CLOSING THE GAPS IN THE U.S. AND INTERNATIONAL QUARANTINE SYSTEMS: LEGAL IMPLICATIONS OF THE 2007 TUBERCULOSIS SCARE

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Spring 2007's public health scare involving the international travels of Andrew Speaker, a Georgia resident diagnosed with an extremely drug-resistant strain of tuberculosis, sparked debate last year concerning governments' abilities to contain disease threats.[1] One focus of the legal discussion has been the constitutional issues involved: the balance between government police powers, specifically the power to isolate and quarantine, and individual liberties, particularly the right to due process.[2]

The Speaker incident highlights two problematic areas in the current domestic and international public health systems. The first area, the source of the majority of the furor that surrounded the case, is the ability of domestic governments to

1. *See*, *e.g.*, Alice Park, *The TB Scare: A Broken System?*, TIME, May 31, 2007, *available at* http://www.time.com/time/health/article/0,8599,1627159,00.html; Robert Block & Ann Carrns, *Tuberculosis Patient's Voyage Stirs Debate over Security Issues*, WALL ST. J., May 31, 2007, at D2.

2. *See* Alyson M. Palmer, *The Legal Questions Behind the TB Case*, FULTON COUNTY DAILY REP., June 8, 2007, *available at* http://www.law.com/jsp/article.jsp?id=1181207137498; KATHLEEN S. SWENDIMAN & NANCY LEE JONES, CRS REPORT FOR CONGRESS: EXTENSIVELY DRUG-RESISTANT TUBERCULOSIS (XDR-TB): QUARANTINE AND ISOLATION 6 (2007), http://www.fas.org/sgp/crs/misc/RS22672.pdf.

quarantine or isolate people who are potential disease threats.[3] At the heart of this discussion is the tension between government police powers and individual liberties, particularly the right to due process.[4] The second area is the need for response to the rapid and rising emergence of new strains of deadly infectious disease, such as the extremely drug-resistant tuberculosis strain with which Speaker was diagnosed, in an era of unprecedented international travel.[5]

The constitutional discussion also provides a framework for analyzing and improving the international system for public health governance. Recent developments in the international public health system resemble features of federal states' allocation of power in public health governance, producing a trend that points to improvements in international health governance through the strengthening of centralized and cooperative efforts.[6]

This Comment will first review the Speaker incident and use it as an illustration of the growing threat posed by the intersection of two phenomena: the evolution of infectious diseases, such as tuberculosis, and the increase in international trade and travel. Part II will provide a background of the domestic and international mechanisms currently in place to respond to the growing threat of infectious disease in international travel. Part III examines criticisms and shortcomings of the U.S. state and federal disease-response frameworks, including some that were exposed in the Speaker

3. *See* Palmer, *supra* note 2 (discussing the balancing act governments must perform between the need to quarantine sick travelers and the need to protect individual rights).

4. *See id.* (discussing the legislative proceedings and public comment process concerning a clearer statement of due process requirements in quarantine procedures).

5. Kim Krisberg, *High-Profile U.S. Case Increases Attention*: *Drug-Resistant TB Becoming More Commonplace Globally*, NATION'S HEALTH, Aug. 1, 2007, at 1.

6. *See* Richard Coker et al., *Detention and the Evolving Threat of Tuberculosis: Evidence, Ethics, and Law*, 35 J.L. MED. & ETHICS 609, 610–11 (2007) (discussing how the international response to tuberculosis has involved foreign judiciaries, legislatures, and private medical professionals working together to properly quarantine and treat tuberculosis patients).

incident. This section also reviews the civil liberties concerns accompanying the renewed use of isolation and quarantine as public health measures; argues for approval of the planned changes to the federal quarantine and isolation law proposed by the Centers for Disease Control and Prevention (CDC) from the angle of the civil liberties arguments; and proposes additional changes to federal law, namely, giving authorization to the CDC to detain individuals traveling out of the United States. Part IV reviews the civil liberties tensions in the public health legislation of European Union (EU) countries, particularly in light of the European Convention for the Protection of Human Rights. Part V examines the proposed expansion of the U.S. National Quarantine System and the implications for such an expansion under the United States' international law obligations. Finally, Part VI compares the trends in the overall structures of public health governance domestically and internationally and proposes the "constitutionalization" of global public health governance as a guide to future international health solutions.

I. EVOLVING INFECTIOUS DISEASES AND INTERNATIONAL TRAVEL

A. The Speaker Incident

Andrew Speaker, an Atlanta lawyer, was first diagnosed with tuberculosis in March 2007.[7] After failed attempts at treatment, physicians diagnosed Speaker with multiple drug-resistant tuberculosis (MDR-TB), a strain of the disease that is rarer and more dangerous than common tuberculosis because it is not as treatable.[8] County health officials were notified of Speaker's diagnosis and met with him and his family to discuss

7. David P. Fidler et al., *Through the Quarantine Looking Glass: Drug-Resistant Tuberculosis and Public Health Governance, Law, and Ethics*, 35 J.L. MED. & ETHICS 616, 617 (2007).

8. *See Recent Case of Extensively Drug Resistant TB: CDC's Public Health Response: Hearing Before the H. Comm. on Homeland Sec.*, 110th Cong. 1, 3 (2007) [hereinafter *Hearing*] (testimony of Julie L. Gerberding, Director, Ctrs. for Disease Control & Prevention), http://www.cdc.gov/washington/testimony/2007/t20070606.htm.

his condition and treatment arrangements.[9] Reports differ concerning precisely what Speaker was told by health officials; Speaker and his family claimed that the contagiousness and dangerousness of his condition were not adequately conveyed to them, and that they were not explicitly told that Speaker should not travel.[10] Health officials from Fulton County and the Georgia Department of Public Health claimed Speaker was explicitly told that he should not travel.[11] On May 10, the Fulton County Health Department began reviewing legal options for restricting an MDR-TB patient, and on May 10 and 11, the Georgia Department of Public Health held discussions with the CDC concerning options for restricting the travel of an MDR-TB patient.[12]

Despite whether Speaker was sufficiently briefed on the seriousness of his condition, on May 12, 2007, he traveled on a commercial airline from his home in Atlanta to Greece for his wedding and then to Italy for his honeymoon.[13] While Speaker was in Italy, health officials in Georgia determined he was infected with extremely drug-resistant XDR-TB, the most lethal and potentially untreatable strain of the disease, instead of MDR-TB, with which he was initially believed to be infected.[14] The CDC was notified, and federal health officials tracked Speaker's movements to Italy and contacted him there, notifying him of the diagnosis and his need for immediate treatment.[15] Speaker was allegedly told he could only return to the United States on a private aircraft equipped to protect crew members from infection, but because the CDC could not arrange for such transportation, he would be quarantined in Italy.[16] Wanting to

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9. *Id.*; Jia-Rui Chong et al., *Border Alert on TB Patient Disregarded*, L.A. TIMES, June 1, 2007, at A1.

10. Chong et al., *supra* note 9.

11. *Id.*

12. Fidler et al., *supra* note 7, at 617.

13. Chong et al., *supra* note 9.

14. *Hearing*, *supra* note 8, at 4.

15. *Id.*

16. *See id.* (stating Speaker was told of the need for isolation and that the Transportation Safety Administration was to prevent Speaker from boarding a

return to the United States for treatment, Speaker and his wife flew on commercial airlines from Italy to Prague and then to Montreal, where they rented a car and drove across the Canadian-U.S. border to New York, passing the checkpoint easily despite an alert to border patrol to detain Speaker if he tried to enter the country.[17] Only after arriving in New York was Speaker apprehended by health authorities and quarantined, even though the CDC had taken measures to notify airlines and border patrol that he was a disease threat and should not travel.[18] Speaker was detained in a New York hospital, where CDC officials served him the first provisional federal quarantine order issued since 1963.[19]

After interviewing him in New York, the CDC began the process of locating and contacting passengers who had been on the same flights Speaker had taken.[20] While still under federal isolation order, Speaker chose to return to Atlanta.[21] From there he was transferred to Denver through his own resources for treatment at the National Jewish Medical Center, where physicians determined that he in fact did not have XDR-TB, but MDR-TB.[22] Speaker underwent surgery at the end of July to remove the infected portion of his lung and was declared noncontagious on July 26, returning to Atlanta the same day.[23]

Speaker's case began to generate media attention at the end of May, when he returned to Atlanta from New York.[24] The target of criticism varied between Speaker himself and health

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commercial aircraft); *see* Chong et al., *supra* note 9 (discussing the CDC's desire to transport Speaker back to the U.S. safely and the need for Speaker to remain in Italian custody until such arrangements could be made).

17. Chong et al., *supra* note 9; Lawrence K. Altman, *Agent at Border, Aware of Alert, Did Not Detain Man Who Has TB*, N.Y. TIMES, June 1, 2007, at A1. U.S. Customs and Border Protection had initiated a nationwide border alert concerning Speaker based on information provided by the CDC on May 22. Fidler et al., *supra* note 7, at 617.

18. Chong et al., *supra* note 9.

19. Fidler et al., *supra* note 7, at 617–18.

20. *Id.* at 618.

21. *Id.*

22. *Id.*

23. *Id.*

24. *Id.*

authorities who had failed to detain him.[25] The incident also prompted an official inquiry by Congress.[26]

B. The Development of Tuberculosis: Ancient Roots and Deadly New Strains

Tuberculosis is by no means a new or recent disease; its bacteria have been detected in fossilized remains from thousands of years ago, and its effect has been immortalized in works of fiction from the 1700s and 1800s through stories of characters afflicted with the disease.[27] However, in recent years the medical community has been faced with developments in tuberculosis that were unprecedented before the last decade of the twentieth century—the evolution of the disease into strains previously unencountered and resistant to traditional methods of treatment, such as the strain contracted by Andrew Speaker.[28]

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25. *Id.* In total, Speaker had traveled on five international commercial airline flights while he was infected, putting several passengers at risk of contracting the disease through him. Chong et al., *supra* note 9. Nine passengers from those flights eventually filed civil actions against Speaker, demanding damages for putting them at risk of contracting tuberculosis. *Nine Sue TB-Infected Atlantan Over Risk Caused During Jet Flight*, ATLANTA J.-CONST., July 13, 2007, at 1C.

