infrastructure through which governments detect, declare, and address emergencies. Laws determine not only what constitutes a public health emergency, but also how to respond through public and private actors.³⁵ Assessing the legal environment in declared states of public health emergency, however, is complicated. Significant legal challenges emerge nationally from the convergence of response efforts of varied entities (e.g., public health agencies, emergency management agencies, hospitals, non-profit institutions) and actors (e.g., public health practitioners, health care workers, law enforcers) at multiple levels of government (e.g., national, regional, and local). Existing laws must be interpreted and applied in real time during emergencies.³⁶ New laws and policies are triggered by or flow from the emergency

33. This definition is based in part on the existing definition of “legal triage” applicable in domestic legal responses and espoused most recently as: “those efforts by public health legal practitioners during declared emergencies to ‘prioritize legal issues and solutions in real time that facilitate legitimate public health responses.’” Hodge & Anderson, *supra* note 1, at 273 (citing Hodge, *supra* note 1, at 631). This definition uses the term “triage” consistent with its general meaning as “a process in which things are ranked in terms of importance or priority[.]” THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE 1840 (4th ed. 2000).

34. Anthony D. Moulton et al., *What Is Public Health Legal Preparedness?*, 31 J.L. MED. & ETHICS 672, 672, 674–75, 681 (2003).

35. See James G. Hodge, Jr., *Assessing the Legal Environment Concerning Mass Casualty Event Planning and Response*, in MASS MEDICAL CARE WITH SCARCE RESOURCES: A COMMUNITY PLANNING GUIDE 25, 27–29 (Sally J. Phillips & Ann Knebel eds. 2006), available at <http://www.ahrq.gov/research/mce/mceguide.pdf>.

36. See *id.* at 26.

declaration itself.³⁷ While advance knowledge of emergency jurisprudence's principles can help to answer many issues, unique legal problems stem from the specific circumstances of any emergency. These emerging legal dilemmas are not easily resolved within any country during a public health emergency.

Now consider how these challenges escalate when a major communicable disease threat goes global. Viral flu strains like H1N1 do not respect international boundaries. In a global economy with hundreds of thousands of persons and millions of goods traversing continents daily, the spread of easily-communicated diseases like H1N1 are predictable and inevitable. It took only a few weeks for H1N1 to transition from a localized threat to a global pandemic.³⁸ Yet, emergency legal responses among countries are less predictable. International standards issued by WHO, the World Trade Organization (WTO), and others on how to respond to global health threats (1) allow significant deviations based on national interpretations of law, policy, and science, and (2) respect international variances in legal systems, politics, and cultures. As a result, one country's public health legal responses do not necessarily mimic another's, which leads to legal differences in response capabilities. Resulting failures to effectively respond to global health threats like H1N1 in some countries increase risks for populations in other nations (even if those other nations are working extensively to control emerging disease threats).³⁹

37. See Hodge, *supra* note 1, at 634–40 (describing various declarations that can be issued at the state and federal levels and how those declarations change their respective legal environments).

38. Margaret Chan, Dir.-Gen., World Health Org., World Now at the Start of 2009 Influenza Pandemic U.N. Doc. SG/SM/12309 (June 11, 2009) (transcript available at http://www.who.int/mediacentre/news/statements/2009/h1n1_pandemic_phase6_20090611/en/index.html).

39. See Tikki Pang & G. Emmanuel Guindon, *Globalization and Risks to Health*, 5 EMBO REP.(SPECIAL ISSUE) S11, S14–15 (2004) (describing the importance of revamping IHR to meet global challenges); Lawrence Gostin, *Fighting the Flu With One Hand Tied*, WASH. POST, May 1, 2009, at A21 (noting that viruses often originate in Asia or other poor regions where detection capabilities are not as advanced as those in wealthier nations); Ban Ki-moon, Sec'y-Gen., United Nations, Address to the Forum on Global Health: The Tie That Binds (June 15, 2009) (transcript available at <http://www.un.org/News/Press/docs//2009/sgsm12309.doc.htm>) (noting the necessity of a global coordinated response to H1N1).

Ill-advised legal responses to transnational risks may be hastily crafted in real-time in ways that are detrimental to global health, trade, and populations. For example, at the inception of the H1N1 pandemic in April 2009, authorities in China used their quarantine laws to sequester a group of seventy or so Mexican tourists visiting their country.⁴⁰ Some of these individuals and others were held for several days at a local hotel⁴¹ even though there was insufficient information to suggest they had H1N1 or had been exposed to individuals believed to be infected with the virus. Additional countries like Argentina, Peru, Ecuador, and Cuba issued legal mandates to temporarily cancel all outgoing flights to Mexico,⁴² even though WHO recommended against similar travel restrictions.⁴³ Cuban authorities reportedly also authorized military soldiers and other personnel to close highways, isolate neighborhoods, and go door-to-door to enforce mandatory quarantines and evacuations door-to-door as needed.⁴⁴ The Tunisian government prohibited its citizens from traveling to Mecca in October for the annual pilgrimage because of a lack of H1N1 vaccine.⁴⁵ Russian and other national authorities blatantly violated WTO policies by banning all pork imports from the United States and other countries for a limited time, despite the lack of a public health justification for the ban (because H1N1 cannot be spread through the consumption of pork products).⁴⁶ Despite the lack of any substantiated threat to the public's health, the Egyptian government ordered the slaughter of several hundred thousand pigs at the onset of the pandemic, at significant cost to local

40. Andrew Browne, *China Forces Dozens of Mexican Travelers into Quarantine*, WALL ST. J., May 4, 2009, at A14.

41. *Id.*

42. Marc Lacey & Andrew Jacobs, *Even as Fears of Flu Ebb, Mexicans Feel Stigma*, N.Y. TIMES, May 5, 2009, at A1 (reporting that Mexican diplomats were angered by the suspension of flights from Mexico by four Latin American nations—Argentina, Peru, Ecuador and Cuba—in response to the flu outbreak).

43. Browne, *supra* note 40.

44. James Anderson, *The Flu Pandemic: Cuban Civil Defense Teams Keep Flu at Bay*, HOUSTON CHRON., Oct. 4, 2009, at 23.

45. *Citizens Barred from Making Hajj*, L.A. TIMES, Oct. 7, 2009, at A28.

