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QUARANTINE AND THE FEDERAL ROLE IN EPIDEMICS

Michael R. Ulrich* & Wendy K. Mariner**

ABSTRACT

*Every recent presidential administration has faced an infectious disease threat, and this trend is certain to continue. The states have primary responsibility for protecting the public's health under their police powers, but modern travel makes diseases almost impossible to contain intrastate. How should the federal government respond in the future? The Ebola scare in the U.S. repeated a typical response—demands for quarantine. In January 2017, the Department of Health and Human Services and the Centers for Disease Control and Prevention issued final regulations on its authority to issue Federal Quarantine Orders. These regulations rely heavily on confining persons who may or may not be ill, raising serious questions about federal commitment to due process protections as well as the scope of statutory authority to impose quarantine. As the Supreme Court has stated in *United States v. Salerno*, “liberty is the norm, and detention prior to trial or without trial is the carefully limited exception.” Unconstrained use of quarantines undermines both the rule of law and public confidence in government decisions in times of crisis. This article analyzes the regulations and argues for a rights-based approach to infectious disease control that also protects public health. By respecting constitutional rights, the federal government can encourage public trust and cooperation and minimize harm, both essential requirements for controlling an epidemic.*

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I. INTRODUCTION

EVERY recent United States federal administration has faced a real or potential epidemic, from Reagan and HIV to Obama and Ebola.¹ Future administrations will likely be no different. With tourism and exploration expanding into forests, jungles, and caves, the next pandemic could be sparked by an unsuspecting tourist visiting parts of the world that humans have rarely seen.² For example, a recent exploration in Borneo revealed forty-eight new viruses in a cave and surrounding forest.³ Whether any of these can infect humans is unknown, but some experts suggest it is only a matter of time before an ecotourist hot-spot spawns the next global pandemic.⁴ Outbreaks of SARS, measles, Ebola, and Zika confirm that infectious diseases are undeterred by borders.⁵ Does the United States have the legal framework to prevent or respond to the next crisis?

Attention to pandemics and emergency preparedness tends to wax and wane in direct proportion to the temporal proximity and visibility of a threat.⁶ The immediate response is often to identify and remove likely sources of harm, with interest in building protective infrastructure declin-

1. Anthony Fauci, Dir., Nat'l Inst. of Allergy & Infectious Diseases at the Nat'l Inst. of Health, From AIDS to Zika: The Perpetual Challenge of Emerging Infectious Diseases, Keynote Address at Northeastern University School of Law's Symposium: Between Complacency and Panic: Legal, Ethical, and Policy Responses to Emerging Infectious Diseases (Apr. 14, 2017), slides available at <http://www.northeastern.edu/law/pdfs/academics/health-law/conf17-presentations/fauci-keynote.pdf> [<https://perma.cc/DCQ7-C6H8>]. In his address, Dr. Fauci described some of the most significant diseases that each administration had to tackle: Ronald Reagan and HIV/AIDS; George H.W. Bush and HIV/AIDS; Bill Clinton and HIV/AIDS, West Nile Virus, H5N1 Influenza, and Antimicrobial Resistance; George W. Bush and HIV/AIDS, Anthrax, H5N1 Influenza, and SARS; and Barack Obama and H1N1 Influenza, MERS, Chikungunya, Ebola, Zika, and Antimicrobial Resistance. *Id.*

2. Michaeleen Doucleff & Jane Greenhalgh, *The Next Pandemic Could Be Dripping on Your Head*, NPR (Feb. 21, 2017), <http://www.npr.org/sections/goatsandsoda/2017/02/21/508060742/the-next-pandemic-could-be-dripping-on-your-head> [<https://perma.cc/4BYA-UW4F>].

3. *Id.*

4. *Id.*

5. Former CDC Director Dr. Thomas Frieden has been quoted as saying “[W]e live in a world where we are all connected by the air we breathe, the water we drink, the food we eat, and by airplanes that can bring disease from anywhere to anywhere in a day.” Jane Jordan et al., *Legal, Operational, and Practical Considerations for Hospitals and Health Care Providers in Responding to Communicable Diseases Following the 2014 Ebola Outbreak*, 23 U. MIAMI BUS. L. REV. 341, 344 (2015). For information on the recent Ebola epidemic, see generally, WORLD HEALTH ORG., *Ebola Outbreak 2014–2015*, <http://www.who.int/csr/disease/ebola/en/> [<https://perma.cc/SCZ9-2ZAF>].

6. Wendy E. Parmet, *After September 11: Rethinking Public Health Federalism*, 30 J. L. MED. & ETHICS 201, 208 (2002). See also Peter Sands, et al., *From Panic and Neglect to Investing in Health Security: Financing Pandemic Preparedness at a National Level*, iv (Int'l Working Grp. on Financing Preparedness, Working Paper No. 115271, 2017), documents.worldbank.org/curated/en/979591495652724770/pdf/115271-REVISED-IWG-Report-Conference-Edition-5-25-2017-1-1-optimized-low.pdf [<https://perma.cc/FK3K-2RT7>] (“[A]s the havoc caused by the last outbreak turns into a fading memory, we become complacent and relegate the case for investing in preparedness on a back burner, only to bring it to the forefront when the next outbreak occurs.”).

ing as memories of the crisis fade.⁷ For example, after the 9/11 attacks, including the subsequent anthrax attacks, Congress enacted several measures to identify and punish terrorists.⁸ However, the country has yet to adopt many of the longer-term preventive measures recommended by the 9/11 Commission.⁹ More recently, and despite the small number of cases in the United States, the Ebola scare created fear and even panic.¹⁰ Here again, the predominant impulse of many officials and much of the public was to isolate anyone who had been in an area where Ebola was present, largely ignoring constitutional rights and public health principles.¹¹ Will this approach remain the default, or should a different conception of prevention govern disease outbreaks?

The current administration has at its disposal a parting gift from the Obama administration: new federal quarantine regulations.¹² On January 19, 2017, the day before the inauguration of President Trump, the Department of Health and Human Services (HHS), with its Centers for Disease Control and Prevention (CDC), promulgated final rules amending the regulations governing domestic and foreign quarantine. Though the terms

7. See Wendy K. Mariner, *Beyond Lifestyle: Governing the Social Determinants of Health*, 42 AM. J. L. & MED. 284, 306 (2016) (noting that infectious disease control “typically takes the form of forbidding entry to anyone suspected of harboring infection and rooting out potentially infected residents”).

8. See, e.g., HOMELAND SECURITY COUNCIL, NATIONAL STRATEGY FOR PANDEMIC INFLUENZA IMPLEMENTATION PLAN 226 (2006), <https://www.cdc.gov/flu/pandemic-resources/pdf/pandemic-influenza-implementation.pdf> [<https://perma.cc/2R8X-HWXP>]; see also Insurrection Act, 10 U.S.C. § 331 (2007); John Warner National Defense Authorization Act of 2007, Pub. L. No. 109-364, 120 Stat. 2083, 2404 (2006), repealed by National Defense Authorization Act, Pub. L. No. 110-181, 122 Stat. 3, 325–26.

9. See NAT’L COMM’N ON TERRORIST ATTACKS UPON THE U.S., THE 9/11 COMMISSION REPORT 385, 387 (2004), <https://www.9-11commission.gov/report/911report.pdf> [<https://perma.cc/J39K-T7UZ>]; see also NAT’L SEC. PREPAREDNESS GRP., TENTH ANNIVERSARY REPORT CARD: THE STATUS OF THE 9/11 COMMISSION RECOMMENDATIONS (Sept. 2011), <http://bipartisanpolicy.org/wp-content/uploads/sites/default/files/CommissionRecommendations.pdf> [<https://perma.cc/KM2U-8NEZ>].

10. Four cases of Ebola were diagnosed in the United States: Thomas Duncan, who had visited Liberia, died of the disease; two nurses who cared for Duncan became infected and recovered; and Dr. Craig Spencer, a physician who had treated Ebola patients in West Africa and also recovered. Seven others (including six health care workers) who became infected overseas were evacuated to the U.S. for treatment, six of whom recovered. Beth P. Bell et al., *CDC’s Response to the 2014-2016 Ebola Epidemic – West Africa and United States*, 65 MORBIDITY & MORTALITY WKLY. REP. 4, 9–10 (2016).