26. *See Hearing*, *supra* note 8, at 3 (transcript of testimony resulting from the inquiry by Congress into Speaker's case). Although Speaker's case was the most widely publicized, there have been other alarming instances of TB-infected travelers crossing borders in the past year. *See, e.g.*, Michelle Mittelstadt & Dane Schiller, *Man with TB Able to Enter U.S. Repeatedly; Lawmakers Ask How Agents Again Failed to Stop an Infected Traveler*, HOUS. CHRON., Oct. 19, 2007, at A1 (describing the inquiry into the case of a Mexican businessman infected with a drug-resistant strain of TB who was permitted to enter the U.S. dozens of times since 2006); *Taiwan TB Patient who Defied Flight Ban will Return to Taiwan*, DEUTSCHE PRESSE-AGENTUR, July 29, 2007 (describing the case of an XDR-TB patient who flew from Taiwan to China in violation of a travel ban).

27. Michael D. Iseman, *Evolution of Drug-Resistant Tuberculosis: A Tale of Two Species*, 91 PROC. NAT'L. ACAD. SCI. USA 2428, 2428 (1994); Justin Gillis, *Maryland Group Moves to Get TB Vaccine for World's Poor*, WASH. POST, Oct. 20, 2005, at A11.

28. Ctrs. for Disease Control & Prevention, *Emergence of Mycobacterium Tuberculosis with Extensive Resistance to Second-Line Drugs—Worldwide, 2000–2004*, 55 MORBIDITY & MORTALITY WKLY. REP. 301 (2006) [hereinafter *Emergence of Mycobacterium Tuberculosis*].

Tuberculosis is a disease caused by the bacteria *Mycobacterium tuberculosis* (*M. tuberculosis*).[29] Only 5–10% of carriers of the bacteria will contract the clinical disease tuberculosis over their lifetime.[30] The bacteria may lie dormant in a carrier, who will exhibit no symptoms, and become infectious only when the carrier's immune system is sufficiently weakened.[31] Infection with the disease usually affects the lungs but may infect the nervous system, lymphatic system, circulatory system, bones, joints, and skin.[32] Symptoms of pulmonary (lung-infected) tuberculosis include prolonged cough, chest pain, fever, chills, and weight loss.[33] *M. tuberculosis* is most commonly transmitted by inhaling airborne droplets expelled by someone infected with the disease through coughing, sneezing, laughing, or spitting.[34]

Tuberculosis bacteria have been detected in the fossilized remains of humans and animals dating as far back as 5,000 B.C. and the Greco-Roman era.[35] During the 17th and 18th centuries, the centuries-long tuberculosis pandemic reached its peak, becoming known as "the White Plague" and claiming the lives of an estimated one billion people between 1850 and 1950.[36]

Developments in the 1930s and 1940s produced treatments that led to the first cures for tuberculosis.[37] The developments involved the discovery of three medications which, given in certain combinations, killed 98–99% of *M. tuberculosis* strains.[38] Tuberculosis sanatoria and clinics were opened in the 1950s and

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29. Ronald Bayer & Laurence Dupuis, *Tuberculosis, Public Health, and Civil Liberties*, 16 ANN. REV. PUB. HEALTH 307, 308 (1995).

30. *Id.*

31. World Health Org. [WHO], Tuberculosis Fact Sheet, http://www.who.int/mediacentre/factsheets/fs104/en/index.html (last visited Nov. 1, 2008).

32. Mayo Clinic, Tuberculosis Symptoms, http://www.mayoclinic.com/health/tuberculosis/DS00372/DSECTION=symptoms (last visited Nov. 1, 2008).

33. Ctrs. for Disease Control & Prevention, Diagnosis of TB, http://www.cdc.gov/tb/pubs/slidesets/core/html/trans5_slides.htm (last visited Nov. 1, 2008).

34. Bayer & Dupuis, *supra* note 29, at 308; Tuberculosis Fact Sheet, *supra* note 31.

35. Iseman, *supra* note 27, at 2428.

36. *Id.*

37. *Id.*

38. *See id.* at 2428–29 (stating that 1–2% of *M. tuberculosis* strains were resistant to drugs in the beginning of the treatment era).

1960s to administer the new cure, which required twenty-four months of drug therapy.[39] However, this widespread cure was followed by "irregular or incomplete adherence" to the required two-year drug therapy by patients, inadequate prescription by physicians, and a drop-off in aggressive tuberculosis programs.[40] The combination of these factors contributed to the subsequent rise in drug-resistant tuberculosis strains.[41] Inadequate administration of drug combinations "[created] an environment that selects for survival of the drug-resistant [mutant]" strains of the bacteria, allowing these subspecies to become dominant in more carriers.[42]

Multidrug resistant tuberculosis (MDR-TB) is defined as infection with *M. tuberculosis* by strains that are resistant to two of the three conventional, "first-line" drugs.[43] Treatment of MDR-TB involves costlier, less effective, and more toxic "second-line" drugs.[44] Extremely drug-resistant tuberculosis (XDR-TB) is resistant to some second-line drugs in addition to first-line drugs, severely limiting treatment options.[45]

II. CURRENT LAW

The rapid evolution of tuberculosis and other contagious diseases, in conjunction with ever-increasing global travel, presents new challenges not only in medicine, but also in public health law.[46]

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39. *Id.* at 2429.

40. *Id.*

41. *Id.*

42. *Id.*

43. *Emergence of Mycobacterium Tuberculosis*, *supra* note 28, at 301.

44. *Id.*

45. WHO, Frequently Asked Questions—XDR-TB, http://www.who.int/tb/challenges/xdr/faqs/en/index.html (last visited Nov. 1, 2008).

46. *See generally* WHO, International Travel and Health, http://www.who.int/ith/chapters/en/index.html (last visited Nov. 1, 2008) (describing the increase in international travel and the challenges presented by the trend); JAMES B. SIMPSON ET AL., PUBLIC HEALTH INST., CALIFORNIA TUBERCULOSIS CONTROL LAW (2003), http://www.phlaw.org/docs/tb_law_paper.pdf.

A. The U.S. Legal Mechanisms for Response

The responsibility to assess and respond to disease threats is primarily one belonging to state governments because it is a classic police power.[47] The scope of the federal government's authority in this area is governed by its ability to regulate interstate commerce and foreign relations and to promote the public welfare under Article I, section 8 of the Constitution.[48] However, the line between state and federal regulation has become blurred in practice, particularly as Congress' reach has expanded under its ability to prevent state discrimination.[49] Case law has historically supported a broader state police power in the public health arena than a narrower one.[50] An apparent exception is the protection afforded individuals classified as disabled under nondiscrimination statutes.[51] For example, the federal Americans with Disabilities Act, Rehabilitation Act, and Air Carriers Access Act contain provisions for individuals with infectious diseases.[52]

47. MARK A. HALL, MARY ANNE BOBINSKI & DAVID ORENTLICHER, BIOETHICS AND PUBLIC HEALTH LAW 519 (2005).

48. *Id.*; U.S. CONST. art. I, § 8.

49. *See, e.g.*, Sch. Bd. v. Arline, 480 U.S. 273, 289 (1987) (holding that a tuberculosis patient is considered a disabled person under the Rehabilitation Act, and the state violates the Act if it terminates an employee, otherwise qualified for the position, because the employee contracts tuberculosis).

50. For example, courts have found that states' interests in promoting public health, safety, and welfare may override an individual's right to bodily integrity (e.g., being injected with the smallpox vaccination), medical privacy (e.g., reporting a positive HIV status to a state registry), and protection against unreasonable search and seizure (e.g., mandatory HIV testing for individuals convicted of prostitution). *See* Jacobson v. Massachusetts, 197 U.S. 11, 11–12 (1905); Middlebrooks v. State Bd. of Health, 70 So. 2d 891, 893 (Ala. 1998); People v. Adams, 597 N.E.2d 574, 584 (Ill. 1992).

51. *Arline*, 480 U.S. at 289.

52. SWENDIMAN & JONES, *supra* note 2, at 6.

1. State Law

Each state has its own legal framework for response to infectious diseases, usually delegating administrative authority to a state health department or local boards of health.[53] Many states have promulgated fairly comprehensive procedures for response to specific disease threats, including tuberculosis.[54] However, the thoroughness of state laws for responding to disease threats can vary widely between states and even between the treatments of specific diseases within the same state.[55] This variation is because "[s]tates originally enacted their quarantine and isolation laws on an ad hoc, disease-by-disease basis."[56] Since 2001, however, the CDC and Center for Law and the Public's Health have promulgated the Model State Emergency Health Powers Act (MSEHPA), which has been adopted by forty-four states.[57] The most controversial of the MSEHPA's provisions are those addressing quarantine and isolation.[58] These provisions allow a state to require treatment, isolation, and quarantine when a state declares a public health emergency.[59] Among the MSEHPA provisions are due process procedures that allow individuals to obtain counsel to challenge the institution of quarantine and mandatory vaccination programs established pursuant to a state declaration of a public health emergency.[60]

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53. *See, e.g.*, GA. CODE ANN. § 31-14-1 (2006) (granting authority to the county boards of health and the Department of Human Resources to petition for the commitment of individuals who are suspected of actively carrying tuberculosis).