46. Jonathan Lynn, *Swine Flu Alert Prompts Pork Import Bans*, REUTERS, Apr. 27, 2009, <http://www.reuters.com/article/idUSN27548150> (last visited Apr. 8, 2010).

farmers who were not paid for their losses.⁴⁷

Although these examples are limited to specific jurisdictions, they exemplify a fundamental weakness of global legal efforts to respond to H1N1 flu. Specifically, there is no definitive, enforceable legal framework to control emergency, communicable disease threats globally. As discussed below, the most comprehensive, modern approach to controlling infectious diseases has been developed by the WHO in the 2005 revision of its International Health Regulations (IHRs). Though extensive, purposeful, and endorsed by WHO member countries,⁴⁸ the central flaw of the IHRs remains their enforceability.⁴⁹ The regulations constitute a guide more than a legal mandate during pandemics. National emergency and public health laws govern in default. As documented in **Table 1**, below, however, emergency laws and responses among sovereign countries vary extensively. In combination, implementation of international and national laws to address global health threats like H1N1 in real-time emergencies is at best reactionary.

A. WORLD HEALTH ORGANIZATION INTERNATIONAL HEALTH REGULATIONS

On April 25, 2009, at the inception of the H1N1 pandemic, WHO Director-General Dr. Margaret Chan sought the counsel of WHO's Emergency Committee and quickly declared a public health emergency of international concern (PHEIC) pursuant to the IHRs.⁵⁰ The Director-General's decision was preemptive and unprecedented. This was the first time that WHO declared a PHEIC under its new, revised standards.⁵¹

47. Gostin, *supra* note 5, at 2378; *Egypt Orders Slaughter of All Pigs over Swine Flu: No Cases Reported in the Country; Some Farmers Refusing to Cooperate*, MSNBC, Apr. 29, 2009, <http://www.msnbc.msn.com/id/30480507/> (last visited Apr. 8, 2010).

48. See WORLD HEALTH ORG., FREQUENTLY ASKED QUESTIONS ABOUT THE INTERNATIONAL HEALTH REGULATIONS (2005), *available at* <http://www.who.int/ihr/about/FAQ2009.pdf> (explaining that IHR are binding on all countries, including all WHO member states).

49. See Gostin, *supra* note 5, at 2377 (stating that failure to comply with norms was a reason behind the revision to the IHR, however the new regulations also provide little enforcement authority to the WHO).

50. Press Release, Chan, *supra* note 4.

51. Katz, *supra* note 5, at 1167.

Finalized by the World Health Assembly on May 23, 2005 following lessons learned during the 2003 Severe Acute Respiratory Syndrome (SARS) epidemic,⁵² a revamped version of the IHRs only became effective on June 15, 2007.⁵³ Shedding the antiquated premises of its original conception in the 1960s, the modern purpose of the IHRs are to “prevent, protect against, control, and provide a 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.”⁵⁴ In setting international standards for disease control and prevention, the new IHRs reject the disease-specific approach of prior iterations (which focused only on three diseases—cholera, plague, and yellow fever)⁵⁵ and adopt an “all hazards” approach.⁵⁶ The revised IHRs apply broadly to naturally occurring infectious diseases, chemical or radiological elements, bioterrorism, and other global threats to the public’s health.⁵⁷

The IHRs provide a host of public health powers to control these threats, including international public health surveillance, vaccinations, medical examinations, quarantine, isolation, and restrictions on human travelers and trade.⁵⁸ Coextensively, they incorporate human rights norms in counter-balance to the use of these and other public health powers. Human rights protections include the need to respect human dignity and freedoms, provide a right to health for quarantined or isolated individuals, protect against unwarranted discrimination, ensure transparency, and

52. See David P. Fidler & Lawrence O. Gostin, *The New International Health Regulations: An Historic Development for International Law and Public Health*, 34 J.L. MED. & ETHICS 85, 85 (2006).

53. Jessica L. Sturtevant et al., *The New International Health Regulations: Considerations for Global Public Health Surveillance*, 1 DISASTER MED. & PUB. HEALTH PREPAREDNESS 117, 117 (2007).

54. World Health Org., *International Health Regulations* (2005), at art. 1, WHA58.3, (May 23, 2005) [hereinafter IHR (2005)].

55. WORLD HEALTH ORG., *supra* note 48, at 1.

56. See IHR (2005), at art. 1 (defining “disease” as encompassing any illness or medical condition “that presents or could present a significant harm to humans”).

57. See *id.*

58. See, e.g., *id.* at arts. 5, 23, 31.

promote privacy of identifiable health data.⁵⁹ Before a public health measure may restrict civil or political human rights, the IHRs have been interpreted to require that the measure⁶⁰ must: “(1) respond to a pressing public or social need; (2) pursue a legitimate aim; (3) be proportionate to the legitimate aim; and (4) be no more restrictive than necessary to achieve the purpose sought by restricting the right.”⁶¹ Though meaningful, human rights protections under the IHRs fall short in two key ways. First, due process protections in the use of compulsory public health powers are not explicitly spelled out.⁶² Second, a human rights requirement to employ least restrictive alternatives to coercive public health powers applies only to the use of medical exams, not other compulsory powers like vaccination, isolation, or quarantine.⁶³

WHO member countries are required to notify WHO of events constituting a PHEIC within twenty-four hours of their receipt of evidence that identifies an extraordinary event which is determined to (1) “constitute a public health risk to other states through the international spread of disease”; and (2) “potentially require a coordinated international response[.]”⁶⁴ As unusual instances of respiratory, flu-like illnesses began to emerge in March 2009, Mexican health authorities properly notified the Pan-American Health Organization (PAHO), the regional arm of WHO covering the Americas.⁶⁵ PAHO transmitted these data to WHO in Geneva.⁶⁶ Once a PHEIC is declared, WHO’s Director-General can:

- Independently assess and verify disease prevalence in

59. *See id.* at arts. 3, 32, 42, 45.

60. *See* Fidler & Gostin, *supra* note 52, at 87.

61. *Id.* (citing U.N. Econ. & Soc. Council [ECOSOC], Sub-Comm’m on Prevention of Discrimination & Prot. of Minorities, *Siracusa Principles on the Limitation and Derogation of Provisions in the International Covenant on Civil and Political Rights*, ¶¶ 10–11, U.N. Doc. E/CN.4/1985/4 (Sep. 28, 1984)).

62. *See* IHR (2005), at art. 23 (stating that no health measure under the IHR shall be carried out except in accordance with the law and international obligations of the State Party).

63. *See id.* at art. 23.

64. *See id.* at arts. 1, 6.