11. See, e.g., *infra* note 240 and accompanying text (describing the restrictive quarantine orders utilized in New York and New Jersey); see also Michael R. Ulrich, *Law and Politics, An Emerging Epidemic: A Call for Evidence-Based Public Health Law*, 42 AM. J. L. & MED. 256, 259 (2016) (finding that the lack of scientific justification for quarantine decisions during the Ebola scare raised public health and constitutional concerns). See generally Joseph Barbera et al., *Large-Scale Quarantine Following Biological Terrorism in the United States, Scientific Examination, Logistic and Legal Limits, and Possible Consequences*, 286 J. AM. MED. ASS’N. 2711, 2711 (2001) (noting the inclination of officials to resort to quarantine to contain the spread of disease, despite lack of effectiveness); Thomas V. Inglesby, Rita Grossman & Tara O’Toole, *A Plague on Your City: Observations from TOPOFF*, 32 CLINICAL INFECTIOUS DISEASE 436, 442 (2001) (“[R]ecommendations for quarantine were made without sufficient consideration of the wide variety of ramifications.”).

12. Control of Communicable Diseases, 82 Fed. Reg. 6890 (Jan. 19, 2017) (codified at 42 C.F.R. pts. 70, 71) [hereinafter *Quarantine Regulations*].

quarantine and isolation are often used interchangeably, they are distinct concepts. Isolation refers to the confinement of individuals *known* to be infected with a contagious infection during its period of communicability, whereas quarantine restricts the movements of persons who have been *exposed or potentially exposed* to a contagious disease during the period of its communicability.¹³

In the Federal Register, HHS/CDC stated they were issuing the 2017 rules to “clarify[] HHS/CDC’s response capabilities, practices, and mak[e] them more transparent.”¹⁴ It also stated that “these measures, which are largely current practice, are being published and codified to make the public aware of their use.”¹⁵ It is unusual for a federal agency to pursue formal rulemaking for the purpose of letting the public know what it is already doing. An additional purpose offered in the Federal Register was that these regulations were needed to respond to recent issues with Ebola and Middle East Respiratory Syndrome (MERS), both of which are quarantinable communicable diseases within federal jurisdiction, and repeated outbreaks of measles, which, notably, is not a federally quarantinable communicable disease.¹⁶

In reality, these regulations appear to be a direct response to criticism of the CDC during the 2014 Ebola scare. Much of the public blamed the CDC for failing to prevent any Ebola case from arising within U.S. bor-

13. LAWRENCE O. GOSTIN, PUBLIC HEALTH LAW: POWER, DUTY, RESTRAINT 429 (2d ed. 2008) [hereinafter GOSTIN, POWER]. “[I]solation is the separation, for the period of communicability, of *known* infected persons in such places and under such conditions as to prevent or limit the transmission of the infectious agent.” *Id.* (emphasis in original). “[Q]uarantine is the restriction of the movement of persons who have been exposed, or potentially exposed, to infectious disease, during its period of communicability, to prevent transmission of infection during the incubation period.” *Id.* See also U.S. DEP’T OF HEALTH & HUMAN SERVS., *What Is the Difference Between Isolation and Quarantine?*, <https://www.hhs.gov/answers/public-health-and-safety/what-is-the-difference-between-isolation-and-quarantine/index.html> [<https://perma.cc/Y77V-KVHR>], (last visited Jan. 20, 2018). In practice, the term quarantine is often used to describe both, though quarantine is a more controversial infringement on liberty rights given that the individual being detained is not known to be infected.

14. *Quarantine Regulations*, *supra* note 12, at 6892.

15. *Quarantine Regulations*, *supra* note 12, at 6894, 6896.

16. *Quarantine Regulations*, *supra* note 12, at 6890. Federally quarantinable communicable diseases are specified by Executive Order of the President. Public Health Service Act, § 361, 42 U.S.C. § 264(b) (2012). Current quarantinable diseases are listed in Exec. Ord. No. 13,674, 79 Fed. Reg. 45,671 (July 31, 2014) and previous versions: “(a) Cholera; Diphtheria; infectious Tuberculosis; Plague; Smallpox; Yellow Fever; and Viral Hemorrhagic Fevers (Lassa, Marburg, Ebola, Crimean-Congo, South American, and others not yet isolated or named).” Exec. Ord. No. 13,295, 68 Fed. Reg. 17,255 (Apr. 4, 2003), as amended by Exec. Ord. 13,375, 70 Fed. Reg. 17,299 (Apr. 1, 2005), as amended by Exec. Ord. No. 13,674, 79 Fed. Reg. 45,671 (July 31, 2014). “(b) Severe acute respiratory syndromes, which are diseases that are associated with fever and signs and symptoms of pneumonia or other respiratory illness, are capable of being transmitted from person to person, and that either are causing, or have the potential to cause, a pandemic, or, upon infection, are highly likely to cause mortality or serious morbidity if not properly controlled. This subsection does not apply to influenza.” Exec. Ord. No. 13,674, 79 Fed. Reg. 45,671 (July 31, 2014). “(c) Influenza caused by novel or reemergent influenza viruses that are causing, or have the potential to cause, a pandemic.” Exec. Ord. No. 13,375, Fed. Reg. 17,299 (Apr. 1, 2005), as amended by Exec. Ord. No. 13,674, 79 Fed. Reg. 45,671 (July 31, 2014).

ders.¹⁷ The CDC did issue guidelines for quarantine,¹⁸ but it has no legal authority to require states to implement them, and many states ignored the guidelines, using their own, often more restrictive and inconsistent measures.¹⁹ The backlash against the CDC came in spite of the fact that the agency is typically charged not with delivering services, but with data collection and providing technical assistance, research, and laboratory services to the states.²⁰

The new regulations grant broad quarantine authority to the CDC. They empower the CDC Director to authorize the “apprehension, medical examination, quarantine, isolation, or conditional release of any individual for the purpose of preventing the introduction, transmission, and spread of quarantinable communicable diseases, as specified by Executive Order.”²¹ This applies to those who arrive in the United States, those who may move interstate, and to some whose movements remain intrastate.²² Two observers suggested the new regulations may enable the CDC to take a larger, more visible role during outbreaks.²³

Several aspects of the regulations provoked concern over the adequacy of due process protections for persons taken into custody, as well as the

17. James G. Hodge, Jr., *Legal Myths of Ebola Preparedness and Response*, 29 NOTRE DAME J. L. ETHICS, & PUB. POL’Y 355, 364–65 (2015).

18. CTRS. FOR DISEASE CONTROL & PREVENTION, INTERIM U.S. GUIDANCE FOR MONITORING AND MOVEMENT OF PERSONS WITH POTENTIAL EBOLA VIRUS EXPOSURE (Oct. 27, 2014), https://www.mainequalitycounts.org/image_upload/Interim_Guidance_CDC_10-27-14.pdf [<https://perma.cc/22U6-TDLX>].

19. AM. CIVIL LIBERTIES UNION & YALE GLOB. HEALTH JUSTICE P’SHIP., FEAR, POLITICS, AND EBOLA: HOW QUARANTINES HURT THE FIGHT AGAINST EBOLA AND VIOLATE THE CONSTITUTION 26 (2015), https://www.aclu.org/sites/default/files/field_document/aclu-ebolareport.pdf [<https://perma.cc/6RWL-U6NE>] [hereinafter ACLU & GHJP] (“[N]early half the country (at least 23 states) had announced quarantine and movement restriction policies that exceeded the CDC’s guidelines.”). Some states even referenced the CDC’s guidelines specifically when justifying their stricter approaches. Governor Malloy of Connecticut stated: “I believe we must go above and beyond what the CDC is recommending.” *Id.* at 25. New Jersey Governor Chris Christie stated that he believed the CDC would “eventually . . . come around to our point of view on this.” *Id.*

20. Mark A. Rothstein, *Ebola, Quarantine, and the Law*, HASTINGS CTR. REP. 5, 5 (2015). The primary responsibility for local disease control lies with the states, which retain police power to protect the public’s health. *Jacobson v. Massachusetts*, 197 U.S. 11, 24–25 (1905). Yet, most state public health departments lack the expertise in epidemiology and disease management for Ebola. ACLU & GHJP, *supra* note 19, at 25.