54. *See, e.g.*, *id.* (describing Georgia's process of involuntary commitment, which involves a series of petitions initiated by various government bodies who are governed by rigid time constraints and evidentiary requirements); *see also* Palmer, *supra* note 2.

55. *See* Palmer, *supra* note 2 (observing that some state statutes address only specific diseases).

56. *Id.*

57. Ctrs. for Law & the Pub.'s Health, The Model State Emergency Powers Act, http://www.publichealthlaw.net/ModelLaws/MSEHPA.php (last visited Nov. 1, 2008).

58. William Martin, *Legal and Public Policy Responses of States to Bioterrorism*, 94 AM. J. PUB. HEALTH 1093, 1093 (2004).

59. HALL ET AL., *supra* note 47, at 585.

60. Martin, *supra* note 58, at 1093–94.

2. Federal Law

As previously discussed, the quarantine authority is traditionally and primarily one of the states' police powers.[61] The federal quarantine statute therefore defers to state law, unless there is a conflict with federal law.[62] The federal government's quarantine and isolation power is outlined in 42 U.S.C. § 264.[63] Subsection (a) delegates authority to the Surgeon General to promulgate and enforce regulations "necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States or possessions, or from one State or possession into any other State or possession."[64] The accompanying regulations subsequently delegate the quarantine authority from the Surgeon General to the head of the CDC.[65]

Although they are often used interchangeably, the term "isolation" actually refers to the procedure which many commonly refer to as "quarantine."[66] Isolation is the separation of already-infected patients to prevent the spread of their disease to others.[67] Quarantine refers to the separation of potential disease threats, which are usually people who were in contact with an infected person and thus may be carriers of the disease.[68] These patients are quarantined for the disease's incubation period to determine whether they are infected.[69] Communicable diseases for which the quarantine power may be

61. HALL ET AL., *supra* note 47, at 519.

62. 42 U.S.C. § 264(e) (2000 & Supp. V 2005).

63. *Id.* § 264.

64. *Id.* § 264(a) (2000).

65. 42 C.F.R. § 70.2 (2007); Palmer, *supra* note 2.

66. *See* CTRS. FOR DISEASE CONTROL & PREVENTION, DEP'T OF HEALTH AND HUMAN SERVS., FACT SHEET: LEGAL AUTHORITIES FOR ISOLATION AND QUARANTINE 1 (2006), http://www.cdc.gov/ncidod/dq/sars_facts/factsheetlegal.pdf [hereinafter LEGAL AUTHORITIES FACT SHEET] (defining isolation and quarantine).

67. *Id.*

68. *Id.*

69. *Id.*; *see also* CTRS. FOR DISEASE CONTROL & PREVENTION, DEP'T OF HEALTH & HUMAN SERVS., QUESTIONS AND ANSWERS: LEGAL AUTHORITIES FOR ISOLATION AND QUARANTINE (2006), http://www.cdc.gov/ncidod/dq/sars_facts/quarantineqa.pdf.

exercised include infectious tuberculosis, cholera, diphtheria, plague, smallpox, yellow fever, viral hemorrhagic fevers, severe acute respiratory syndrome (SARS), and pandemic influenza.[70]

"[A]pprehension, detention, or . . . release of individuals" is limited to the purpose of preventing disease transmission as described in 42 U.S.C. §264(a).[71] Subsection (c) limits application of the apprehension and detention ability "to individuals coming into a State or possession from a foreign country or a possession."[72] Thus, the federal quarantine provisions mainly address individuals entering the United States from foreign countries.[73] Subsection (a) extends the government's quarantine authority to interstate travelers if they are in a communicable disease stage, but as a practical matter, the CDC focuses on the entrance of international travelers and rarely detains interstate travelers under the federal statute.[74] 42 C.F.R. § 70.1 specifically excludes "loading persons or property for transportation to a foreign country" from the interstate traffic definition covered by 42 U.S.C. § 264.[75] Even quarantine of international travelers under the federal statute is rare; before Andrew Speaker, the most recent use of this federal authority was during the detention of a potential smallpox carrier from Sweden in 1963.[76] Exercise of quarantine authority under state law is much more common.[77]

The statute provides few limits on federal quarantine authority; its exercise is primarily left to the discretion of medical authorities at the CDC.[78] However, federal quarantine orders may be challenged in court.[79] While Speaker did not challenge his order, the last federal public health detainee did in

70. LEGAL AUTHORITIES FACT SHEET, *supra* note 66, at 2.
71. 42 U.S.C. § 264(b) (2000 & Supp. V 2005).
72. *Id.* § 264(c) (2000).
73. *Id.* §§ 264–265 (2000 & Supp. V 2005); Palmer, *supra* note 2.
74. 42 U.S.C. § 264(a) (2000); Palmer, *supra* note 2.
75. 42 C.F.R. § 70.1 (2007).
76. Palmer, *supra* note 2.
77. *Id.*
78. *Id.*; 42 U.S.C. § 264 (2000 & Supp. V 2005).
79. Palmer, *supra* note 2.

1963.[80] The court dismissed the challenge, citing the discretion of public health authorities over legal judgments.[81]

B. International Law Mechanisms for Response

International cooperation to contain infectious disease did not really develop until the 19th century.[82] One of the first international diplomatic events to address disease control was the International Sanitary Conference in 1851.[83] Prior to 1851, most European states had their own domestic quarantine systems.[84] However, lack of uniformity between states' quarantine systems resulted in trade burdens being placed on countries dependent on shipping, because a state could indefinitely detain the ship of another state on public health grounds.[85] In the 1830s, the first outbreaks of cholera, a new disease at the time, and unprecedented international trade and travel led to the first calls for international cooperation to replace or supplement the costly and inefficient collection of individual quarantine systems.[86] Between the 1830s and 1850s, various states attempted to convene the European community for discussions on the disease issue, finally succeeding in 1851 when eleven European states and Turkey met in France.[87] The International Sanitary Conference's two fundamental objectives were to protect Europe from the invasion of additional new diseases and to reduce the trade hindrances created by individual quarantine systems.[88] These objectives arose out of the two main factors (the emergence of new diseases and increased trade) that brought the countries together and remain the two main goals of international health cooperation.[89]

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80. *Id.*

81. *Id.*

82. DAVID P. FIDLER, INTERNATIONAL LAW AND INFECTIOUS DISEASES 26 (1999).

83. *Id.* at 21.

84. *Id.* at 27.

85. *Id.* at 26–27.

86. *Id.* at 27.

87. *Id.* at 27–28.

88. *Id.* at 28.

89. *Id.* (citing WHO Constitution art. 1, July 22, 1946, 221 U.N.T.S. 186). The WHO's objectives as stated in the International Health Regulations (IHR) are "to ensure

The treaties produced between 1851 and 1945 had a number of shortcomings.[90] Gaps existed in the overall "international regime" because not all member states of a particular treaty ratified newer versions, and many states did not ratify any health treaties at all.[91] Treaties often overlapped, and the process of creating and ratifying treaties was slow and cumbersome, causing the law to lag significantly behind scientific developments and the rapid increase in "the speed, volume, and scope of international traffic."[92]

One of the objectives of the newly-created United Nations (UN) after World War II was international health cooperation.[93] The first specialized agency established by the UN was the World Health Organization (WHO).[94] Member states appointed delegates to the World Health Assembly (WHA), the supreme decision-making authority of the WHO.[95] In 1951, the WHA adopted the International Sanitary Regulations (later renamed the International Health Regulations (IHR)) to replace the previous patchwork collection of treaties.[96] Delegating authority to the WHA to promulgate international health regulations ameliorated the mismatch between health laws and the scientific and technological development that resulted from the previous lengthy treaty process.[97] In addition, Article 22 of the WHO Constitution bound all member states to regulations promulgated by the WHA unless the state notified the Director-General of a rejection or reservation.[98] Along with centralization of the treaty-making process within the WHO and the WHO's

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the maximum security against the international spread of diseases with a minimum interference with world traffic." WHO Constitution art. 1, July 22, 1946, 221 U.N.T.S. 186; FIDLER, *supra* note 82, at 28.

90. FIDLER, *supra* note 82, at 58–59.

91. *Id.* at 58.

92. *Id.* at 58–59.

93. *Id.* at 59.

94. *Id.*

95. Elisabetta Minelli, World Health Organization: The Mandate of a Specialized Agency of the United Nations (dissertation, Catholic University of Milan), *available at* http://www.gfmer.ch/TMCAM/WHO_Minelli/P1-2.htm.

96. FIDLER, *supra* note 82, at 59.

97. WHO Constitution, *supra* note 89, art. 21; FIDLER, *supra* note 82, at 59.

98. WHO Constitution, *supra* note 89, art. 22; FIDLER, *supra* note 82, at 59.

Article 21 quasi-legislative powers, this "contracting out" provision was intended as a solution to the earlier problem of states' inconsistent subscriptions to various laws under the treaty system.[99]

Despite the hopes for "energetic and efficient use of international law by [the] WHO for infectious disease control," the WHO historically has not been aggressive in using international law to pursue global health measures and has not used the full extent of its authority under the WHO Constitution.[100] Its power to promulgate regulations is limited, unlike its power to adopt treaties or conventions, which extends to any matter within the WHO's functions.[101] The WHO's quasi-legislative powers "thus [have] circumscribed ability to support a broad attack against infectious diseases."[102] Before the revision of the IHR in 2005, the WHO's power to issue binding regulations had only been exercised twice: once to promulgate the original IHR in 1969 and once on nomenclature issues.[103] Thus, instead of exercising its power to promulgate regulations, the WHO's general practice has been to issue nonbinding recommendations.[104] The goal of achieving regulations that would keep up with change in the scientific and technological

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99. FIDLER, *supra* note 82, at 59–60. Article 19 gives the WHA authority "to adopt conventions or agreements with respect to any matter within the competence of the Organization." WHO Constitution, *supra* note 89, art. 19; FIDLER, *supra* note 82, at 60.