65. Katz, *supra* note 5, at 1166.

66. *See id.* at 1167.

countries with assistance from non-governmental organizations;

- Share data with other countries to help with international response efforts; and
- Issue temporary (non-binding) recommendations to countries on the most appropriate ways to respond, including health measures to be taken by affected countries and countries not directly affected.⁶⁷

Countries may follow WHO's guidance in their discretion. The IHRs stipulate only that countries must not (1) mandate invasive procedures as a condition of entry for any traveler; (2) require health documentation for travelers other than those authorized in the IHRs or by WHO;⁶⁸ (3) impose health measures that are more restrictive than the IHRs without adequate scientific or WHO guidance; or (4) unnecessarily restrict international traffic or trade.⁶⁹

The primary flaw of the IHRs are not WHO's failure to set forth reasonably sound provisions for international disease control. Throughout the H1N1 pandemic, WHO worked with real-time surveillance information to generate guidance for global emergency response efforts based on existing public health science and practice. The problem lies in their enforcement. The IHRs provide guidance, not mandates.⁷⁰ Compliance with the regulations is essentially voluntary,⁷¹ although member states have strong incentives to adhere to retain their WHO status and avoid public censure. Yet there

67. See IHR (2005), at arts. 10, 12, 15–17.

68. See *id.* at art 23. Concerning international travelers, countries may require for public health purposes, upon departure or arrival, information on the traveler's destination or itinerary; a non-invasive medical examination; and inspection of bags, cargo, containers, mail, and human remains. *Id.* Pursuant to Article 31, "invasive medical examinations, vaccination or other prophylaxis shall not be required as a condition of entry" unless they are (1) "necessary to determine whether a public health risk exists;" (2) a condition of entry for a traveler seeking temporary or permanent residence; (3) consistent with country-specific health measures that comply with Article 43; or (4) implemented consistent with Article 23. *Id.* at arts. 31, 43.

69. See *id.* at art. 43.

70. See Gostin, *supra* note 5, at 2377.

71. See Sturtevant et al., *supra* note 53, at 120 ("The WHO has no formal means by which to enforce the IHR."); Gostin, *supra* note 39 ("[T]he frightening truth is that the WHO has no real power").

are no direct funds, even for the poorest nations, accompanying national endorsements of the IHRs.⁷² Nor do the IHRs require member countries to build national surveillance capacity.⁷³ Furthermore, as a concession to national sovereignty, the IHRs specifically allow countries to legislate in pursuit of their own health policies under principles of national law, notwithstanding inconsistencies with the Regulations' standards.⁷⁴ As discussed below, this is exactly what countries have done.

B. COUNTRY-SPECIFIC INTERNATIONAL DECLARATIONS

Within any country there is a slate of emergency laws and policies that may be triggered through declarations of states of emergency, disaster, public health emergency, or other terms.⁷⁵ In the United States, multiple federal laws address emergencies, including those arising from public health threats.⁷⁶ Federal laws authorize declarations of (1) a general emergency, (2) a disaster, and (3) a public health emergency. Declarations of emergency⁷⁷ or disaster⁷⁸ authorized by the

72. See IHR (2005), at arts. 5, 13 (suggesting that countries develop, strengthen, and maintain core public health capacities to detect, assess, notify, and report events, and to respond promptly and effectively to public health risks and emergencies of international concern); see also Gostin, *supra* note 5, at 2377 (“[P]recious little has been devoted to build [surveillance and response] capacity in poor countries.”).

73. Fidler & Gostin, *supra* note 52, at 88 (“The new IHR also contain no obligations on states parties to provide financial and technical resources to support capacity-building.”).

74. See Fidler, *supra* note 4 (“The IHR 2005 do not preclude States Parties from implementing measures that achieve a greater level of health protection than WHO temporary recommendations . . .”).

75. While there are important distinctions between the terms disaster, emergency, public health emergency, or like terms as used in existing statutory or regulatory frameworks, this article does not attempt to delineate these distinctions for the purposes of emergency responses to public health threats like H1N1. For more information concerning U.S. distinctions among these terms, see Hodge & Anderson, *supra* note 1, at 255–69.

76. See *id.* at 255–63 (documenting the extensive range of federal laws implicated in national emergencies).

77. In general, the President can declare a state of emergency under the Stafford Act only after a state governor requests federal assistance “to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe. . . .” 42 U.S.C. §§ 5122(1), 5191 (2006). What constitutes an emergency is broad and may apply to a wide range of incidents. For example, President Clinton declared a state of emergency in 2000 to

Robert T. Stafford Disaster Relief and Emergency Assistance Act,⁷⁹ must be issued by the President.⁸⁰ Pursuant to the Public Health Service Act,⁸¹ the declaration of a public health emergency may be issued by the Secretary of the Department of Health and Human Services (DHHS).⁸² In response to the national threat of H1N1, DHHS declared a state of public health emergency on April 26, 2009.⁸³ Only later, on October 23, 2009, did President Obama declare a state of national emergency.⁸⁴ Together, these declarations changed the legal

contain West Nile Virus in New York and New Jersey. SARAH A. LISTER, CONGRESSIONAL RESEARCH SERV., THE PUBLIC HEALTH AND MEDICAL RESPONSE TO DISASTERS: FEDERAL AUTHORITY AND FUNDING 4 (2007). Once declared, the Stafford Act provides the President with expansive power to authorize temporary housing, to provide financial assistance for individuals, and to issue new rules and regulations. See 42 U.S.C. § 5192 (2006).

78. The President can declare a state of disaster pursuant to the Stafford Act upon the request of a governor during a more extreme crisis involving:

any natural catastrophe (including any hurricane, tornado, storm, high water, winddriven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance . . . to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.

42 U.S.C. § 5122(2), 5170 (2006). During a declared disaster, federal agencies may support local and state response efforts, but can also directly coordinate response efforts of federal agencies, private entities, and state and local governments. *Id.* at § 5170a.

79. *Id.* at §§ 5121–5205.

80. *Id.* at §§ 5170, 5191.

81. 42 U.S.C. §§ 201–300 (2006).

82. *Id.* at § 247d(a). “Public health emergency” is not specifically defined in the Act. Instead, DHHS’s Secretary has wide discretion to determine when “a disease or disorder presents a public health emergency; or . . . a public health emergency, including significant outbreaks of infectious diseases or bioterrorist attacks, otherwise exists . . .” *Id.* Upon declaration, the Secretary can make or enter grants or contracts, provide awards for expenses, and conduct and support investigations into the cause, treatment, or prevention of a disease or disorder. *Id.*; see generally Jennifer Ray, *Federal Declaration of a Public Health Emergency*, 7 BIOSECURITY & BIOTERRORISM 251 (2009) (describing the procedure for and legal events that accompany declaration of a public health emergency).

83. Press Release, Johnson, *supra* note 6.

84. Proclamation No. 8443, 74 Fed. Reg. 55,439 (Oct. 23, 2009).

landscape for H1N1 response efforts nationally,⁸⁵ authorizing various federal powers to acquire and distribute resources and requiring federal agencies like DHHS and the Department of Homeland Security (DHS)⁸⁶ to coordinate national response efforts.

Other countries' emergency declarations in response to H1N1 empower their emergency management, public health, and law enforcement authorities to respond in different ways. The table below provides a brief synopsis of select countries' emergency declarations and resulting legal powers.