21. 42 C.F.R. § 70.6(a) (2017). The regulations include several other provisions that are beyond the scope of this article. For example, the pilot of an interstate flight must report “the occurrence onboard of any deaths or the presence of ill persons . . . and take such measures as the Director may direct to prevent the potential spread of the communicable disease.” *Id.* § 70.11(a). For flights and ships arriving from outside of U.S. borders, the regulations list specifications for information that must be provided to the Director for passengers and crew that the Director deems may be at risk of exposure to a communicable disease. *Id.* § 71.4–71.5. The Director is also authorized under the regulations to conduct non-invasive public health prevention measures at ports of entry or other locations, and may require individuals to provide certain information, such as contact information, intended destination, health status, exposure history, and travel history. *Id.* § 71.20.

22. *Id.* § 70.5.

23. Lawrence O. Gostin & James G. Hodge, *Reforming Federal Public Health Powers: Responding to National and Global Threats*, 317 J. AM. MED. ASS’N. 1211, 1212 (2017) (“Although the rule stresses cooperation with tribal, state, and local authorities, federal agents can now intervene directly.”).

limited provisions for their care.²⁴ Others wondered whether they are likely to be relevant in more than a handful of individual cases, thus providing little in terms of public protection.²⁵ Still others questioned whether they respond to the actual needs of a population facing the risk of a disease outbreak.²⁶ No one disputes the need to protect the population from the spread of dangerous communicable diseases. The question is whether these regulations offer the protection they appear to promise or whether a different approach would be more effective.

In Part II of this paper we examine whether the regulations pass legal muster. A threshold issue is whether the 2017 regulations are consistent with the scope of statutory authority for the CDC. We then address the heart of the issue: whether the regulations meet the substantive and procedural due process standards for involuntary quarantine and isolation. In order to involuntarily confine an individual, both the characteristics of the disease and the characteristics of the individual must be taken into account. Only by examining both factors can an accurate assessment be made as to whether the individual poses a risk to the public health warranting involuntary confinement.

Part III asks whether the CDC should reconsider these regulations. Despite the claim that they largely codify existing practice, these regulations appear to be a reaction to the Ebola scare rather than a thoughtful, scientific, or principled approach to preventing a variety of epidemics. This part compares the regulations' reliance on quarantine with alternative measures that would better prevent transmitting contagious diseases, such as providing evidence-based information and support to encourage voluntary cooperation. History teaches that in the modern era, quarantine has rarely prevented an epidemic, is often impossible to implement on a wide scale, and has often been applied in a discriminatory manner. We conclude that the 2017 regulations are unlikely to improve public health outcomes and may in fact exacerbate harms.

Finally, Part IV examines the federal role in preventing disease transmission more generally. An ad hoc state approach is unlikely to contain the spread of disease. In the absence of credible medical information, states are likely to make alpha and beta errors, missing those who are infected and imposing unnecessary restrictions on those who are not. More importantly, they may miss opportunities to take the steps that

24. The NPRM of August 15, 2016 received 15,800 comments. *Quarantine Regulations*, *supra* note 12, at 6894; *see Quarantine Regulations*, *supra* note 12, at 6916 (discussing due process concerns); *Quarantine Regulations*, *supra* note 12, at 6918 (discussing issues with payment for care and treatment).

25. *See, e.g., Quarantine Regulations*, *supra* note 12, at 6924 (regarding public comments that state and local regulations are sufficient to protect the public).

26. *See, e.g., Quarantine Regulations*, *supra* note 12, at 6896 (suggesting that education on health practices would be more effective than the promulgated regulations); *see also* Kyle Edwards, Wendy Parmet & Scott Burris, Opinion and Editorial, *Why the C.D.C.'s Power to Quarantine Should Worry Us*, N.Y. TIMES (Jan. 23, 2017), <https://www.nytimes.com/2017/01/23/opinion/why-the-cdcs-power-to-quarantine-should-worry-us.html> [<https://perma.cc/RE6S-LZU5>] (questioning the practicality of the regulations).

would better protect the population. We conclude that the federal government should look beyond quarantine, with its focus on quasi-criminal enforcement, and develop the positive measures needed to protect the public health. A rights-based approach to our next epidemic, one relying on transparency and science-based measures, will ensure that federal law becomes an asset to public health rather than a liability.

II. POWER AND RIGHTS: THE LEGALITY OF THE FEDERAL QUARANTINE REGULATIONS

Federal authority to quarantine ships, commodities, and people has rarely been challenged, but its use has often been controversial. Our past is replete with examples of the discriminatory use of quarantine, typically targeting immigrants, the poor, minorities, and marginalized groups.²⁷ During the Bubonic plague at the beginning of the twentieth century, public health officers tried to quarantine and inoculate only those of Chinese descent, on the theory that they were especially susceptible to plague, ignoring the actual source of infection—fleas carried by rats.²⁸ A federal court found that the San Francisco quarantine ordinance violated the Equal Protection Clause.²⁹ There was no evidence to support the city's rationale that Asians were especially susceptible to plague. In a second case, the same court also found the quarantine was "not a reasonable regulation to accomplish the purposes sought."³⁰ The quarantined area included both people who were infected and those who were not, increasing—not decreasing—the probability of disease transmission.

Thus, while both state and federal governments have (different) authority to pass laws imposing quarantine when necessary to contain a contagious disease outbreak, the more salient question is how those laws are implemented.³¹ Ideally, regulations implementing the power to quarantine should avoid the mistakes of the past. Regulations granting discretion to officials in determining the need for quarantine do not guarantee

27. See Wendy E. Parmet, *AIDS and Quarantine: The Revival of an Archaic Doctrine*, 14 HOFSTRA L. REV. 53, 66 (1985) [hereinafter Parmet, *AIDS*] (discussing how health officials used quarantine against prostitutes as a complement to police work). See generally HOWARD MARKEL, *QUARANTINE!* (Johns Hopkins Univ. Press 1997).

28. Wendy K. Mariner, George J. Annas & Wendy E. Parmet, *Pandemic Preparedness: A Return to the Rule of Law*, 1 DREXEL L. REV. 341, 354–55 (2009). See generally MARILYN CHASE, *THE BARBARY PLAGUE: THE BLACK DEATH IN VICTORIAN SAN FRANCISCO* (2003).

29. *Wong Wai v. Williamson*, 103 F. 1, 10 (C.C.N.D. Cal. 1900).

30. *Jew Ho v. Williamson*, 103 F. 10, 23–24 (C.C.N.D. Cal. 1900) ("Though the law itself be fair on its face and impartial in appearance, yet, if it is applied and administered by public authority with an evil eye and an unequal hand, so as practically to make unjust and illegal discriminations, between persons in similar circumstances, material to their rights, the denial of equal justice is still within the prohibition of the constitution.").

31. The primary responsibility for local disease control lies with the states, which retain police power to protect the public's health, safety and welfare. Federal authority is grounded primarily in the power to regulate commerce. *Compagnie Francaise de Navigation a Vapeur v. La. State Bd. of Health*, 186 U.S. 380, 389 (1902). See WENDY E. PARMET, *POPULATIONS, PUBLIC HEALTH, AND THE LAW* (2009); *Gibbons v. Ogden*, 22 U.S. 1, 296 (1824).

misuse. At the same time, flexibility in enforcement can invite the abuse of power. Indeed, constitutional due process and equal protection safeguards are mandated for this very reason.

A. STATUTORY AUTHORITY

The federal statutory authority to promulgate the 2017 federal quarantine regulations derives from Section 361 of the Public Health Service Act, codified at § 264 of Title 42 of the U.S. Code, which grants the Secretary of HHS authority to “make and enforce such regulations as in [their] judgment are 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.”³² Regulations may not provide for the apprehension, detention, or conditional release of individuals except for the purpose of preventing the introduction, transmission, or spread of the diseases specified in Executive Orders of the President (the “quarantinable diseases”).³³ Individuals who have a disease that is not listed in the Executive Order are not subject to apprehension or detention under this federal law.