100. FIDLER, *supra* note 82, at 60. Specifically, the WHO has not made extensive use of its Article 19 quasi-legislative powers. *Id.*

101. *Id.*; WHO Constitution, *supra* note 89, art. 19; *cf.* WHO Constitution, *supra* note 89, art. 21 (listing specific areas for WHA regulation). "The Health Assembly shall have authority to adopt regulations concerning: (a) sanitary and quarantine requirements and other procedures designed to prevent the international spread of disease; (b) nomenclatures with respect to diseases, causes of death and public health practices; (c) standards with respect to diagnostic procedures for international use; (d) standards with respect to the safety, purity and potency of biological, pharmaceutical and similar products moving in international commerce; [and] (e) advertising and labeling of biological, pharmaceutical and similar products moving in international commerce." WHO Constitution, *supra* note 89, art. 21.

102. FIDLER, *supra* note 82, at 60.

103. *Id.*; Michael G. Baker & David P. Fidler, *Global Public Health Surveillance Under New International Health Regulations*, 12 EMERGING INFECTIOUS DISEASES 1058, 1058 (2006).

104. FIDLER, *supra* note 82, at 61.

fields has also been somewhat deterred by the contracting-out provision, under which states can opt out of substantial legal obligations.[105]

Thus, "the [1969] IHR are based on authority in the WHO Constitution that contains tensions."[106] States unwilling to obligate themselves to particular IHR provisions can fairly easily escape liability via the contracting-out provision, and "measures cannot be adopted quickly enough to meet the health requirements of the moment."[107]

International law in general has existed in an anarchical state since the European powers signed the Westphalian Treaty in the 19th century.[108] The system has been primarily anarchical since that time because states are the main actors; there is no "common, supreme authority" to which all nation-states are compulsorily subject.[109] This condition has also dominated the international public health system since the 19th century and is reflected in some of the insufficiencies of the IHR; states may come together to cooperate, but the lack of accountability and the ability to opt out of unwanted obligations prevent uniform execution or enforcement of the provisions.[110]

105. *Id.*

106. *Id.*

107. *Id.* (quoting the legal counsel for the WHO in 1989).

108. David Fidler, *SARS: Political Pathology of the First Post-Westphalian Pathogen*, 31 J.L. MED. & ETHICS 485, 486 (2003).

109. *Id.*

110. *Id.* at 487–88.

III. POSSIBLE CHANGES TO DOMESTIC LAW

A. Civil Liberties Implications of Domestic Law

1. Prolonged Detention of Tuberculosis Patients

Another recent tuberculosis case has brought into particularly sharp focus the civil liberties concerns that have been raised in the context of the Speaker incident. Discussion similar to that concerning Andrew Speaker's travels surrounded another recent controversial MDR-TB patient, Robert Daniels.[111] Daniels was detained in an Arizona hospital jail ward for almost one year for failing to wear a mask in public after he was diagnosed with drug-resistant tuberculosis.[112] Unlike most tuberculosis patients, who are confined in medical isolation facilities, Daniels was detained in a Phoenix hospital's jail ward that had been outfitted for quarantine purposes.[113] For almost a year, he was kept under video surveillance and denied access to visitors, telephones, television, or showers, amenities typically afforded the inmates at the prison.[114]

Daniels petitioned for an improvement in his living conditions in the state superior court, but the petition failed.[115] Attorneys from the American Civil Liberties Union eventually took up his case and filed a federal lawsuit claiming Daniels had been deprived of liberty without due process, a violation of his Fourteenth Amendment rights.[116] Proceedings were suspended when county health officials agreed to transfer Daniels to the National Jewish Medical Center in Denver, the same facility

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111. *See* Op-Ed., *Highly Infectious People: A Case for Human Quarantine*, ARIZ. REPUBLIC, July 18, 2007, at B4 (comparing the treatment received by Speaker and the treatment received by Daniels while the two were in detention).

112. Dennis Wagner, *County Violated Rights, Law, ACLU Says*, ARIZ. REPUBLIC, May 31, 2007, at B1 [hereinafter Wagner I].

113. *Highly Infectious People*, *supra* note 111.

114. Dennis Wagner, *Once-Quarantined TB Patient Returns to Moscow*, ARIZ. REPUBLIC, Oct. 9, 2007, at B8 [hereinafter Wagner II].

115. *Id.*

116. Press Release, Am. Civil Liberties Union, ACLU of Arizona Sues County Officials Over Inhumane Confinement of TB Patient, (May 31, 2007), *available at* http://www.aclu.org/privacy/gen/29941prs20070531.html.

where Speaker was treated.[117] After Daniels' treatment, however, he was returned to Phoenix and ordered to submit to monitoring by the county for eighteen months, which included the possibility of wearing a tracking device on his ankle.[118] Before he could be returned to Arizona, however, Daniels fled the country, returning to his family in Russia.[119]

2. The CDC's Proposed Rule

The above example and the Speaker case illustrate the difficulty of balancing protection of public health with protection of individual civil liberties. Attempts to find the appropriate balance include changes to some of the existing statutes and regulations dictating procedures to follow in responding to a potential public health threat.[120] The proposed changes to the CDC regulations have generated considerable debate, particularly concerning the civil liberties issues.[121]

In 2005, the CDC proposed amendments to the regulations governing quarantine and isolation in order to improve reaction to disease threats and strengthen security at points of entry.[122] The amendments were proposed in response to the SARS outbreak in 2003, during which "the agency experienced difficulties locating and contacting airline passengers who might have been exposed to the SARS virus during their travels."[123] The amendments would be the first update to the regulations in twenty-five years.[124]

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117. Wagner II, *supra* note 114; *Highly Infectious People*, *supra* note 111.

118. Wagner II, *supra* note 114.

119. *Id.*

120. *See, e.g.*, Comments on DHHS, Control of Communicable Diseases, 70 Fed. Reg. 71892 (proposed Nov. 30, 2005) submitted by Wendy K. Mariner et al., New England Coal. for Law & Pub. Health 2 (Feb. 3, 2006) [hereinafter NECLPH comments], *available at* http://www.cdc.gov/ncidod/dq/nprm/comments/2006Feb3_NECLPH.pdf (explaining that the purpose behind the proposed regulations is a more effective response to potential public health threats).

121. *Id.*

122. *Hearing*, *supra* note 8, at 7.

123. SWENDIMAN & JONES, *supra* note 2, at 3.

124. *Hearing*, *supra* note 8, at 7.

The proposal mainly addresses the release of travelers' information and the due process afforded to individuals before a quarantine or isolation order may be served or enforced.[125] Specifically, the amendments require airlines to collect and keep information on crew and passengers for up to sixty days after the conclusion of a flight and to report the information to the CDC upon request.[126] The amendments would also require passengers to report certain information that is currently not required, or that is only intermittently required.[127] This information includes crew members' and passengers' phone numbers, e-mail addresses, returning flight information, emergency contact information, and the identities of traveling companions.[128] The amendments also expand the definition of an "ill person" to include the signs or symptoms of quarantinable diseases.[129] Because airline crews are required to report to the CDC any "ill persons" under the regulations, the expanded definition broadens the scope of crews' reporting requirements.[130] The amendment is purposely over-inclusive to ensure that any potential disease threat is reported for the CDC's consideration.[131]

The amendments also more explicitly outline due process procedures for individuals who may need to be isolated or quarantined.[132] The procedures permit isolation for three business days after service of a quarantine order to administer tests and take samples to determine whether an individual is infected.[133] This provision is in contrast to the current regulations, which allow detaining an individual only when "the risk of transmission of infection [is considered] to be

125. *Id.*

126. Control of Communicable Diseases, 70 Fed. Reg. 71892, 71899 (proposed NOV. 30, 2005) (to be codified at 42 C.F.R. pts. 70 & 71), *available at* http://www.cdc.gov/ncidod/dq/nprm/docs/42CFR70_ 71.pdf [hereinafter CDC Proposal].

127. *Id.*

128. *Id.*

129. *Id.* at 71896.

130. *Id.*

131. *Id.* at 71896–97.

132. *Id.* at 71895–96.

133. *Id.*

exceptionally serious."[134] During this three-day period, little may be brought to court for review because the factual and scientific evidence on which an order is based is still being gathered.[135] If tests indicate a need for further quarantine, the individual will be separated for no longer than the incubation period of the disease.[136] The regulation amendments provide for filing a writ of habeas corpus for judicial review of the legal and constitutional bases of the individual's detention.[137] A quarantined individual may also request an administrative hearing for the review of the factual and scientific grounds upon which he is held.[138] The administrative hearing is meant to comply with due process requirements, including allowing the petitioner access to a representative for the hearing.[139]

The CDC proposal was subject to a fifty day comment period, during which a number of organizations submitted comments and criticisms of the amendments.[140] Civil rights advocates have criticized the proposal for violating due process protections under the Fifth Amendment and for opening the door for abuse or inappropriate administration.[141] Critics cite cases holding that quarantine and isolation are deprivations of liberty for which the government must afford due process and "illness alone does not justify detention."[142] They argue any

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134. NECLPH comments, *supra* note 120, at 4 (quoting 42 C.F.R. § 71.33 (1985)).

135. CDC Proposal, *supra* note 126, at 71895–96.

136. *Id.* at 71896. The incubation period of a disease is measured from the time of infection to the time a patient begins to exhibit disease symptoms. MedicineNet, Definition of Incubation Period, http://www.medterms.com/script/main/art.asp?articlekey=18956 (last visited Nov. 1, 2008).