Table. Select Examples of National Emergency Declarations in Response to H1N1

Date	Country	Declaration	Select Authorization of Powers
4/25/09	Mexico	Emergency Decree	Government may regulate transportation; suspend public events; enter any home or building for inspection; order quarantines; and assign authorities and health professionals to conduct certain tasks. Thomas Black, <i>Mexico's Calderon Declares Emergency amid Swine Flu Outbreak</i> , BLOOMBERG.COM, Apr. 25, 2009,

85. See James G. Hodge, Jr. & Brooke Courtney, *Assessing the Legal Standard of Care in Public Health Emergencies*, 303 J. AM. MED. ASS'N 361, 361 (2010) (stating that after declarations of a national emergency and public health emergency in response to H1N1, DHHS was authorized "to waive or conditionally set aside or modify certain federal program requirements and disable federal law requiring hospitals to screen patients seeking emergency services on site").

86. DHS is responsible for organizing federal response capabilities through the formulation of the National Response Plan (NRP) to manage domestic incidents across all levels of government through prevention, preparedness, response, and recovery activities. Press Release, Office of the Press Sec'y, The White House, Homeland Security Presidential Directive/HSPD-5 (Feb. 28, 2003), available at <http://www.fas.org/irp/offdocs/nspd/hspd-5.html>. The NRP was recently superseded by the National Response Framework ("NRF") in March 2008. See U.S. DEP'T OF HOMELAND SEC., NATIONAL RESPONSE FRAMEWORK 2-3, 79 (2008), available at <http://www.fema.gov/pdf/emergency/nrf/nrf-core.pdf>.

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			http://bloomberg.com/apps/news?id=20670001&sid=aEsNownABJ6Q&pid=20601087 (last visited Apr. 8, 2010).
4/26/09 Renewed 12/28/09 10/01/09 7/24/09 10/23/09	United States	Public Health Emergency National Emergency Declaration	DHHS may take such action as appropriate including: making grants; providing awards for expenses; entering into contracts; and conducting and supporting investigations into the cause, treatment, or prevention of a disease. http://www.hhs.gov/secretary/phe_swh1n1.html (last visited Apr. 8, 2010). DHHS may temporarily waive or modify certain requirements of Medicare or Medicaid reimbursement policies, as well as requirements under the State Children's Insurance Program, the Emergency Medical Treatment and Labor Act (EMTALA), and the HIPAA Privacy Rule. Proclamation No. 8443, 74 Fed. Reg. 55,439 (Oct. 23, 2009).
4/27/09	Colombia	State of Emergency	Government may budget and distribute special resources to contain and mitigate the impact of H1N1. Adriaan Alsema, <i>Columbia Declares State of Emergency over Swine Flu Threat</i> , COLOMBIA REPORTS, Apr. 27, 2009, available at http://colombiareports.com/colombia-news/news/3775-colombia-declares-state-of-emergency-over-swine-flu-threat.html .
4/28/09	Costa Rica	National Health Emergency	Government may reinforce prevention, vigilance, and medical attention; health officials may issue restrictive

			measures to prevent the illness from spreading. <i>Government Declares a Health Emergency in Costa Rica</i> , INSIDE COSTA RICA, Apr. 29, 2009, http://insidecostarica.com/dailynews/2009/april/29/nac01.htm (last visited Apr. 8, 2010).
4/29/09	Ecuador	State of Emergency	Government shall coordinate efforts and to take necessary measures; bar entry by foreigners who have been to Mexico and suspend charter flights to Mexico. <i>Ecuador Declares State of Emergency Due to Swine Flu Alert</i> , CHINA VIEW, Apr. 29, 2009, http://news.xinhuanet.com/english/2009-04/30/content_11286242.htm (last visited Apr. 8, 2010).
4/30/09 Renewed 8/27/09	Nicaragua	State of Emergency	Government activates an inter-agency committee to develop and implement emergency plans for rapid and appropriate care. <i>Enact National Health Emergency Nicaragua: Interinstitutional Commission is reactive with human influenza</i> , NICARAGUA TODAY, Aug. 27, 2009, deaths http://www.nicaraguahoy.info/dir_cgi/topics.cgi?op=view_topic;cat=NoticiasGenerales;id=57516 (last visited May 4, 2010).
8/17/09	Malaysia	National Health Emergency	Government may order any person to treatment, immunization, isolation or observation, as well as order the destruction of structures that are incapable of being thoroughly disinfected. <i>A(H1N1): 2 More Die, Health Curfew if Mortality Rate Reaches 0.4pc</i> , STAR ONLINE, Aug. 17, 2009,

			http://thestar.com.my/news/story.asp?file=/2009/8/17/nation/20090817103540&sec=nation (last visited Apr. 8, 2010).
11/02/09	Afghanistan	State of Health Emergency	Government required all educational institutions closed for several weeks and advised against public gatherings. <i>Afghanistan declares H1N1 Emergency, Shuts Schools</i> , REUTERS, Nov. 2, 2009, available at http://www.reuters.com/article/idUSTRE5A115V20091102 .

Of those countries that formally declared states of emergency, most relied on general emergency powers tailored to address specific public health threats. Other countries, including Afghanistan, Costa Rica, Malaysia, and the United States, declared specific states of health emergency. The timing and scope of these general and “health-related” emergency declarations are noteworthy. Not surprisingly, Mexico was the first country to issue an emergency decree on April 25, 2009.⁸⁷ With multiple, identified deaths from H1N1 influenza already documented, Mexico’s President Felipe Calderon pledged to take “all the measures necessary to respond with efficiency and opportunity to this respiratory epidemic.”⁸⁸ Governmental offices, schools, business, theaters, and museums were closed for over two weeks.⁸⁹ The President’s decree also bestowed additional authority to control transportation, enter private property, and order quarantines.⁹⁰

Following the U.S. declaration of public health emergency

87. *Focus: Swine Flu, Timeline: H1N1 Outbreak*, ALJAZEERA.NET, June 15, 2009, <http://english.aljazeera.net/news/americas/2009/05/200952105136198276.html> (last visited Apr. 8, 2010).

88. Thomas Black, *Mexico’s Calderon Declares Emergency amid Swine Flu Outbreak*, BLOOMBERG.COM, Apr. 25, 2009, <http://bloomberg.com/apps/news?id=20670001&sid=aEsNownABJ6Q&pid=20601087> (last visited Apr. 8, 2010).