The statute treats foreign and interstate travelers differently. Section 264(c) of the statute requires that regulations that provide for the apprehension, detention, examination, or conditional release of an individual can *only* apply to individuals who are coming *into* the United States from a foreign country or possession.³⁴ Subsection 264(d) creates a limited exception to the foreign arrival requirement. This exception provides the jurisdictional authorization for interstate quarantine measures:

(d) Apprehension and examination of persons reasonably believed to be infected.

(1) Regulations prescribed under this section may provide for the *apprehension and examination* of any individual reasonably believed to be infected with a communicable disease in a qualifying stage and (A) to be moving or about to move from a State to another State; or (B) to be a probable source of infection to individuals who, while infected with such disease in a qualifying stage, will

32. 42 U.S.C. § 264(a) (2012). Though 42 U.S.C. § 264 and § 265 grant authority to the Surgeon General, the Reorganization Plan No. 3 of 1966 abolished the Office of the Surgeon General and transferred the functions of the Surgeon General to the Secretary of Health, Education, and Welfare, which was later redesignated the Secretary of Health and Human Services, and retained the authorities under 42 U.S.C. § 264 and § 265 despite the Office of the Surgeon General being reestablished in 1987. Control of Communicable Diseases, 81 Fed. Reg. 54,230, at 54,232 (Aug. 15, 2016) (codified at 42 C.F.R. pts. 70, 71 (2017)).

33. 42 U.S.C. § 264(b). For a list of current quarantinable communicable diseases, see *supra* note 16.

34. 42 U.S.C. § 264(c) (“Application of regulations to persons entering from foreign countries. Except as provided in subsection (d), regulations prescribed under this section, insofar as they provide for the apprehension, detention, examination, or conditional release of individuals, shall be applicable only to individuals coming into a State or possession from a foreign country or a possession.”).

be moving from a State to another State. Such regulations may provide that *if upon examination any such individual is found to be infected, he may be detained* for such time and in such manner as may be reasonably necessary.

(2) For purposes of this subsection, the term “qualifying stage”, with respect to a communicable disease, means that such disease—
 (A) is in a communicable stage; or
 (B) is in a precommunicable stage, if the disease would be likely to cause a public health emergency if transmitted to other individuals.³⁵

Here, the statute clearly authorizes only the apprehension and examination of someone reasonably believed to be infected and moving across state lines.³⁶ The statute does not authorize the detention of anyone already in the United States unless and until that person is found to actually be infected with a quarantinable disease.³⁷ Therefore, there is no statutory authority for federal interstate quarantine—only federal interstate isolation of infected persons. There is some pragmatic logic to this. Given the states’ resources and experience with domestic quarantine, it is likely that, in practice, the CDC would rely on the states to execute interstate quarantines.

Contrary to this statute, the 2017 interstate regulations provide for indefinite detention of individuals within the United States without any finding that the individual is infected with a quarantinable disease.³⁸ Unlike the statute, the text of the interstate regulations for domestic quarantine mirrors the text for foreign arrivals (foreign regulations). Thus, on its face, this interstate quarantine regulation constitutes administrative agency action beyond the scope of its statutory authority and is, therefore, invalid. Where the statute is clear about an agency’s regulatory authority, the agency has no power to act on matters outside the scope of that authority.³⁹

One potential defense of the interstate regulations providing for detention might be that the statutory term “apprehension” is sufficiently ambiguous, within the meaning of *Chevron*,⁴⁰ to permit the agency to

35. *Id.* at § 264(d) (emphasis added).

36. *See infra* notes 43–47 and accompanying text (distinguishing between apprehension and detention in terms of length of time).

37. The actual infection limitation requirement may be intended to restrict federal jurisdiction to cases in which an individual poses an actual threat to interstate commerce. The subsection also requires meeting a second criterion—(A) that the person is or will be traveling from State to State or (B) likely to infect someone else who will be traveling across state lines. 42 U.S.C. § 264(d).

38. 42 C.F.R. § 70.6 (2017).

39. *Lyng v. Payne*, 476 U.S. 926, 937 (1986) (“an agency’s power is no greater than that delegated to it by Congress”); *La. Pub. Serv. Comm’n v. FCC*, 476 U.S. 355, 374 (1986) (same); *A.L.A. Schechter Poultry Corp. v. United States*, 295 U.S. 495 (1935); *Massachusetts v. EPA*, 549 U.S. 497, 528 (2007) (“The statutory text forecloses EPA’s reading.”).

40. *Chevron U.S.A., Inc. v. Nat. Res. Def. Council*, 467 U.S. 837, 842–43 (1984) (Where Congress has not “directly spoken to the precise question at issue,” the court may defer to the agency’s interpretation as long as it is “based on a permissible construction of the statute.”).

interpret it broadly—to include the detention specified in the interstate regulations before determining whether a person is actually infected with a quarantinable disease. There are several problems with this argument, however. First, Congress did speak directly to the issue in question.⁴¹ The statute uses the terms apprehension and detention separately in both the foreign section (§ 264(c)) and the interstate section (§ 264(d)), making it difficult to assume that apprehension means one thing in (c) and something different in (d). Second, the agencies' explanation in the Federal Register makes no reference to ambiguous terms, to *Chevron*, or to how the agency interprets the term “apprehension.”⁴² It offers no reason why the rule goes beyond the statute.

A third problem with the agency's interpretation is that it is a stretch to assume that apprehension in the statute includes many days of detention.⁴³ The regulations appear to use apprehension and detention consistently with the statute, with apprehension meaning the initial stopping of a person for questioning, and detention meaning involuntary confinement.⁴⁴ Both the statute and the foreign and interstate rules allow apprehension on the basis of a reasonable belief that a person is infected, perhaps analogous to a *Terry* stop.⁴⁵ In the statute, however, a person already in the country cannot be detained, perhaps analogous to arrest, unless that domestic person is found to be infected.⁴⁶ This analogy supports the distinction between the two, in that apprehension should be a relatively short amount of time and with the specific purpose of acquiring information to determine whether a longer restriction, a detention, is lawful. Thus, the agency's application of the same procedures in foreign and domestic cases is hard to justify as a permissible interpretation of the terms of the statute.⁴⁷

41. *Id.* at 842 (A court must first ask “whether Congress has directly spoken to the precise question at issue.”).

42. See Control of Communicable Diseases, 81 Fed. Reg. 54,230 (Aug. 15, 2016) (codified at 42 C.F.R. pts. 70, 71).

43. See *Michigan v. EPA*, 135 U.S. 2699, 2707 (2015) (“agencies must operate within the bounds of reasonable interpretation” (quoting *Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2442 (2014))).

44. This usage differs from that in criminal law. Criminal laws distinguish between apprehending and detaining people, with apprehension sometimes used as a synonym for the initial seizure, capture, or arrest of a suspect. Arrests require probable cause. Detention is typically limited to temporarily and briefly stopping someone, usually in a public place where the person remains free to leave (usually after answering some benign questions); it does not typically force the person to move to a different location. “Terry” stops require reasonable suspicion. In criminal law, a temporary detention that lasts a long time can be deemed to be an arrest subject to Fourth Amendment requirements. See Wayne R. LaFave, *The “Routine Traffic Stop” from Start to Finish: Too Much “Routine,” Not Enough Fourth Amendment*, 102 MICH. L. REV. 1843, 1850, 1898–99 (2004) (describing a *Terry* stop as temporary and brief in nature, and methods officers utilize to avoid violating the Fourth Amendment with overly extended stops).

45. 42 U.S.C. § 264(d)(1) (2012).