137. CDC Proposal, *supra* note 126, at 71896.

138. *Id.*

139. *Id.*

140. CDC Proposal, *supra* note 126, at 71892; *see, e.g.*, Letter from Barry Steinhardt, Director, Tech. & Liberty Program, ACLU, & Christopher Calabrese, Counsel, Tech. & Liberty Program, ACLU, to the Centers for Disease Control and Prevention (Mar. 1, 2006), *available at* http://www.cdc.gov/ncidod/dq/nprm/comments/2006Mar1_ACLU.pdf (opposing the CDC's proposed rules for quarantining travelers); NECLPH comments, *supra* note 120 (also opposing the proposed rules).

141. *See* NECLPH comments, *supra* note 120, at 6–7, 14 (noting concern over the possibility of officials detaining persons with relatively minor ailments).

142. *Id.* at 2 (citing Addington v. Texas, 441 U.S. 418 (1979); O'Connor v. Donaldson, 422 U.S. 563 (1975)).

public health regulation that deprives an individual of liberty meets due process requirements only if it "requires evidence of both the presence of a serious contagious disease and the probability that the person will actually infect others if not involuntarily confined."[143] Under this standard, the proposal fails because it allows an initial three-business-day detention period before health officials determine whether the detainee is a disease threat.[144] The proposed regulations also fail because they do not provide for containment of the threat by less restrictive means before resorting to physical detention and they do not entitle the detained individual to counsel.[145]

Critics of the proposal cite cases under which the amendments appear to fail, but the overwhelming trend in public health cases has been to grant the government a broad scope within which to act in responding to public health threats.[146] At the same time, however, extreme cases such as Robert Daniels' illustrate the need for a check on the government's discretion to detain sick individuals, even when potential risk to the public has been demonstrated.[147] While "illness alone" is certainly insufficient grounds for detention, the CDC amendments arguably provide a sufficient check on potential abuse of the power accorded governments under the amendments.[148] As the comments to the regulations note, the factual or scientific basis for a quarantine order is usually difficult to obtain without first exercising custody over the individual (assuming, of course, the individual is uncooperative and is unwilling to allow testing to determine the seriousness of his condition).[149] The three-business-day testing period is not an

143. *Id.* at 3.

144. *See id.* at 3–4 (stating concern over regulations allowing for quarantine of individuals who are incapable of transmitting disease).

145. *Id.* at 4–5. They only entitle an individual to a "representative." CDC Proposal, *supra* note 126, at 17934.

146. *See*, *e.g.*, Jacobson v. Massachusetts, 197 U.S. 11, 25 (1905); Middlebrooks v. State Bd. of Health, 70 So. 2d 891, 892–93 (Ala. 1998); People v. Adams, 597 N.E.2d 574, 579 (Ill. 1992).

147. *See Highly Infectious People*, *supra* note 111 (arguing for humane detainment of patients such as Robert Daniels).

148. *See generally* CDC proposal, *supra* note 126.

149. *Id.* at 71902.

unreasonable period to detain an individual for the purpose of running tests and taking samples; courts have permitted far more intrusive measures to be taken against uncooperative individuals in the interest of public health.[150]

Furthermore, if carried out responsibly, the administrative and judicial review provisions of the CDC proposal provide, for the most part, sufficient opportunity for erroneous or wrongful detention to be exposed and terminated. The seriousness of the Daniels case arguably was the result of insufficient access to judicial review or insufficient implementation of judicial review provisions already in place.[151] The CDC amendments' provision for administrative review of the scientific and factual bases of a quarantine order is probably sufficient to prevent detaining individuals based on error or abuse of discretion; however, some form of appeal of the administrative decision should probably be implemented as well to ensure accuracy of a quarantine order that can potentially detain an individual for months. Along that line, the CDC regulations should specifically provide for access to the administrative review board at designated intervals throughout the individual's detention if it is determined he is infected with a quarantinable disease and is therefore subject to detention spanning the disease's incubation period. This repeated access is necessary for two reasons: first, because the factual and scientific bases of an individual's detention change as the infection changes and develops; and second, because initial determination of a person's condition may not be accurate, as illustrated in the Speaker and Daniels cases.[152] More frequent access to administrative and, if necessary,

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150. *See, e.g.*, *Jacobson*, 197 U.S. at 12 (upholding the state statute requiring smallpox vaccinations for all persons and authorizing vaccinations by force if unwanted); *Middlebrooks*, 70 So. 2d at 892–93 (approving state law requiring disclosure of HIV status by infected persons to state representatives); *Adams*, 597 N.E.2d at 582–83 (upholding state law requiring HIV testing of persons convicted of prostitution).

151. *See Highly Infectious People*, *supra* note 111.

152. *See Introduction* to QUARANTINE STATIONS AT PORTS OF ENTRY: PROTECTING THE PUBLIC'S HEALTH 14, 25 (Laura B. Sivitz, Kathleen Stratton & Georges C. Benjamin eds., 2005) (pointing out that the effects of an infection are bound to change beginning at the presymptomatic period). Both Speaker and Daniels were at one point diagnosed with XDR-TB. Physicians later found these diagnoses were erroneous; both actually had MDR-TB. *See supra* Parts I.A, III.A.1; Wagner I, *supra* note 112.

judicial review of an individual's detention can prevent prolonged, unnecessary detention such as Daniels' while providing the means to detain individuals posing legitimate health risks, such as Speaker.

B. Expanding the CDC's Power to Reach Individuals Traveling Overseas

As much as the CDC's proposed amendments represent a potential step in closing the U.S. quarantine gap, they do not address a particular shortcoming in federal law that was brought into focus in the Speaker incident: the lack of federal power to prevent infected individuals from leaving the United States.[153] As previously discussed, the federal government's authority to detain potential disease threats focuses mainly on the entrance of infected individuals into the United States and, to a lesser degree, on the interstate movement of individuals.[154] Indeed, one of the explanations for the Speaker incident cited by CDC Director Julie Gerberding in her testimony before Congress was the CDC's lack of authority to actually prevent Speaker from traveling overseas under current federal law.[155] Along with the amendments to the CDC quarantine regulations, changes should also be made to Title 42 of the U.S. Code to give the CDC authority to detain infectious patients before they leave the country.[156]

153. Palmer, *supra* note 2.

154. *See supra* text accompanying notes 69–71.

155. Palmer, *supra* note 2.

156. *See id.* (suggesting that changes are needed to 42 U.S.C. § 264 to provide detaining authority to the CDC).

IV. THE CIVIL LIBERTIES DEBATE IN EUROPE

A. TB Control Measures in the European Union and the European Convention for the Protection of Human Rights

European countries likewise face the challenge of balancing effective containment with civil rights protections.[157] Each country has its own framework for civil rights protections, and the European Convention for the Protection of Human Rights and Fundamental Freedoms (ECHR) is an additional, broader source of guidelines for states that are members to the Convention.[158] The ECHR provides individuals a forum in the European Court of Human Rights to bring a claim against a member state for violation of a right protected by the Convention.[159] The Court's decisions are legally binding, and the Court may award damages.[160] Other significant provisions of the ECHR include Article 5, which provides for protection of the right to liberty against exercises of public power, including the public health power.[161] Article 8 protects the right to private and family life, and Article 6 protects the right to a fair trial.[162]

Tuberculosis control measures vary between states across Europe.[163] A survey of fourteen countries' legal compulsory measures found varying uses of the general methods of containment; for example, eight states sanction detention, usually requiring a court order to authorize detention, and five states allow compulsory treatment of tuberculosis.[164] Detention

157. Coker et al., *supra* note 6, at 610.

158. *Id.* at 610–11.

159. Fed. Dep't of Foreign Affs., *Switzerland and the European Convention on Human Rights*, http://www.eda.admin.ch/eda/en/home/topics/eu/euroc/coeuhr.html (last visited Nov. 1, 2008).

160. European Court of Human Rights, How the Execution of Judgments Works, http://www.echr.coe.int/ECHR/EN/Header/The+Court/Execution/How+the+execution+of+judgments+works/ (last visited Nov. 1, 2008); Convention for the Protection of Human Rights and Fundamental Freedoms art. 53, Nov. 4, 1950, 213 U.N.T.S. 222, 248 [hereinafter ECHR].

161. ECHR, *supra* note 160, art. 5.

162. *Id.* arts. 6, 8.

163. Coker et al., *supra* note 6, at 610–11.

164. *Id.*

authority is not limited to infectious cases; in some countries, it may be authorized upon a patient's refusal of treatment, regardless of the risk of contagiousness.[165] In England and Wales, the current tuberculosis control law is limited to patients with tuberculosis "in the infectious state."[166] Possible shortcomings in the current tuberculosis control statutes in England and Wales include a lack of uniformity in procedures for reviewing cases, a lack of limits on the length of detention, and the lack of automatic rights to legal representation.[167]

B. Enhorn v. Sweden and its Implications

The insufficiencies in English law, particularly clear under the application of the ECHR, are not uncommon among European nations.[168] In the 2005 case of *Enhorn v. Sweden*, the European Court of Human Rights held in favor of an individual who challenged Sweden's detention of him for being HIV positive.[169] Noting the lack of case law concerning challenges to disease-related detention, the Court set forth some general principles that may serve as guideposts not only for future decisions on the matter but also for possible amendments to the more far-reaching laws of some EU countries.[170] Citing articles 5 and 8 of the ECHR, the Court required that infringements of the rights to liberty, private life, and family life be proportionate to the public health threat posed by the individual, similar to the U.S.'s rational relationship test for the exercise of police powers applied in the United States.[171] The Court also required an "absence of arbitrariness," which could be satisfied only if it could be shown that less restrictive control measures were considered and found inadequate.[172] The Court also put forth an

165. *Id.* at 610.
166. *Id.*
167. *See id.* (describing various shortcomings in tuberculosis control statutes).
168. *Id.*
169. *Id.*
170. *Id.*
171. *Id.* at 610–11.
172. *Id.*

interpretation of Article 6, stating that detention without opportunities for defense, review, and appeal violated the right to a fair trial.[173]

Although *Enhorn* was the only public health case in recent years to reach the European Court of Human Rights, the Swedish containment measures were not unlike many of those in other European community states.[174] The Court's holding and the broader principles it discussed concerning the scope of public health powers under the ECHR indicate that the current detention measures in many European countries would be found insufficient under the relevant human rights provisions.[175] However, it is unclear how some of the tuberculosis control measures previously discussed would be construed under the *Enhorn* ruling; arguably, the rights of an individual detained for being HIV positive should be more heavily weighted than rights of individuals who are isolated for contracting tuberculosis, because tuberculosis is more easily communicated than HIV.[176] Nonetheless, some provisions are more likely suspect under the *Enhorn* court's interpretation of the ECHR articles; for example, the lack of uniform review measures in England and Wales would probably fail under the Court's interpretation of a fair trial, including opportunities for defense, review, and appeal.[177] Many of the other EU states' tuberculosis control measures would probably also need to include provisions requiring less restrictive measures to be used first before resorting to detention, and requiring a rational basis between the detention and public safety if the control measures do not already contain such provisions.