89. *See id.*

90. *Id.*

on April 26, 2009,⁹¹ Colombia issued a state of emergency on April 27 despite not identifying a single case of H1N1 in the country.⁹² Colombian authorities in Bogota used their authority and infusion of new resources stemming from the declaration to prepare for anticipated cases.⁹³ After finding only two domestic cases of H1N1 infection, Costa Rica declared a national health emergency on April 28, 2009, authorizing the expenditure of five million dollars for public health efforts⁹⁴ and recommending that citizens cancel trips to Mexico.⁹⁵ Like Columbia, Ecuador issued a preemptive state of emergency on April 29 despite the lack of confirmed cases.⁹⁶ Unlike Columbia, Ecuador immediately instituted a policy prohibiting flights to and from Mexico and barring foreigners who had recently visited Mexico from entering the country.⁹⁷ Nicaragua President Daniel Ortega issued a largely preemptive decree of health emergency on April 29, 2009, noting “[t]he threat is for everyone, no country is exempt[.]”⁹⁸ A month later, on May 29, Venezuela issued its declaration of emergency after a single case was confirmed.⁹⁹

While these countries largely took a preventive approach to H1N1 influenza in quickly declaring states of emergency prior to or soon after detecting initial cases of H1N1, others largely waited to assess the spread and impact of H1N1. Chile did not

91. See Press Release, Johnson, *supra* note 6.

92. Adriaan Alsema, *Columbia Declares State of Emergency over Swine Flu Threat*, COLOMBIA REPORTS, Apr. 27, 2009, available at <http://colombiareports.com/colombia-news/news/3775-colombia-declares-state-of-emergency-over-swine-flu-threat.html>.

93. See *id.*

94. Vanessa I. Garnica, *Costa Rica Allots \$5 Million to Fight Flu*, THE TICO TIMES, Apr. 30, 2009, available at LexisNexis Academic (last visited May 3, 2010).

95. Francisco Jara, *With Two Flu Cases, Cost[a] Rica Calls National Health Emergency*, AGENCE FRANCE-PRESSE, Apr. 29, 2009, available at LexisNexis Academic (last visited Apr. 8, 2010).

96. *Ecuador Declares State of Emergency Due to Swine Flu Alert*, CHINA VIEW, Apr. 29, 2009, http://news.xinhuanet.com/english/2009-04/30/content_11286242.htm (last visited Apr. 8, 2010).

97. *Id.*

98. *Nicaragua in State of Health Emergency for 2 Months over Flu*, DEUTSCHE PRESSE-AGENTUR, Apr. 30, 2009, available at LexisNexis Academic (last visited Apr. 8, 2010).

99. *Venezuela: Venezuela Declares State of Emergency to Avoid A/H1N1 Spread*, THAI PRESS REPORTS, June 1, 2009 (on file with author).

issue its health emergency decree until June 14, 2009 after identifying two H1N1 deaths and over 2,300 confirmed cases.¹⁰⁰ The Yemeni Ministry of Health declared a state of emergency on June 16 in response to its initial cases of H1N1 infections.¹⁰¹ Health authorities in Yemen targeted air travel as part of its prevention strategy, vowing, “[n]o international air passenger should be exempt from screening.”¹⁰² With over 4,200 confirmed cases, Malaysian authorities declared a state of national health emergency on August 17, 2009. Its declaration generated a series of systematic responses designed to mitigate the further spread of H1N1 influenza.¹⁰³ These included various travel warnings, requirements for citizens with flu-like symptoms to wear face masks in public, and self-quarantine as needed. Authorities suggested that additional measures, including a “health curfew” as proposed in Mexico may be implemented.¹⁰⁴ Torn by war, violence, and poverty in the modern era, Afghan authorities declared a state of health emergency on November 2, 2009 after registering more than 300 positive cases of H1N1 in the country.¹⁰⁵ Schools were ordered closed for three weeks,¹⁰⁶ even though such a social distancing strategy was rejected by CDC for implementation in the United States.¹⁰⁷

100. *Chile Decreases Emergency Measures After A/H1N1 Infections Reach 2,337*, CHINA VIEW, June 14, 2009, http://news.xinhuanet.com/english/2009-06/15/content_11544285.htm (last visited Apr. 8, 2010).

101. *First Swine Flu Case in Yemen Confirmed; Ministry of Health Declares Emergency Nationwide*, YEMEN POST, June 16, 2009, available at <http://www.yemenpost.net/Detail123456789.aspx?ID=100&SubID=901&MainCat=8>; World Health Organization, *New Influenza A (H1N1) in Eastern Mediterranean Region Number of Laboratory-Confirmed Cases and Deaths Reported to WHO*, available at [http://reliefweb.int/rw/fullmaps_sa.nsf/luFullMap/8B3780DA9A323023C12576030040D7DA/\\$File/map.pdf?OpenElement](http://reliefweb.int/rw/fullmaps_sa.nsf/luFullMap/8B3780DA9A323023C12576030040D7DA/$File/map.pdf?OpenElement) (last visited May 4, 2010).

102. Salma Ismail, *Yemen Reports Five Swine Flu Cases*, YEMEN TIMES, June 17, 2009, http://yementimes.com/defaultdet.aspx?SUB_ID=30051 (last visited Apr. 8, 2010).

103. Himanshu Bhatt, *A(H1N1): National Health Emergency Declared*, SUN2SURF: MALAYSIAN SOURCE FOR NEWS & LIFESTYLE, Aug. 17, 2009, available at <http://www.thesundaily.com/article.cfm?id=37019>.

104. *Id.*

105. *Afghanistan Declares H1N1 Emergency, Shuts Schools*, REUTERS, Nov. 2, 2009, available at <http://www.reuters.com/article/idUSTRE5A115V20091102>.

106. *Id.*

107. Maryn McKenna & Lisa Schnirring, *CDC, States Weigh Usefulness of School Closures*, CIDRAP NEWS, May 4, 2009,

Considerable, additional legal activity in response to the H1N1 pandemic occurred at the subnational level. In the United States, since September 11, 2001, at least twenty-seven states¹⁰⁸ have legislatively defined and authorized the declaration of a “public health emergency.”¹⁰⁹ Many of these states’ laws mirror provisions in the Model State Emergency Health Powers Act (MSEHPA),¹¹⁰ drafted by the *Centers for Law and the Public’s Health* following the anthrax exposures in the Fall of 2001.¹¹¹ MSEHPA offers flexible, model language setting forth potential powers for responding to a public health emergency.¹¹² During the H1N1 outbreak, governors or other

<http://www.cidrap.umn.edu/cidrap/content/influenza/panflu/news/may0409schools-jw.html> (last visited Apr. 8, 2010) (reporting that school closures were no longer effective at preventing spread of the virus).