46. *Id.*

47. It is not clear why Congress established two different sets of permissible measures for foreign and interstate quarantine in the first place. One possibility might be that Congress assumed that persons arriving at the nation's borders would be more likely to bring a Quarantinable Disease into the country undiscovered than would people traveling inside

The statutory authorization of regulations that provide for examination of the person (both foreign and domestic) complicates the issue. It might take time to examine the person who has been apprehended in order to determine whether the person is in fact infected. If “examination” is limited to a brief interview, relevant information may take only minutes to collect. If diagnostic tests are desired, however, results may take several days. Perhaps the agency decided that the time period for apprehension should include this time. But, restricting the person’s movement or removing the person to a place he or she cannot leave is an obvious limitation on liberty—a detention.⁴⁸ This may be justifiable—or at least lawful—in the case of persons entering the country, given the quite limited constitutional protections for foreign arrivals and border searches.⁴⁹ When detaining domestic persons already lawfully in the country, however, the agency is not only acting beyond its prescribed authority, but may also violate both the Fourth Amendment’s prohibition on unreasonable searches and seizures and the Fifth Amendment’s prohibition against infringing liberty.⁵⁰ Moreover, the regulations themselves (both foreign and interstate) appropriately do not require the person to submit to any bodily intrusion, such as a blood draw. Therefore, as a practical matter, under the regulations, a domestic person who has not been found to be infected could be detained and the liberty violation could last many days, even weeks, which is hard to justify as a simple process to stop and inquire.⁵¹ Even if the statute were ambiguous, an agency interpretation that raises a constitutional issue would be inconsistent with the interpretive rule of avoiding constitutional problems.⁵²

the country. The statute was originally enacted in 1944, in wartime and before leisure and business travel was widespread. Public Health Services Act, Pub. L. No. 78–410, § 361, 58 Stat. 703–04 (1944). Amendments to the text have not altered its substance, except to substitute “in a qualifying stage” for “communicable disease.” See *supra* note 35 and accompanying text.

48. See discussion *infra* Part II.B.

49. See, e.g., *United States v. Montoya*, 473 U.S. 531 (1985) (upholding a seventy-two-hour detention of a suspected drug mule at the border).

50. See discussion *infra* Part II.B. While unnecessary detention can be a violation of the Fourth Amendment’s protections against unwarranted seizures, this article does not focus on these arguments as they have rarely been raised in this context.

51. *United States v. Mead Corp.*, 533 U.S. 218, 228 (2001) (“The weight [accorded to an administrative] judgment in a particular case will depend upon the thoroughness evident in its consideration, the validity of its reasoning, its consistency with earlier and later pronouncements, and all those factors which give it power to persuade” (quoting *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944))).

52. See *infra* notes 266–269 and accompanying text. There is a second inconsistency between the statute and regulations that is worth noting. The statute provides for penalties of “a fine of not more than \$1,000 or by imprisonment for not more than one year, or both” for any violation of the statute or regulations. 42 U.S.C. § 271(a) (2012). The regulations, however, specify a fine of up to \$100,000—a tenfold increase (\$250,000 if the violation results in death). 42 C.F.R. §§ 70.2, 70.18 (2017). Fines for organizations are up to \$200,000 and \$500,000 respectively. *Id.* It appears that this increase resulted from comparing prison sentences in the United States criminal code with their corresponding fines. Section 3571 of the criminal code allows the imposition of fines on defendants who have been found guilty of an offense. 18 U.S.C. § 3571 (2012). 18 U.S.C. § 3571 provides:

B. PROTECTING LIBERTY

“[I]nvoluntary confinement of an individual for any reason, is a deprivation of liberty which the State cannot accomplish without due process of law.”⁵³

There is no question that the state has the authority to take measures to protect the public’s health by exercising its police powers.⁵⁴ However, these powers are not unbounded. The individual’s right to liberty, protected by the Fifth and Fourteenth Amendments, constrains the government’s options. Both involuntary quarantine and isolation are obvious deprivations of liberty, which require justification. With respect to infectious diseases, the actions needed to prevent transmission depend on the characteristics of the pathogen (e.g., virulence, mode of transmission, probability of infection given exposure, probability of illness given infection, incubation period, appearance of symptoms) and the availability of control measures (e.g., accurate and reliable diagnostic tests, safe and ef-

(a) In general.—A defendant who has been found guilty of an offense may be sentenced to pay a fine.

(b) Fines for individuals.—Except as provided in subsection (e) of this section, an individual who has been found guilty of an offense may be fined not more than the greatest of—

- (1) the amount specified in the law setting forth the offense;
- (2) the applicable amount under subsection (d) of this section;
- (3) for a felony, not more than \$250,000;
- (4) for a misdemeanor resulting in death, not more than \$250,000;
- (5) for a Class A misdemeanor that does not result in death, not more than \$100,000;
- (6) for a Class B or C misdemeanor that does not result in death, not more than \$5,000; or
- (7) for an infraction, not more than \$5,000.

(d) . . .

(e) Special rule for lower fine specified in substantive provision.—If a law setting forth an offense specifies no fine or a fine that is lower than the fine otherwise applicable under this section and such law, by specific reference, exempts the offense from the applicability of the fine otherwise applicable under this section, the defendant may not be fined more than the amount specified in the law setting forth the offense.

Id. at § 3571(a)–(b), (e). These criminal fines may not be more than the fine specified in the law describing the offense (here \$1,000) *unless* the offender has been convicted of an infraction, misdemeanor or felony. *Id.* § 3571(b). HHS appears to have characterized the offense as a Class A misdemeanor, because it carries a maximum prison sentence of one year, and concluded that a Class A misdemeanor could carry a fine of not more than \$100,000 under § 3571(b). 18 U.S.C. § 3559 (2012) (classification system for criminal offenses and sentences). Even more troubling, though consistent with the penal tone of these regulations, is the fact the penalties are applicable to any violation of a quarantine order, which can apply to a person who is not even infected, further disconnecting these regulations from health outcomes.

53. *O’Connor v. Donaldson*, 422 U.S. 563, 580 (1975) (Burger, J., concurring) (emphasis added).

54. *Jacobson v. Massachusetts*, 197 U.S. 11, 25 (1905) (noting the “settled principle[] [that] the police power of a state must be held to embrace, at least, such reasonable regulations established directly by legislative enactment as will protect the public health and the public safety”). In the case of quarantine, state government authority comes from the police power, while federal authority derives from the Commerce Clause. *See also* GOSTIN, POWER, *supra* note 13, at 5–6.

fective vaccines or treatments, and isolation). These dictate what measures may be reasonable.

Quarantine or isolation may be a valid measure in appropriate circumstances. For example, a highly contagious airborne disease with a high mortality rate could warrant a broader use of quarantine than Ebola, which is not transmissible until after symptoms manifest. But, the rights that an individual retains are not determined by the gravity of the outbreak alone. Rather, the gravity and circumstances of the outbreak, the disease characteristics, the availability of control measures, and the characteristics of the individual in question affect the strength of the government's justification for limiting a right. Due process protections exist to ensure that individuals are not deprived of their liberty mistakenly or arbitrarily. Consistent respect for rights is also critical in contagious disease response, because public adherence to government control measures is likely to depend on faith in the fairness of those measures. Substantive due process is intended to ensure the government has sufficient justification for limiting individual rights. Procedural due process offers the safeguards needed to ensure that laws are properly applied to those individuals to whom the laws are supposed to apply.⁵⁵ Even though the state may be justified in invoking confinement measures during an outbreak, due process protections should ensure that these measures are applied only to those who pose a sufficient risk of spreading the disease to necessitate the deprivation of liberty. Several provisions in the regulations raise substantive due process questions; others raise procedural due process questions.

1. *Substantive Due Process*

The term quarantine is often (mis)used to mean several different measures, all of which restrict liberty. Isolation properly refers to the confinement of someone *known to be infected*, whereas quarantine refers to confining an individual who has been *exposed or potentially exposed* to an infectious disease during its period of communicability.⁵⁶ Both involuntary quarantine and involuntary isolation are particularly extreme deprivations of liberty and should be used only when no other intervention is able to minimize the risk of infection to the public.⁵⁷ In all cases, the goal, of course, is to protect a healthy population from exposure to a harmful contagion. Examples stretch from fourteenth century quarantines to protect the population from the Black Death to modern quarantines of

55. Parmet, *AIDS*, *supra* note 27, at 81.

56. See U.S. Dep't of Health & Human Servs., *What Is the Difference Between Isolation and Quarantine?*, *supra* note 13 and accompanying text.