173. *Id.* at 611.

174. *See id.* (indicating that, following *Enhorn*, similar grounds could be used to challenge comparable containment measures in other states).

175. *Id.* at 611.

176. *Id.* at 610.

177. *Id.* at 610–11.

V. INTERNATIONAL LAW IMPLICATIONS OF THE NATIONAL QUARANTINE SYSTEM EXPANSION

The U.S. system likewise probably requires updating in order for it to meet the standard of the international obligations set forth in treaties to which the United States is a party.[178] Particularly, plans to expand the National Quarantine System should take into account the IHR, which were newly revised in 2005 and officially went into effect in 2007.[179]

A. The National Quarantine System

Under its quarantine powers established in the Public Health Service Act, the U.S. federal government established several quarantine stations located in various American ports of entry.[180] These quarantine stations form the core of the National Quarantine System (NQS), which also consists of medical response facilities, other federal government agencies, and airline and shipping carriers.[181] The quarantine stations mainly function to prevent disease threats from entering the United States.[182] Management authority was delegated to the CDC's Division of Global Migration and Quarantine (DGMQ).[183] The main functions of the quarantine stations are: "(1) [i]dentification of ill passengers and crew[;] (2) [r]esponding to reports of ill passengers[;] (3) [a]ssuring immigrant and refugee health[; and] (4) [i]nspection of animals, animal products,

178. *See, e.g.*, David P. Fidler, International Legal Considerations for the Quarantine Station Expansion, *in* QUARANTINE STATIONS AT PORTS OF ENTRY: PROTECTING THE PUBLIC'S HEALTH 199, 207 (Laura B. Sivitz, Kathleen Stratton & Georges C. Benjamin eds., 2005) [hereinafter Fidler I].

179. *Id.* at 200.

180. CTRS. FOR DISEASE CONTROL & PREVENTION, U.S. DEPT. OF HEALTH & HUMAN SERVS., U.S. QUARANTINE STATIONS FACT SHEET 1 (2007), http://www.cdc.gov/NCIDOD/DQ/resources/Quarantine_Stations_Fact_Sheet_current.pdf [hereinafter QUARANTINE STATIONS FACT SHEET].

181. COMM. ON MEASURES TO ENHANCE THE EFFECTIVENESS OF THE CDC QUARANTINE EXPANSION PLAN FOR U.S. PORTS OF ENTRY, INST. OF MED. OF THE NAT'L ACADS., QUARANTINE STATIONS AT PORTS OF ENTRY: PROTECTING THE PUBLIC'S HEALTH 36, 38 (Laura B. Sivitz, Kathleen Stratton & Georges C. Benjamin eds., 2005) [hereinafter QUARANTINE STATIONS AT PORTS OF ENTRY].

182. *Id.* at 36–37.

183. QUARANTINE STATIONS FACT SHEET, *supra* note 180, at 1.

etiologic agents, hosts, and vectors."[184] Under 42 C.F.R. §§ 70–71, if quarantine station staff reasonably believe an individual attempting to enter the country is carrying a communicable disease of public health significance, the staff is authorized to detain, medically examine, and conditionally release them.[185]

At its most extensive point, the NQS consisted of fifty-five quarantine stations.[186] But the belief that infectious disease was on the decline, and no longer posed the threat it once did, led to the significant downsizing of the system to only eight stations in the 1970s.[187] The threat of bioterrorism and the resurgence of infectious diseases such as SARS led the CDC to increase the number of quarantine stations since 2001 to the twenty currently in operation.[188]

Although the increase in the number of quarantine stations illustrates recognition of the need for increased screening at ports of entry, the extent of the stations' effectiveness remains limited because a person may carry a communicable disease without exhibiting symptoms sufficient to establish reasonable belief that he is a carrier.[189] Inspectors generally look for signs including "rash, unusually flushed or pale complexion, jaundice, shivering, profuse sweating, diarrhea, and inability to walk without assistance"; however, as in Speaker's case, infectious disease microbes may be present but not manifested as observable symptoms.[190] As a result, only a percentage of possible disease carriers have the potential to be screened at the stations.[191] In response, the WHO has advised the CDC that "[a]lthough the health benefit of screening travelers coming from areas affected by serious communicable disease remains unproved, WHO recommends that it be permitted (but not

184. QUARANTINE STATIONS AT PORTS OF ENTRY, *supra* note 181, at 36.

185. *Id.* at 37.

186. QUARANTINE STATIONS FACT SHEET, *supra* note 180, at 1.

187. *Id.*

188. *Id.*

189. *Introduction*, *supra* note 152, at 25. Refugees and out-of-country permanent resident applicants undergo medical screening prior to entering the country in order to qualify for refugee entry or an immigrant visa. *Id.* at 26.

190. QUARANTINE STATIONS AT PORTS OF ENTRY, *supra* note 181, at 42; *see supra* Part I.A. (discussing the Speaker case).

191. *Introduction*, *supra* note 152, at 25.

encouraged) before and during an influenza pandemic 'for political reasons, to promote public confidence.'"[192] Flights from certain areas of the world with higher incidences of infectious disease are prioritized for inspection.[193] As of 2005, flights ranked highest priority for inspection were those arriving from Africa and Southeast Asia.[194] Reports of investigations in 2005 found that few ship masters or airline pilots actually report sick passengers to quarantine officials prior to arrival, as they are required to do under the C.F.R.[195] Because quarantine stations are located at only a fraction of U.S. ports of entry, Customs and Border Patrol (CBP) staff, which are located at every port of entry, act as surrogates for CDC quarantine stations, carrying out some of the inspection duties.[196] However, the CBP's contribution to the disease-screening effort is also severely limited because the inspection duties are in addition to CBP's primary responsibilities and are not the primary function for which the staff was trained.[197]

B. Implications under the International Health Regulations

The federal government's plan to expand the NQS has international law implications because the expansion may include "forward deploy[ment of] public health assets to foreign ports and countries."[198] Any such deployment of U.S. personnel to carry out public health functions in other countries must comply with the U.S.'s various international obligations.[199] Some of these obligations arise under the IHR, newly revised in 2005.[200] This section will address the implications for the proposed NQS expansion that the new IHR creates.

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192. *Id.*

193. QUARANTINE STATIONS AT PORTS OF ENTRY, *supra* note 181, at 42.

194. *Id.*

195. *Id.* at 43; *see also* 42 CFR § 72.21 (2007) (requiring "[t]he master of a ship destined for a U.S. port" and "[t]he commander of an aircraft destined for a U.S. airport" to immediately report any death or ill person to the nearest quarantine station).

196. QUARANTINE STATIONS AT PORTS OF ENTRY, *supra* note 181, at 44.

197. *Id.* at 47–48.

198. Fidler I, *supra* note 178, at 203.

199. *Id.* at 201–03.

200. *Id.* at 202–03.

One of the most significant changes to the IHR is the revision of the definition of "disease" to include biological and chemical threats in addition to the traditional communicable diseases.[201] Because the NQS expansion primarily contemplates only threats posed by naturally-occurring infectious disease, the proposed plan may be insufficient to meet the legal obligations under the IHR's expanded scope.[202]

Article 4 of the new IHR requires states parties to establish a national "focal point" for contact in public health emergencies.[203] The NQS expansion would need to incorporate such a contact point into its plan to meet this requirement, a significant "organizational and administrative challenge" because of the networking involved.[204]

The revised IHR also significantly expand the scope of the notification requirements.[205] In addition to notifying the WHO of the outbreak of specific diseases (smallpox, polio, certain influenzas, and SARS), state parties must also report "all events which may constitute a public health emergency of international concern" within their territories.[206] Situations such as Speaker's would be included in the scope of the IHR's expanded reporting requirements.[207]

Articles 9 and 10 of the revised IHR increase the role the NQS would play in cooperating with the WHO to survey and verify information.[208] Article 9 allows the WHO to collect and use epidemiological information from nongovernment sources in

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201. *Id.* at 203–04; WORLD HEALTH ORG., INTERNATIONAL HEALTH REGULATIONS 7 (2005). Article 1.1 of the IHR defines disease as "an illness or medical condition, irrespective of origin or source, that presents or could present significant harm to humans." WORLD HEALTH ORG., *supra*.

202. Fidler I, *supra* note 178, at 204.

203. *Id.* at 205.

204. *Id.* at 205, 236.

205. *Id.* at 205.

206. WORLD HEALTH ORG., *supra* note 201, at 12; Fidler I, *supra* note 178, at 205.

207. *See* Fidler I, *supra* note 178, at 205 (noting that the revised IHR require countries to report any event "which may constitute a public health emergency of international concern"). Although the revised IHR did not officially become effective until almost two months after the Speaker incident, the CDC did notify the WHO of the situation in accordance with article 6. Fidler et al., *supra* note 7, at 617.