108. These jurisdictions include: Alabama, ALA. CODE § 31-9-3 (LexisNexis Supp. 2009); Alaska, ALASKA STAT. § 18.05.070(2) (2008); Arizona, ARIZ. REV. STAT. ANN. § 36-787 (2009); California, CAL. GOV’T CODE § 8558 (West 2005 & Supp. 2010); Connecticut, CONN. GEN. STAT. ANN. § 19a-131 (West Supp. 2009); Delaware, DEL. CODE ANN. tit. 20, § 3132 (2005); District of Columbia, D.C. CODE ANN. § 7-2304.01 (LexisNexis 2008); Florida, FLA. STAT. ANN. § 381.00315(1)(b) (West 2007); Georgia, GA. CODE ANN. § 38-3-3(6) (Supp. 2009); Illinois, 20 ILL. COMP. STAT. ANN. 3305/4 (West 2008); Iowa, IOWA CODE ANN. § 135.140(6) (West 2007); Louisiana, LA. REV. STAT. ANN. § 29:762(12) (2007); Maine, ME. REV. STAT. ANN. tit. 22, § 801 (2004 & Supp. 2009); Maryland, MD CODE ANN., PUB. SAFETY, § 14-3A-01 (LexisNexis Supp. 2009); Massachusetts, MASS. ANN. LAWS ch. 17, § 2A (LexisNexis 1999); New Jersey, N.J. STAT. ANN. § 26:13-2 (West 2007); New Mexico, N.M. STAT. ANN. § 12-10A-3(G) (West 2003 & Supp. 2009); North Carolina, N.C. GEN. STAT. § 130A-475 (2009); Oklahoma, OKLA. STAT. ANN. tit. 63, § 6104 (West 2004 & Supp. 2010); Oregon, OR. REV. STAT. ANN. § 433.441 (West Supp. 2009); South Carolina, S.C. CODE ANN. § 44-4-130(P) (Supp. 2009); South Dakota, S.D. CODIFIED LAWS § 34-22-41 (2004); Texas, TEX. HEALTH & SAFETY CODE ANN. § 81.003 (Vernon Supp. 2009); Utah, UTAH CODE ANN. § 26-23b-102(6) (Supp. 2009); Virginia, VA. CODE ANN. § 44-146.16 (Supp. 2009) (“public health threat”); Washington, WASH. REV. CODE ANN. § 70.119A.020 (West Supp. 2010); Wisconsin, WIS. STAT. ANN. § 166.02 (West Supp. 2009); and Wyoming, WYO. STAT. ANN. § 35-4-115 (2009).

109. See generally Lawrence O. Gostin et al., *The Model State Emergency Health Powers Act: Planning for and Response to Bioterrorism and Naturally Occurring Infectious Diseases*, 288 J. AM. MED. ASS’N 622, 622–23, 625 (2002) (discussing how MSEHPA authorizes the declaration of a public health emergency).

110. MODEL STATE EMERGENCY HEALTH POWERS ACT (Ctrs. for Law & the Public’s Health at Georgetown & Johns Hopkins Univs., 2001).

111. Gostin et al., *supra* note 109, at 622–23.

112. See MODEL STATE EMERGENCY HEALTH POWERS ACT § 104(m). “Public health emergency” is defined as:

An occurrence or imminent threat of an illness or health condition that: (1) is

leaders in at least twelve states formally declared states of emergency or public health emergency.¹¹³ Hong Kong, China issued its own declaration of public health emergency modeled after MSEHPA on May 1, 2009 pursuant to its Prevention and Control of Disease Ordinance.¹¹⁴ China's Shandong Province declared a "second-level health emergency" on May 13, 2009.¹¹⁵ During the month of August, at least five Indian states and territories (Maharashtra,¹¹⁶ Tamil Nadu,¹¹⁷ Haryana,¹¹⁸

believed to be caused by . . . (i) bioterrorism; (ii) the appearance of a novel or previously controlled or eradicated infectious agent or biological toxin; . . . and (2) poses a high probability of . . . (i) a large number of deaths in the affected population; (ii) a large number of serious or long-term disabilities in the affected population; or (iii) widespread exposure to an infectious or toxic agent that poses a significant risk of substantial future harm to a large number of people in the affected population.

Id. During a public health emergency declared pursuant to MSEHPA, (1) government is vested with new and expedited powers such as the ability of a state's governor to suspend the operation of existing laws that may interfere with effective emergency responses, *id.* at § 403(a); (2) individuals are entitled to enhanced public health services, such as expedited access to medicines, vaccines, or other resources, *id.* at § 505(d); (3) responders may be authorized to act in ways that differ from non-emergency situations, including practicing medicine with out-of-state licenses, *id.* at § 608; and, (4) volunteers and other emergency responders are protected from some forms of civil liability, *id.* at § 804(b).

113. Pub. Health L. & Pol'y Program, Ariz. St. Univ., *supra* note 6. Those states are as follows: Maryland, New York, Illinois, Ohio, Iowa, Florida, Nebraska, Wisconsin, Maine, Texas, California, and Virginia. *Id.* Although these states represent a minority of U.S. jurisdictions, their combined populations comprise over 50% of the U.S. population. See U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES 2010, at tbl.13 (2010).

114. Prevention and Control of Disease Ordinance, (2008) Cap. 599, § 8. (H.K.), *available at* http://www.legislation.gov.hk/blis_ind.nsf/CurAllEngDoc/OB97283F997976774825749F003142D1?OpenDocument. Pursuant to this ordinance, modeled in part on MSEHPA, Hong Kong's Chief Executive in Council may make regulations to prevent, combat, or alleviate the effects of a public health emergency. *Id.* Regulations may require: (1) disclosure by individuals of information that is relevant to handling the public health emergency; (2) disclosure by public officers to the public of information that is relevant to handling the public health emergency; (3) requisition of property; and (4) "appointment of any person to act as a medical or health professional, the control of such appointed person, and deeming such appointed person to be registered under any enactment[.]"

115. See *China's Shandong Quarantines 23, Declares Health Emergency over A/H1N1 Flu*, PEOPLE'S DAILY ONLINE, May 15, 2009, <http://english.peopledaily.com.cn/90001/90782/90880/6658293.html> (last visited Apr. 8, 2010).

116. *Maharashtra Invokes Epidemic Act to Check Swine Flu*, DAILY NEWS

Delhi,¹¹⁹ and Gujarat¹²⁰) invoked emergency provisions of their respective public health or epidemic disease acts.¹²¹

While these countries' national and regional emergency declarations provide examples of the types of emergency legal powers that were instituted in response to H1N1, most WHO member countries did not declare any formal state of emergency despite WHO's rapid declaration of a PHEIC. Instead, they relied on implementation of national or regional pandemic flu plans, use of existing domestic public health laws and policies, and guidance from WHO, border countries, and others to lead their response efforts. Notable is the divergence in legal and policy approaches to pandemic flu responses among the majority of WHO member states as contrasted with select nations that instituted emergency legal responses. Emergency declarations typically authorize countries to respond domestically to public health threats in expedited ways. Whether public health legal responses among countries that declared emergencies exceeded or were more (or less) effective in controlling the spread of H1N1 than countries which did not

& ANALYSIS, Aug. 4, 2009, http://www.dnaindia.com/mumbai/report_maharashtra-invokes-epidemic-act-to-check-swine-flu_1279630 (last visited Apr. 8, 2010).