57. Wendy E. Parmet, *J.S. Mill and the American Law of Quarantine*, 1 *PUB. HEALTH ETHICS* 210, 213 (2008) [hereinafter Parmet, *J.S. Mill*]. Involuntary isolation is not necessary for anyone who can take precautions to avoid exposing others to infection, assuming the person is infected. Most courts and many state statutes require that a person be subject to the least restrictive conditions that the individual's particular circumstances permit. See, e.g., *Covington v. Harris*, 419 F.2d 617, 624 (D.C. Cir. 1969).

cruise ships carrying passengers with a norovirus.⁵⁸

Importantly, movement restrictions can be voluntary or involuntary. Most people who are seriously ill with a contagious disease seek medical treatment and voluntarily accept isolation, typically as a patient in a hospital room, as part of their treatment.⁵⁹ Voluntary isolation as part of medical therapy is non-controversial; it poses no legal problems, even though the purpose of isolation during treatment is to protect others from exposure to a communicable infection.⁶⁰ In contrast, an involuntary movement restriction is a form of civil commitment imposed by government and generally must comply with both substantive and procedural due process requirements, as discussed below. The media and some government reports, however, often refer to these movement restrictions as quarantines without distinguishing between voluntary and involuntary cases.⁶¹ Analyses of laws governing either involuntary isolation or involuntary quarantine, however, should keep the distinctions in mind. In this article, unless otherwise indicated, the use of the term quarantine refers to involuntary movement restrictions, including isolation.

The 2017 regulations set forth rules for the involuntary detention of individuals believed to be infected with a quarantinable communicable disease.⁶² As noted above, the statute authorizes regulations providing for the apprehension, detention, examination, and conditional release of such individuals, but does not use the term quarantine.⁶³ Thus, whether these regulations comply with due process requirements depends on their compliance with the due process required for involuntary civil detention.

While the United States Supreme Court has not heard a case involving the involuntary quarantine or isolation of an individual to prevent the spread of disease, it has set forth standards for the civil commitment of persons who have been diagnosed as having a mental disorder to prevent them from causing future harm to others. State courts have used these standards in civil commitment doctrine by analogy to determine when involuntary confinement is justified to prevent the spread of infectious

58. Wendy Ryan, *Dirty Dining: 10 Florida Cruise Ships Hit with Norovirus in 2016 and 2017 Still Passed Inspections*, ABC ACTION NEWS (May 22, 2017), <https://www.abcactionnews.com/money/consumer/dirty-dining/dirty-dining-10-fl-cruise-ships-hit-with-norovirus-this-last-year-and-still-passed-inspections> [<https://perma.cc/5XHC-GCND>].

59. Mariner, *supra* note 28, at 357.

60. The legality presumes that the voluntary isolation is indeed voluntary. During the Ebola scare in the U.S., there were reports of quarantine orders that were labeled voluntary that were accepted under coercion and, thus, were not truly voluntary, raising constitutional concerns. *See infra* notes 116, 275–278 and accompanying text.

61. ACLU & GHJP, *supra* note 19, at 26; *see* Gostin, *supra* note 13 (describing the difference between isolation and quarantine).

62. Quarantinable communicable diseases are those specified by Executive Order. 42 C.F.R. § 70.6(a) (2017); *see supra* note 16. Other sections of the regulations provide for quarantine of vessels and commodities entering the United States. *Id.* § 71.5. Here we address only the sections affecting individuals.

63. *See* 42 U.S.C. § 264 (2012). In the statute, the term quarantine is reserved for general section headings and summarily characterizing “quarantine stations” and “quarantine duties.” *See, e.g.*, 42 U.S.C. §§ 267–68.

disease.⁶⁴

In its civil commitment cases, the U.S. Supreme Court has recognized that the state has no cognizable interest in confining individuals who have not committed any crime unless the individual, by reason of mental illness, is essentially unable to control his own dangerous behavior so that he is likely to harm other people. In *O'Connor v. Donaldson*, the Court declared that “[a] finding of ‘mental illness’ alone cannot justify a State’s locking a person up against his will”⁶⁵ Florida had committed Kenneth Donaldson to a mental institution for nearly fifteen years on the sole ground that he was mentally ill. The Court rejected the hospital superintendent’s argument that the state was within its authority to hold an individual who was “sick,” even though he posed no risk of harm to anyone at any time in his life, including during confinement.⁶⁶

In *Foucha v. Louisiana*, the Court made clear that to hold an individual involuntarily in civil commitment, the Due Process Clause required proof of two elements: mental illness *and* dangerousness to themselves or others.⁶⁷ By itself, neither element provides sufficient justification for confinement.⁶⁸ Furthermore, the Court stated that the burden of proof lies with the State to show that each element exists with “clear and convincing evidence,” as a preponderance of the evidence “fell short of satisfying due process.”⁶⁹ The Court recognized that a “loss of liberty produced by an involuntary commitment is more than a loss of freedom from confinement.”⁷⁰ Therefore, “the Due Process Clause contains a substantive component that bars certain arbitrary, wrongful government actions ‘regardless of the fairness of the procedures used to implement them.’”⁷¹ It is for this reason that substantive due process “requires that the nature of commitment bear some reasonable relation to the purpose for which the individual is committed.”⁷²

Civil commitment is a form of preventive detention, a measure generally disfavored in the United States. Whereas, criminal confinement may

64. See e.g., *City of Newark v. J.S.*, 652 A.2d 265, 175–276 (N.J. Super. Ct. 1993) (analogizing civil commitment standards for mental illness to state that evidence must show the individual has an illness and is a danger to others).

65. 422 U.S. 563, 573–75 (1975). The Court added, “[T]here is still no constitutional basis for confining such persons involuntarily if they are dangerous to no one and can live safely in freedom.” *Id.*

66. *Id.* at 564, 568–70. After his release, Donaldson published a book describing his experience. KENNETH DONALDSON, *INSANITY INSIDE OUT* (CROWN PUBLISHERS, 1976).

67. *Foucha v. Louisiana*, 504 U.S. 71, 75–76 (1992).

68. *Kansas v. Hendricks*, 521 U.S. 346, 358 (1997) (“A finding of dangerousness, standing alone, is ordinarily not a sufficient ground upon which to justify indefinite involuntary commitment. We have sustained civil commitment statutes when they have coupled proof of dangerousness with the proof of some additional factor, such as a ‘mental illness’ or ‘mental abnormality.’ These added statutory requirements serve to limit involuntary civil confinement to those who suffer from a volitional impairment rendering them dangerous beyond their control.”) (citations omitted).

69. *Foucha*, 504 U.S. at 75–76.

70. *Id.* at 79.

71. *Id.* at 80.

72. *Id.* at 79.

stem from voluntary criminal acts known to violate the law, an individual's civil commitment may result through no fault of their own. The Court has emphasized the difference between confinement as punishment for criminal offenses and civil confinement for the protection of the public: "That distinction is necessary lest 'civil commitment' become a 'mechanism for retribution or general deterrence'—functions properly those of criminal law, not civil commitment."⁷³ In theory, the criminal law serves a deterrent function for people who are presumed to be rational and capable of conforming their conduct to the law. Those who are not deterred can be punished after committing a crime, not before.⁷⁴ In contrast, a person who suffers from a mental illness that makes it difficult or impossible to control his or her own actions cannot necessarily be deterred. Civil commitment is reserved for such cases in order to protect the public from future harm that the person cannot help causing.

The principles in these cases provide the doctrinal structure for laws authorizing involuntary civil commitment for individuals with a contagious disease who are likely to spread it to others.⁷⁵ The mere presence of the contagious disease, like the mere presence of mental illness, does not by itself constitute a likelihood of harming others. In both cases, the potential harm comes from the person's behavior. In the case of contagious disease, the behavior may be deliberate or inadvertent—contact with other people that could actually infect them.⁷⁶ This is analogous to the harm that could be inflicted by a person who cannot control behavior because of a mental illness. It is for this reason that both elements—contagious disease and actions that place other people at risk of harm—are necessary to justify involuntary confinement. There is no reason—and no

73. *Kansas v. Crane*, 534 U.S. 407, 412 (2002).