208. Fidler I, *supra* note 178, at 206–07.

addition to the previously-allowed government sources, increasing the amount of information states parties may be called upon to verify under Article 10.[209] Article 11 also allows the WHO to disseminate the information it collects to state parties, increasing the amount of information the NQS is required to assess.[210]

The revisions to the IHR thus impose a number of additional obligations upon state parties, primarily in recognition of the changing disease environment and the need for states' efforts to be more cooperative.[211] Expansion of the National Quarantine System therefore needs to incorporate this more current and collaborative approach in order to be in compliance with the IHR.

VI. THE CONSTITUTIONALIZATION OF GLOBAL HEALTH GOVERNANCE

The updated principles reflected in the revised IHR and the need for their incorporation into the NQS may be seen as part of the trend towards the "constitutionalization" of public health on a global level, the patterning of international public health after features of the public health systems in countries having a federal structure of government.[212] Although civil liberties issues continue to create tension in the U.S. public health system, for the most part the increasing involvement of the federal government in the public health sphere has been effective in, and necessary for, responding to 21st century disease threats.[213] As the volume and speed of travel increased, state regulation alone became insufficient as it became rarer for disease threats to be localized within state boundaries.[214] Particularly, the "federalization" of public health governance

209. *Id.* at 206.

210. *Id.* at 206–07.

211. *Id.* at 203–06.

212. David P. Fidler, *Constitutional Outlines of Public Health's "New World Order"*, 77 TEMP. L. REV. 247, 272–74 (2004) [hereinafter Fidler II].

213. *Id.* at 252, 255.

214. *See id.* at 272–73 (stating that the allocation of public health governance across countries is, on an international level, "ill-suited" for the disease threats of the 21st century).

domestically was necessary in order to respond to growing health-related national security issues, protect individual rights, and support states' public health efforts.[215] One of the primary means by which the federal government has exercised its increasing role in public health is the commerce power.[216]

A similar trend towards centralization or federalization of power can be observed in the global public health governance system.[217] Historically, the nature of global health governance has been anarchic due to lack of a centralized government comparable to that of U.S. federal system.[218] However, since the SARS and pandemic influenza epidemics in the early 2000s, global health governance has taken on features similar to those in the constitutional system of a nation with a federal system of powers, such as the United States.[219] For example, the WHO's new use of tools, such as travel warnings and expanded surveillance, places the WHO in a position comparable to a federal government exercising its interstate commerce power to regulate public health.[220]

Indeed, examining the evolution of global health governance towards a federal or federal-like structure may provide insight into possible future improvements of international health law and the tendency of states to behave independently; the U.S.'s constitutional hierarchy may provide a "template [for the global

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215. *Id.* at 272–74. The federal government's increasing role is evidenced by the expanding role of the CDC and the proposed amendments to the federal quarantine regulations. Palmer, *supra* note 2. This centralization of power has also been referred to as the vertical allocation of public health power. Fidler II, *supra* note 212, at 272–73.

216. *See* Fidler II, *supra* note 212, at 277.

217. *Id.* at 272–74.

218. *See supra* text accompanying notes 108–10.

219. *See* Fidler II, *supra* note 212, at 252, 272–74 (stating that a horizontal allocation of public health sovereignty is insufficient for responding to 21st century events and that the Constitution provides a clear framework for vertical reallocation of power).

220. *See* Charles Piller, *In SARS Aftermath, the WHO's in Charge*, L.A. TIMES, July 13, 2003, at A1 (discussing the travel warnings issued by the WHO after the SARS outbreak and the new efficacious position and police power the WHO obtained from those actions).

community to handle] new challenges."[221] This section will discuss global developments in three areas—security, human rights, and public health—that are analogous to the developments leading to the increased role of the U.S. federal government in public health.[222] This section will also explore how the use of the "global commerce power" to regulate public health has progressed in a manner similar to the federalization of the public health power in the United States. The constitutional-like structure taking shape in global public health governance provides a possible framework for future improvement of the anarchic international health system; strengthening global efforts in security, human rights, and public health, and continuing the use of the global commerce power are possible ways to improve the international system.[223]

A. Security Concerns

At the domestic level, part of the federalization trend in public health resulted from the recharacterization of public health as a national security issue.[224] This recharacterization was in response to three main threats: (1) the threat of bioterrorism, particularly after the September 11th attacks; (2) naturally occurring infectious diseases, such as Speaker's XDR/MDR-TB, particularly following the SARS and pandemic influenza outbreaks; and (3) the ability of infectious disease epidemics, such as HIV/AIDS in Africa, to destabilize certain regions of the world and thereby jeopardize U.S. foreign policy interests.[225] Public health as a global security concern has likewise resulted in some verticalization of international public health power in recent years.[226] One example is the revision of the IHR in 2005 to include not only traditional infectious disease threats in its notification requirements, but also all "public

221. *See* Fidler II, *supra* note 212, at 274 (discussing the lack of vertical allocation in international law and the use of a constitutional framework to improve the "networked anarchy" between states).

222. *See id.* at 275.

223. *Id.* at 274–79.

224. *Id.* at 275.

225. *Id.* at 252–53.

226. *Id.* at 275.

health emergenc[ies] of international concern" occurring in the territory of member states, "irrespective of cause, including those associated with the accidental, natural, or suspected intentional release of pathogens, chemical or radionuclear materials."[227] The revision also includes biological, chemical, or radionuclear sources in its definition of causes of disease, recognizing the new threat posed by bioterrorism and weapons of mass destruction.[228]

The emerging global security function is also evident in increased international cooperation resulting from the threat posed by bioterrorism and evolving diseases.[229] The United States has emphasized the importance of the WHO's surveillance capabilities in its own response to bioterrorist attacks and has joined members of the G-7 and Mexico in the Global Health Security Initiative, "which focuses on both intentional and naturally occurring infectious disease threats."[230]

Global health efforts have also addressed the third security threat, the destabilizing effect of infectious disease epidemics on states and interstate relations.[231] In 2000, the United Nations Security Council for the first time characterized the HIV/AIDS epidemic as "a threat to international peace and security."[232] The WHO began a major global health effort, the "'3 by 5' Initiative," with the goal of "[providing] access to antiretroviral treatment to three million people living with HIV/AIDS in developing countries by 2005."[233]

Just as the threats of bioterrorism, mutated infectious disease, and overseas pandemics posed threats to U.S. security that transcended state borders and increased federal action in

227. *Id.* at 275 (quoting World Health Org., *International Health Regulations: Working Paper for Regional Consultations* 2–3 (Intergovernmental Working Group on the Revision of the Int'l Health Regulations, Paper No. 12.2003, 2004), *available at* http://www.publichealthlaw.net/Reader/docs/IHR.pdf); WORLD HEALTH ORG., *supra* note 201, arts. 6–7.

228. Fidler II, *supra* note 212, at 275 n.97, 276.

229. *Id.* at 276.

230. *Id.*

231. *Id.*

232. *Id.*

233. *Id.* at 276 n.103.

the public health sphere, the same threats transcend nation-state borders and have spurred global cooperation.[234] Increasing these cooperative efforts is one way to close some of the gaps in the international health system that result from disjointed and uncoordinated actions taken by individual nation-states.

B. Human Rights Protection

At the domestic level, the federalization of public health was also a function of the federal government's role in protecting individual rights against infringement by state governments through the protections of the federal Constitution.[235] Since its inception after World War II, the WHO goals have had a human rights emphasis, evidenced by the postwar "Health for All" campaign.[236] But a global function similar to the U.S. health-related civil rights protections has particularly developed since the 1980s, "largely driven by the human rights strategy adopted to combat HIV/AIDS."[237] The HIV/AIDS pandemic highlighted the function of civil and political rights protection in public health policy.[238] The threat of bioterrorism and instances such as Andrew Speaker's also raised the issue of the resurrected need for quarantine and isolation and the accompanying individual rights concerns.[239]

C. Public Health Preparedness and Response

Historically, the federal government's role in public health preparedness and response was to provide support and resources for state-level measures.[240] However, as the federal

234. *See id.* at 276 (stating that national security concerns have caused governments to understand the "need for international cooperation and global support").

235. *Id.* at 255.

236. *Id.* at 282. "The right to health has received renewed attention in recent years, as evidenced by the United Nations' issuance of General Comment No. 14 on the right to health and appointment of a Special Rapporteur on the Right to Health." *Id.* at 282–83.

237. *Id.* at 282.

238. *Id.* at 283.

239. *Id.*

240. *Id.* at 254.

government's national security and Commerce Clause functions expanded, so did its involvement in the policymaking and executing aspects of public health.[241]

Similarly, the traditional role of international health organizations has been to support health preparedness and response efforts by individual states.[242] However, the 1990s and early 2000s witnessed an increasing role of international health organizations in overseeing matters that were previously exclusively state-governed.[243] As at the domestic level, this increasing involvement resulted from the evolution of public health needs beyond the capacity of individual states as a result of changing security, trade, and travel.[244] This expansion is reflected in the revised IHR, which "provides States with direction regarding the minimum core surveillance and response capacities required at the national level in order to successfully implement the global health security, epidemic alert and response strategy."[245]

Other examples of the expansion of international efforts in the realm of public health preparedness and response include the Global Polio Eradication Initiative, the largest public health initiative in the world, and other traditional disease eradication strategies, which have strengthened their efforts.[246] "Public-private partnerships have formed to develop new drugs and vaccines for diseases neglected by private industry and to increase access in developing countries to essential medicines, such as antiretroviral therapies."[247] Private philanthropists, such as the Bill and Melinda Gates Foundation, and the governments of developed countries, such as the United States, have been pouring unprecedented amounts "of money into public

241. *Id.* "Federal leadership on preparedness and response is . . . transforming the traditional distribution of public health power into one in which the federal government plays the more decisive and powerful constitutional role." *Id.*

242. *Id.* at 280.