117. *H1N1: TN Govt Bans Home Quarantine*, TIMES OF INDIA, Oct. 13, 2009, <http://timesofindia.indiatimes.com/city/chennai/H1N1-TN-govt-bans-home-quarantine/articleshow/5118134.cms> (last visited Apr. 8, 2010) (reporting that the Tamil Nadu government used powers under Public Health Act to proscribe ineffective health measures like home quarantines).

118. *Haryana Invokes Epidemic Act*, TIMES OF INDIA, Aug. 11, 2009, <http://timesofindia.indiatimes.com/india/Haryana-invokes-Epidemic-Act/articleshow/4881209.cms> (last visited Apr. 8, 2010).

119. *Epidemic Act in Place but Some Hospitals Fail to Toe Govt Line*, TIMES OF INDIA, Aug. 12, 2009, <http://timesofindia.indiatimes.com/city/delhi/Epidemic-Act-in-place-but-some-hospitals-fail-to-toe-govt-line/articleshow/4887156.cms> (last visited Apr. 8, 2010).

120. *Modi Govt. Invokes Epidemic Act, as 9 Fresh Cases of H1N1 Reported*, THAIINDIAN NEWS, Aug. 19, 2009, http://www.thaindian.com/newsportal/india-news/modi-govt-invokes-epidemic-act-as-9-fresh-cases-of-h1n1-reported_100235035.html (last visited Apr. 8, 2010).

121. In another state in India, Andhra Pradesh, it was reported that a man died of H1N1 after a private hospital refused to treat him. *See Swine Flu Death: Notice Served on Hospital*, HINDU, Oct. 7, 2009, <http://www.thehindu.com/2009/10/07/stories/2009100758310300.htm> (last visited Apr. 8, 2010) (reporting that authorities at the private hospital have been questioned as to why the patient was discharged and not treated after he was initially on a ventilator).

similarly declare emergencies has not been assessed.

III. GLOBAL HEALTH LAW IN REAL-TIME

Legal responses to global health emergencies are unpredictable because national emergency laws, even when declared, feature different legal approaches and appreciation for global responsibilities. The IHRs come as close as possible to a “one size fits all” approach to controlling infectious diseases that pose significant transnational public health threats. The IHRs, however, clearly allow for dissimilar public health practices among sovereigns.¹²² So they must, at least until member countries divest their national sovereignty to bestow stronger enforcement powers on WHO¹²³ similar to powers possessed by the WTO.¹²⁴ Lacking an enforceable international code for all nations as to how to respond in real time, the default globally is to defer to specific WHO member countries’ emergency and public health laws. This is not always a weakness. Though the public health threat of a highly communicable virus like H1N1 may not respect boundaries, it does not impact countries equally. Industrialized nations with sophisticated national health systems may not require the same type of public health legal responses to control the spread of disease that are needed in developing countries lacking resources and personnel to test, screen, and treat individuals. To the extent emergency laws focus on flexibility and real-time responsiveness, they tend to offer multiple options without requiring specific actions.¹²⁵ Their strength is how they can encourage and authorize innovative, non-traditional responses;¹²⁶ their weakness is how their application can lead to global injustices, abuses, and confusion during emergencies.¹²⁷

122. See Fidler, *supra* note 4.

123. Sturtevant et al., *supra* note 53, at 120 (“Legal enforcement of the IHR remains problematic in the absence of sanctions . . .”).

124. See, e.g., WORLD TRADE ORG., UNDERSTANDING THE WTO 55–58 (4th ed. 2008) (explaining that the WTO can impose sanctions on states that do not comply with the WTO dispute settlement process).

125. See Hodge, *supra* note 1, at 627–29.

126. See Hodge & Anderson, *supra* note 1, at 272.

127. See Gostin, *supra* note 5, at 2376 (suggesting that the global response to H1N1 raises “serious questions of global justice, as Mexicans have become subject to stigma and discrimination”).

Dissimilarities inherent in sovereign emergency laws are not the problem per se until a localized public health threat like H1N1 globalizes and requires transnational legal responses. National legal responses during the earliest stages of the H1N1 pandemic may respond to domestic objectives but may also devalue the need for global responses in real-time events. The ease of transmissibility of conditions like H1N1 in a global economy exposes these flaws. Even the strongest national public health system capable of initially controlling disease within a country's borders cannot contain threats that arise outside its sovereign domain.

The missing elements underlying the global control of infectious diseases like H1N1 is clearly not a lack of national legal powers nor a lack of global health strategies. Most country's domestic emergency powers are sufficiently broad to address their specific public health objectives, although they may be used in invidious ways contrary to public health practice. As noted above, the majority of WHO member states did not choose to evoke formal emergency powers in response to H1N1, relying instead on existing public health powers and pandemic flu preparedness plans. Although "the new IHR[s] are no 'magic bullet' for global health problems,"¹²⁸ they do offer global standards that most nations respect, at least superficially.¹²⁹ What is truly lacking, however, is the willingness and capacity of leaders and other actors nationally to implement strategic responses to protect global health in the face of emerging international threats. What I define as "global legal triage," refers to efforts of international and national leaders and others to identify, prioritize, and solve transnational public health legal issues to improve global health outcomes in real-time during international emergencies.¹³⁰

Global legal triage necessitates legal counsel and leaders primarily at the international or national levels to generate legal solutions to transnational issues that impact global health in real-time emergencies. Questions of law and governance relating to global allocation of scarce resources and personnel,

128. Fidler & Gostin, *supra* note 52, at 93.

129. *Id.* ("The revised [IHR] promise to become a centerpiece for global health governance in the 21st century.").

130. *See supra* note 33.

limitations on individual travel or entry, or restrictions on commerce and trade require strategic responses that reflect global health priorities, not just national ones. Addressing these global legal challenges in actual emergencies is hampered by the altered legal environment inherent in national emergency declarations, the exigencies of protecting domestic public health, and the entrenchment that occurs when political leaders face unsure and potentially catastrophic threats to their populations. Primary attention to the public health impacts on domestic populations is understandably at the center of national efforts. Yet when national legal responses fail to match international infectious disease standards set forth in the IHRs, public health risks initially addressed in one country inevitably transfer to other populations. Countries that institute significant emergency response efforts to stymie the spread of disease may initially proclaim hollow victories. Over the long-term, however, infectious disease “never dies or disappears for good.”¹³¹ In the case of H1N1, short-sightedness in addressing domestic public health concerns to the detriment of international health may negatively impact the health of the same domestic populations as the virus (in its original or mutated form) spreads globally.