74. For a fictional portrayal of a world where individuals are punished for crimes prior to committing them, see *MINORITY REPORT* (20th Century Fox, DreamWorks Pictures 2002).

75. This article does not address the question of whether and to what extent the state may civilly commit a person for harm to self, because that concern is not present in the case of contagious disease, where the state's primary purpose is to prevent the spread of disease to others. While many states authorize civil commitment for mental illness and harm to oneself as well as others, the Supreme Court has not elucidated the scope of state power to protect mentally ill persons from harming themselves. See the dictum in *O'Connor v. Donaldson*, 422 U.S. 563, 575 (1975) ("That the State has a proper interest in providing care and assistance to the unfortunate goes without saying. But the mere presence of mental illness does not disqualify a person from preferring his home to the comforts of an institution. Moreover, while the State may arguably confine a person to save him from harm, incarceration is rarely if ever a necessary condition for raising the living standards of those capable of surviving safely in freedom, on their own or with the help of family or friends.").

76. Deliberate infection of others is a rare event and could be prosecuted as a crime like assault. Inadvertent transmission of disease may occur if the person is unaware of the precautions that should be taken; lives in crowded surroundings, such as a homeless shelter or on the street, where public contact is inevitable; or, as in most of the reported cases in recent decades, suffers from a mental illness or substance use disorder that makes it difficult for them to adhere to the necessary precautions. See, e.g., *City of Newark v. J.S.*, 652 A.2d 265, 277 (N.J. Super. Ct. 1993) (finding that the risk for spreading infection is increased due to the individual being homeless, unable to shelter in place, and likely to stay in a shelter where other homeless individuals would be at risk).

constitutional justification—for confining people who are able to control their behavior and avoid putting others at risk of being harmed. Therefore, both the characteristics of the disease and the characteristics of the individual must be examined to determine whether involuntary confinement is warranted.

This civil commitment standard creates a simple two-factor test,⁷⁷ making clear that both the disease and the individual's ability and willingness to control their behavior are factors that must be considered. These two factors weighed in tandem determine the potential risk to the public. Moreover, evaluating each factor permits responses tailored to the degree of risk to the public. It is not a binary choice between involuntarily confining individuals in a government facility or letting them go free and placing the public at risk. That is a false dichotomy. There is a wide spectrum of interventions, including active monitoring and being confined in one's home, that infringe to a lesser extent on individual liberty. The degree of intrusion into individual liberty should match the degree of risk to the public.

To be sure, there are some instances in which the severity of a particular contagious disease can justify quarantining a person before the presence of infection can be determined.⁷⁸ The justification lies, in part, on the particular pathology of the infectious agent, the ease of transmission from person-to-person by casual contact, and a substantial probability of serious illness or death resulting from infection. In such cases, the magnitude of the possible harm can outweigh the person's liberty interest in not being mischaracterized as having a deadly disease.

However, the pathology of the disease itself does not provide a basis for ignoring the second factor of the test: evidence that the individual is likely to behave in such a way that will transmit the infection to others (assuming the person is in fact infected). The state has no reason to involuntarily quarantine a person who will not infect other people. A contagious disease cannot be transmitted to others unless the presumably infected person behaves in ways that could transmit infection. For seriously dangerous airborne agents, it may be more difficult for an individual to ensure they can protect others. Transmission of blood-borne agents would be easier to prevent since they require more intimate contact or at least leaving blood-stained items, such as clothing, blankets, or needles, where others could touch them. Thus, the second part of the two-factor test should not be abandoned, even in plausible emergency

77. While the mental illness jurisprudence requires the presence of mental illness, quarantine by definition does not require certainty of infection and, indeed, there may be circumstances where involuntary quarantine for a contagious disease may be justified. Our contention is that this may only be true in rare cases and that to determine when this action is warranted requires proper examination of both the profile of the disease and the individual. *See infra* notes 78–79 and accompanying text.

78. A prompt hearing must follow to evaluate whether continued confinement is justified. *See infra* notes 145–156 and accompanying text (discussing procedural due process requirements for hearings).

circumstances.⁷⁹

Dr. Craig Spencer and Nurse Kaci Hickox are examples of persons who were suspected of harboring the Ebola virus, but could not be justifiably quarantined, because neither the characteristics of the disease nor the characteristics of the individuals supported involuntary confinement.⁸⁰ Ebola cannot be spread to others until after symptoms appear. Furthermore, both individuals were experts in the disease with experience treating Ebola patients and, therefore, more than capable of avoiding any behavior that might transmit any infection. They posed no threat to the public. In contrast, a person who is suspected of infection with active, contagious tuberculosis and who also suffers from a disabling condition that makes it difficult to control his own behavior could meet both factors for emergency involuntary detention for the purpose of determining whether he does in fact have the infection.⁸¹

Emergency quarantine seems relevant primarily to travelers entering the United States from countries where quarantinable diseases exist. This is because quarantine applies to persons who may have been exposed to such a disease, but are not yet known to be infected. Furthermore, imposing quarantine at the border is more clearly a matter of federal law.⁸² However, the CDC did not attempt or even recommend federal emergency quarantine for either Dr. Spencer or Nurse Hickox when they returned to the United States after treating Ebola patients overseas. Instead, the state of New Jersey took Nurse Hickox into custody, and the state of Maine attempted unsuccessfully to confine her to her home. Federal emergency quarantine orders have been and are likely to remain very rare, which suggests that they offer negligible protection of the general public in the event of a real epidemic.⁸³

The 2017 quarantine regulations go well beyond the doctrinal framework described above by authorizing involuntary confinement without requiring consideration of both of the factors required for civil commitment. The regulations do not require any evidence that a person is likely to act in ways that will infect others. And, the regulations do not require an examination into the characteristics of the disease, which, as described

79. *See Myers v. Patterson*, 819 F.3d 625, 632 (2d Cir. 2016) (stating that in order to handcuff and briefly detain a person who is mentally ill, an officer must have probable cause to believe that a person poses a danger to others or herself).

80. *See Bell*, *supra* note 10.

81. *See, e.g., City of Newark v. J.S.*, 652 A.2d 265, 274 (N.J. Super. Ct. 1993). Though in this particular case the individual was known to be infected with tuberculosis and was confined to prevent the spread of disease, to prevent the disease from becoming a resistant strain, and to treat him if he wished to be treated.

82. *See, e.g., U.S. ex rel. Siegel v. Shinnick*, 219 F. Supp. 789, 790 (E.D.N.Y. 1963).

83. The case of Andrew Speaker does not fit the emergency quarantine model, because the CDC knew that Mr. Speaker had tuberculosis (although the CDC misdiagnosed his case as one of extensively resistant TB), and the CDC served him with a federal quarantine order only after he voluntarily admitted himself to a New York hospital. His case is better characterized as isolation for treatment. *Speaker v. U.S. Dep't of Health & Human Servs. Ctrs. For Disease Control & Prevention*, 680 F. Supp. 2d 1359, 1360–61 (N.D. Ga. 2009), *reversed*, 623 F. 3d 1371 (11th Cir. 2017).

earlier, is critical to establishing what the potential magnitude of harm is to the public. Rather, a reasonable belief that an individual is infected with a quarantinable disease is the sole standard used to justify involuntary commitment.⁸⁴

In the foreign regulations, the CDC Director may “isolate, quarantine, or place . . . under surveillance” any person arriving into the United States whom “the Director has reason to believe . . . is infected with or has been exposed to any of the communicable diseases listed in an Executive Order.”⁸⁵ A case from 1963 demonstrates the problem with this standard. Ellen Siegel was held in quarantine for up to fourteen days because she did not present a “valid certificate” of vaccination against small pox.⁸⁶ Mrs. Siegel had visited Sweden when it still had a case of smallpox and although she had been revaccinated about two months earlier, the vaccination was said to be “unsuccessful.” The district court denied her petition for habeas corpus, even though officials had no evidence of Mrs. Siegel’s exposure to small pox. On one hand, the judge clearly stated the grounds for isolation: “[O]ne who is considered by the health authority (medical officer in charge) as having been exposed to infection by a quarantenable [sic] disease and to be capable of spreading that disease.”⁸⁷ On the other hand, the judge allowed the medical officer considerable discretion in believing that there was an opportunity for Mrs. Siegel to have been exposed during her four days in Stockholm, since there would be no way to know whether she had in fact been exposed until the fourteen day incubation period elapsed, and also failed to consider Mrs. Siegel’s ability to take appropriate precautions.⁸⁸

The *Siegel* case demonstrates a disconnect between doctrine and practice, especially in the case of quarantine in the absence of evidence of infection. It is not surprising that judges are wary of releasing individuals who might have a communicable disease, contrary to the judgment of health officials. However, as seen in this case, that judgment may have had less to do with evidence of actual exposure or infection than with making a safe decision for the public and the officials themselves. If officials are wrong, only the individual suffers. If they are correct but release the person, there could be an outbreak. This latter possibility, of course, depends on whether the person fails to take precautions to avoid contact with other people. But, that factor is often ignored in practice. This narrow, utilitarian view of harm demonstrates a concerning disregard for individual rights and the reason that due process protections are required.