243. *Id.*

244. *See id.* (discussing sovereign states' need for global help in addressing public health, just as individual states in the U.S. needed help from the federal government).

245. *Id.* at 281 (citing WORLD HEALTH ORG., *supra* note 201).

246. *Id.* at 280 & n.121.

247. *Id.* at 280. One such partnership, the Global Fund, is "an unprecedented effort to redistribute wealth from rich to poor in the name of infectious disease control." *Id.*

health preparedness and response in the developing world."[248] The WHO established the Global Network with the goal of more rapid identification of public health threats and more effective mobilization of national and global resources in response.[249]

D. The Commerce Power

At the domestic level, the public health power of the individual U.S. states is subject to preemption by the federal government's enumerated powers.[250] One of the most expansive federal powers that can preempt state action is the Commerce Clause.[251] Via the Commerce Clause, the federal government has reached into a number of areas traditionally within the realm of state governments, including public health.[252] It is likewise able to limit state public health sovereignty by balancing it against the interests of interstate commerce.[253]

A similar tension between public health interests and commercial interests has long existed in the global arena.[254] For example, the first international conference to discuss public health was convened in part because of the hindrances on trade created by states quarantining merchant ships from other countries.[255] Thus, balancing international trade and commerce with public health concerns was and remains one of the main functions of global health governance and is a strong support for the verticalization of power in the international sphere.[256]

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248. *Id.* at 280–81.

249. *Id.* at 281. Some commentators point to the relatively quick curb on the SARS spread as an illustration of the effectiveness of the Network. *Id.*

250. *See* HALL ET AL., *supra* note 47, at 519.

251. *Id.* at 540.

252. *Id.*

253. *See* Fidler II, *supra* note 212, at 253.

254. *See* FIDLER, *supra* note 82, at 28 (discussing quarantine in the 15th century as a compromise between maritime commerce and disease importation).

255. *Id.*

256. *See* Fidler II, *supra* note 212, at 277–79 (presenting a brief history of the balance between international trade and public health and the WTO's creation of a "global commerce clause"). The goals of the WHO as stated in the IHR remain "[ensuring] the maximum security against the international spread of diseases with a minimum interference with world traffic." FIDLER, *supra* note 82, at 28.

The revolutionary use of travel warnings by the WHO during the SARS outbreak is an important example of the potent ability to affect the international economy through containment of infectious disease.[257] Despite the aura of ineffectiveness that plagued the WHO during the decades after its formation, the early years of the new century witnessed signs of progress in the WHO's operations through its response to the SARS and avian influenza pandemics.[258] The outbreak of SARS in 2003 was the first incident in which the WHO made significant use of its power to issue warnings against travel to infected areas, including China, Taiwan, Hong Kong, and Toronto.[259] This move is credited with helping to halt the disease before it spread any further than it did.[260] The use of travel warnings proved an effective tool against states that otherwise had little legal incentive to cooperate.[261]

One reason for this effectiveness was because the travel warnings alerted the public and stemmed further international travel that would have contributed to the spread of the disease.[262] However, a more significant implication of the travel warning tool is the economic impact on the infected areas. The countries and cities subject to the SARS travel warnings lost billions in trade and tourism, creating a significant incentive for countries to cooperate earlier in the process.[263] The WHO's use of travel warnings during the SARS outbreak has been

257. *See* Piller, *supra* note 220 (discussing the WHO's ability to affect world economies through travel warnings).

258. *See id.*; *see also* Press Release, World Health Org., WHO Reports Some Promising Results on Avian Influenza Vaccines (Feb. 16, 2007), *available at* http://www.who.int/mediacentre/news/notes/2007/np07/en/index.html.

259. Piller, *supra* note 220. The WHO's handling of the SARS epidemic has been called "revolutionary" and an "historical event." *Id.*

260. *Id.*

261. *Id.* Indeed, the insufficiency of reporting and surveillance requirements under the IHR (arguably due to lack of a direct enforcement mechanism) is highlighted by the fact that the nations in which SARS was first detected did little to notify international health authorities and may have actively concealed information. *Id.*; David Bishop, *Lessons from SARS: Why the WHO Must Provide Greater Economic Incentives for Countries to Comply with International Health Regulations*, 36 GEO. J. INT'L L. 1173, 1195, 1197 (2005).

262. Piller, *supra* note 220.

263. *Id.*

described as "[international] 'police' powers for controlling outbreaks that put it above national governments, the traditional guardians of public health."[264] The WHA's approving the WHO to act without prior consent from the governments of affected nations was unprecedented and "[changed] the whole way in which sovereign states exercise their sovereignty in the context of infectious disease."[265] The WHA's authorization for the WHO to issue the warnings without requiring permission from the affected nations' governments is comparable to the U.S. federal government's preemption of state sovereignty in the interest of national concerns.[266] Continued use of the travel warning tool, an important feature of the global commerce power, is a significant way to address the international surveillance and containment problems created by the inability to otherwise enforce or implement IHR provisions under the WHO Constitution.

In addition to economic measures the WHO may take in the interest of public health, "the establishment of the World Trade Organization ('WTO') in 1995 has stimulated . . . the emergence of a 'global commerce clause' in global health governance."[267] Just as individual U.S. state sovereignty to exercise police powers for public health purposes is limited by the federal government's ability to regulate interstate commerce, United Nations member states' sovereignty to pursue their own public health objectives are limited by the trade structure governed by the WTO.[268]

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264. *Id.* (quoting Ray A. Arthus, an infectious disease expert for the CDC).

265. *Id.* (quoting David P. Fidler, a professor of international law). Despite the undeniable power of travel warnings, however, some have argued the tool is a particularly "blunt" one that can unnecessarily devastate the economy of an infected region. *Id.* In particular, Canadian authorities objected to the warning issued against travel to Toronto, which they argue was unnecessary because containment measures had already been taken and the disease was on the decline. *Id.* The economy of Toronto suffered millions of dollars in losses resulting from the SARS outbreak. *The Economic Impact of SARS*, CBC NEWS ONLINE, July 8, 2003, http://www.cbc.ca/news/background/sars/economicimpact.html (last visited Nov. 1, 2008).

266. Piller, *supra* note 220; *see* U.S. CONST. art. VI, cl. 2 (stating that states cannot pass laws contrary to the U.S. Constitution, federal statutes, or U.S. treaties).

267. Fidler II, *supra* note 212, at 277.

268. *Id.* at 278.

The effect of the participation of nonstate actors in the SARS and bird flu pandemics is also credited with the recent transformation in global health governance.[269] Beginning in the mid-1990s, the WHO began exploring global response mechanisms that would reduce its reliance on cooperation from sovereign governments.[270] Some of these mechanisms include proposals to revise the IHR to expand collection of surveillance information from nongovernmental sources.[271] One example of this was the WHO's establishment of the Global Outbreak Alert and Response Network ("Global Network") to facilitate information sharing from nonstate entities.[272] Surveillance and reporting by nonstate actors to the WHO played significant roles in stemming the SARS and avian influenza pandemics.[273] Contributions from nonstate sources in these instances are particularly significant when contrasted against the actions of the governments of states where the outbreaks occurred.[274]

The development of global health governance's functions in security, protection of human rights, and health preparedness and response and the growing use of the "global commerce power" indicate the development of the international framework in a trend similar to the federalization of public health in the United States.[275] As these functions continue to develop, they point to a model for global public health governance that is more cooperative, less subject to the anarchic whims of individual nation-states, and more equipped to meet the challenges of evolving infectious disease threats in an increasingly interconnected global environment. Such a framework will also

269. *Id.* at 266.

270. *Id.*

271. *Id.*

272. *Id.*

273. *Id.* at 267.

274. *Id.* The Chinese government, for example, had been trying to exclusively control information regarding the SARS outbreak that occurred in its territory. *Id.* This control was destroyed by the reporting of the outbreak by nongovernmental sources to the WHO. *Id.* In Thailand and Indonesia, government attempts to cover up the pandemic influenza outbreaks were revealed when cases were reported to the WHO by nongovernment actors. *Id.*

275. *Id.* at 272–74.

need to confront the challenges arising from the increasing federalization of public health power in the United States, such as civil rights concerns.

VII. CONCLUSION

The 2007 tuberculosis scare brought to light many of the challenges facing the United States and the international community concerning public health, particularly the ability to contain the spread of infectious disease in an era of unprecedented levels of travel. At the heart of the issues are the fundamental powers of public health authorities—the sources, development, and scope of the government's ability to infringe on the personal liberties of a minority in the interests of the public.

Domestically, adopting the proposed amendments to the CDC regulations and providing the federal government the authority to detain infectious individuals traveling overseas can begin to close some of the gaps while caring for the individual rights at stake. Overseas, European Union states facing similar civil liberties challenges to their tuberculosis control laws must meet standards set by the European Convention for the Protection of Human Rights. The proposed expansion of the National Quarantine System will likewise need to conform to international law, particularly the newly revised International Health Regulations. Adequately addressing the infectious disease threat ultimately requires international cooperation and coordination, an approach that may be helped by the trend towards "constitutionalization" of the global health governance system.

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* J.D., University of Houston Law Center, expected May 2009; B.A. in History, University of Texas at Austin, 2004. The Author would like to thank her family and friends, particularly her parents, Frank and Daisy Chen, for their support and encouragement during the writing of this Comment. The Author would also like to thank Professor Michael Olivas for his assistance in selecting the topic, and the members of the Houston Journal of International Law for their editing contributions.