The 2004–2005 SARS epidemic, which motivated fundamental reforms to the IHRs,¹³² provides another example. Though aware of the existence of an unknown and potentially deadly infectious agent spreading among local populations, Chinese authorities initially attempted to withhold surveillance data and isolates from WHO and other global partners.¹³³ The most favorable interpretation of these failures is that SARS was viewed by Chinese authorities as a localized problem that posed no threat to others. The more likely view is that China

131. ALBERT CAMUS, *THE PLAGUE* 308 (Stuart Gilbert trans., 1st Vintage Intl. ed. 1991) (1948).

132. See Fidler & Gostin, *supra* note 52, at 85 (“The outbreak of [SARS] in 2003 accelerated the IHR revision process.”).

133. See Lawrence O. Gostin et al., *Ethical and Legal Challenges Posed by Severe Acute Respiratory Syndrome: Implications for the Control of Severe Infectious Disease Threats*, 290 J. AM. MED. ASS’N 3229, 3233 (2003); accord Fidler & Gostin, *supra* note 52, at 88 (citing DAVID P. FIDLER, *INTERNATIONAL LAW AND INFECTIOUS DISEASES* (1999)) (“States parties often violated the old IHR by failing to report cases of diseases subject to the Regulations because they feared other countries would implement economically damaging trade or travel restrictions.”).

intentionally withheld data to avoid the stigma that eventually followed, leading to billions of dollars of damages and lost revenues as nations and citizens responded by avoiding Chinese goods and travel.¹³⁴ In the end, both China and the global health community suffered from this initial, unethical decision as SARS spread across China and to multiple other countries causing needless morbidity and mortality.¹³⁵

The strategic legal goal of pandemic flu response efforts cannot be grounded solely in protectionism, but rather must adequately prioritize the health of all populations. This is particularly relevant in decisions to allocate scarce resources. WHO, member countries, and numerous public- and private-sector entities have issued guidelines on allocating scarce resources in emergencies that are grounded in principles of justice and fairness.¹³⁶ Ethical models for emergency-resource distributions have been widely proposed.¹³⁷ To be purposeful, these allocation models must be supported by legal principles in real-time emergencies.¹³⁸ For example, even as the United States experienced a shortage of available vaccines and antivirals in the midst of the H1N1 pandemic and despite some opposition, President Obama pledged donations of existing U.S. supplies in mid-September 2009 to global response efforts

134. See Erik Eckholm, *SARS in Beijing: The Unraveling of a Cover-Up*, in *SARS IN CHINA: PRELUDE TO PANDEMIC?* 122–32 (Arthur Kleinman & James L. Watson eds. 2006).

135. *Id.*

136. See, e.g., WORLD HEALTH ORG., PANDEMIC INFLUENZA PREPAREDNESS AND RESPONSE (2009); FED. OFFICE OF PUB. HEALTH, SWISS CONFEDERATION, SWISS INFLUENZA PANDEMIC PLAN (2009), available at <http://www.bag.admin.ch/influenza/01120/01134/03058/index.html?lang=en>; MASS MEDICAL CARE WITH SCARCE RESOURCES: A COMMUNITY PLANNING GUIDE, *supra* note 35; see also Richard Coker & Sandra Mounier-Jack, *Pandemic Influenza Preparedness in the Asia-Pacific Region*, 368 *LANCET* 886, 886–89 (2006) (assessing the plans of eight Asia-Pacific countries).

137. See, e.g., Lawrence O. Gostin, *Medical Countermeasures for Pandemic Influenza: Ethics and the Law*, 295 *J. AM. MED. ASS'N* 554, 555–56 (2006); John L. Hick et al., *Clinical Review: Allocating Ventilators During Large-scale Disasters—Problems, Planning, and Process*, 11 *CRITICAL CARE* 217, 218–24 (2007).

138. See JOHNS HOPKINS CTR. FOR PUB. HEALTH PREPAREDNESS ET AL., PRINCIPLES OF LAW AND ETHICS TO GUIDE ALLOCATION DECISIONS INVOLVING SCARCE RESOURCES DURING PUBLIC HEALTH EMERGENCIES (2006), available at <http://www.publichealthlaw.net/Resources/ResourcesPDFs/Summit%20Allocation%20Principles.pdf>.

coordinated by WHO.¹³⁹ Additional countries including Australia, Brazil, Canada, France, Italy, New Zealand, Norway, Switzerland, and the United Kingdom similarly donated vaccines.¹⁴⁰ Though laudable, the objective was not just to share vaccines to stymie the spread and impact of the disease elsewhere, but also to limit the impact domestically by controlling the threat internationally. Only through these types of legal decisions, grounded in affirmative foreign relations and theories of global justice, will it be possible to circumvent the most serious effects of global public health threats like H1N1 in the future.

IV. CONCLUSION

Facing a novel, albeit relatively mild viral threat in H1N1, countries responded in disparate ways, buttressed by incongruent emergency laws and decisions as to when, how, or if to use them. Whether in ignorance or outright refusal, countries' legal and public health responses did not always conform to WHO's guidance through its invocation of the IHRs. Proven public health interventions were negated. Human rights abuses arose. Economic impacts were realized. And H1N1 influenza spread like wildfire. This first major test of the global health system in the face of a global health threat does not bode well for future outbreaks.

Threats like H1N1 or other highly communicable diseases cannot be completely snuffed out through existing, or likely future, global health initiatives. We still cannot prevent pandemics that arise naturally as part of organized society. However, when disease spreads because of failures in global health strategies inhibited by legal principles of national sovereignty and limited views of the roles of government to

139. See Sheryl Gay Stolberg, *Shortage of Vaccine Poses Political Test for Obama*, N.Y. TIMES, Oct. 28, 2009 at A4; Press Release, The White House, President Announces Plan to Expand Fight Against Global H1N1 Pandemic (Sept. 17, 2009), available at http://www.whitehouse.gov/the_press_office/President-Announces-Plan-to-Expand-Fight-Against-Global-H1N1-Pandemic/ (promising 10% of U.S. vaccine supply to global distribution efforts).

140. See, e.g., Meagan Fitzpatrick, *Canada to Donate H1N1 Vaccine to the WHO*, CANWEST NEWS SERVICE, Jan. 28, 2010, available at <http://www.canada.com/business/Canada+donate+H1N1+vaccine/2494564/story.html>.

protect only domestic populations, society can no longer blame a virus completely for its human and economic losses. Not all governments must respond alike to pandemic threats. To the contrary, public health threats impact populations differently depending on multiple factors. Rather, when they respond legally, they must be mindful of the global health impacts of their decisions. Tepid acceptance of international disease control standards like the IHRs are insufficient. Countries must not only embrace global health goals in response to pandemic threats but also act consistent with them. The dual global health legal challenges of this century are (1) to reform public health laws at every level of government to better reflect shared, global objectives, and (2) then be prepared to apply them through the practice of global legal triage.