The 2017 interstate regulations take a similar approach, but flesh out the requirements authorizing involuntary measures in more detail. The

84. 42 C.F.R. § 70.6(a) (2017). Under the regulations, interstate quarantine also requires reasonable belief that the individual may cross state lines or be a source for someone who may cross state lines.

85. *Id.* § 71.32(a) (unchanged by 2017 Rule).

86. U.S. *ex rel.* Siegel v. Shinnick, 219 F. Supp. 789, 790–91 (E.D.N.Y. 1963).

87. *Id.* at 791.

88. *Id.*

regulation's text, set forth above, authorizes "apprehension, medical examination, quarantine, isolation, or conditional release" of anyone in the United States who "is reasonably believed to be infected with a quarantinable communicable disease in a qualifying stage."⁸⁹ A qualifying stage is defined in the regulations as either of two things.⁹⁰ The first is the period in which the infection can be transmitted, which makes sense. The second is a bit more complicated. It is in the "precommunicable stage," but only with a "quarantinable communicable disease [that] would be likely to cause a public health emergency if transmitted to other individuals."⁹¹

The regulations state that the reasonable belief that a person is infected must be based on "articulable facts upon which a public health officer could reasonably draw the inference that an individual has been exposed, either directly or indirectly, to the infectious agent."⁹² This seems intended to ensure that the official has a scientific basis for suspecting a person may have been infected. However, as in *Siegel*, officials may simply assume that anyone who has been in a country with a particularly dangerous communicable disease has been exposed.⁹³

It is possible that the outbreak potential of quarantinable communicable diseases would justify taking a closer look at people who might have been exposed to them. Thus, people coming into the United States from a country having an outbreak of a severe quarantinable disease could be stopped for a brief interview (an apprehension). However, they pose no danger if they are able to take, and do take, the necessary precautions to avoid transmitting infection, whether or not they are actually infected. Nurse Kaci Hickox is an example of a detainee knowing more about how to diagnose infection and avoid infecting others than the officials in New Jersey who placed her in quarantine and those in Maine who sought to do so.⁹⁴ The regulations' complete omission of any consideration of individual capacity or behavior increases the probability of unnecessary and unwarranted detentions. As such, these regulations enable actions against those who pose no threat to the public, are unnecessary to protect the public's health, and thus violate substantive due process.

89. 42 C.F.R. § 70.6(a)(1) (2017).

90. *Id.* § 70.1.

91. *Id.* The precommunicable stage is further defined as the "earliest opportunity for exposure." *Id.* It is not clear that the "[p]ublic health emergency" language is a substantial limitation. If a disease is dangerous enough to be placed in the Executive Order list, when would it *not* be likely to cause a public health emergency if transmitted to others?

92. *Id.* The explanation in the Federal Register notes that this comports with standard public health practice. Control of Communicable Diseases, 82 Fed. Reg. 6890, 6906 (Jan. 19, 2017) (codified at 42 C.F.R. pts. 70, 71).

93. *See* *Liberian Cmty. Ass'n of Conn. v. Malloy*, No. 3:16-cv-00201, 2017 WL 4897048, at *3–4 (D. Conn. 2017) (describing the quarantine of two plaintiffs who were in Liberia but working on data analysis and were never exposed to anyone who had Ebola).

94. Kaci Hickox, *Her Story: UTA Grad Isolated at New Jersey Hospital in Ebola Quarantine*, DALLAS MORNING NEWS (Oct. 29, 2014), <http://www.dallasnews.com/ebola/headlines/20141025-uta-grad-isolated-at-new-jersey-hospital-as-part-of-ebola-quarantine.ece> [<https://perma.cc/73JX-6W8G>].

There are good reasons to be skeptical of allowing such broad discretion to officials. History shows that officials have often enforced measures like quarantine and civil commitment disproportionately against minorities, immigrants, and the poor.⁹⁵ Infectious disease emergencies are typically accompanied by paranoia and fear, and “commonly trigger retributive and discriminatory instincts, so that actual quarantines often impose inhumane, stigmatizing, or even penal treatment upon persons who are confined based on caprice or even prejudice.”⁹⁶ For this reason perhaps, some observers argue that it will be important to ensure that the regulations are enforced by qualified officials who base decisions on science.⁹⁷ However, the purpose of having rules is to prevent abuse of discretion. If the rules authorize discretion broad enough to enable or even invite abuse, they endanger guarantees of individual liberty.

Quarantine should be seen as the exception to the rule that citizens retain the liberty to move freely, free from restraint.⁹⁸ Moreover, broad use of methods that are meant to be rare exceptions, such as quarantine, means that exceptions become the rule. When exceptions become the rule, the rule of law becomes corrupted in the eyes of the public. To have the public question the rule of law generates not only potential harm to our democratic system, but more specifically, when the public questions the legal decisions of the government during infectious outbreaks, this increases the potential for harm to the public’s health.

2. *Procedural Due Process*

In criminal law, procedural due process seeks to ensure that those who are punished are those who have committed a crime. Conversely, involuntary isolation is based largely on predictions about the risks individuals will present in the future.⁹⁹ Quarantine is based not only on predictions about the risk of future behavior, but also predictions or guesses about the presence of infection. For involuntary quarantine and isolation, some scholars have advocated for requiring all of the procedural protections found in criminal prosecution.¹⁰⁰ At the very least, those whom the state

95. Mariner, Annas & Parmet, *supra* note 28, at 355–56. *See generally* HOWARD MARKEL, *QUARANTINE!* (Johns Hopkins Univ. Press 1997); ALAN M. KRAUT, *SILENT TRAVELERS: GERMS, GENES, AND THE “IMMIGRANT MENACE”* (Johns Hopkins Univ. Press 1994); PRISCILLA WALD, *CONTAGIOUS—CULTURES, CARRIERS, AND THE OUTBREAK NARRATIVE* (Duke Univ. Press 2008).

96. Daniel Markovits, *Quarantines and Distributive Justice*, 33 J. L. MED. & ETHICS 323, 323 (2005).

97. *See* Maria Gallucci, *New Quarantine Rules Raise Public Health Concerns Under Trump*, MASHABLE (Jan. 25, 2017), <http://mashable.com/2017/01/25/donald-trump-cdc-quarantine-rules/#fV6IfgJ6oOqO> [<https://perma.cc/9UK6-P6J7>] (“The federal quarantine rules aren’t the issue per se, said Scott Burris . . . It’s the matter of who will implement these rules that has public health experts concerned.”).

98. *Foucha v. Louisiana*, 504 U.S. 71, 83 (1992); *see also infra* notes 131–135 and accompanying text (discussing that procedural due process allows for narrow exceptions in acute circumstances with overwhelming governmental interest).

99. Parmet, *AIDS*, *supra* note 27, at 85–86.

100. *See* Parmet, *J.S. Mill*, *supra* note 57, at 214 (“Mill advocated that before women are subjected to forced examinations and detentions, they should be given at least roughly

seeks to quarantine should be afforded the same procedural protections civil commitment requires.

The 2017 quarantine regulations miss the mark by failing to incorporate appropriate procedural due process. Procedural due process rights for civil commitment include, at a minimum, the following: (1) the right to legal counsel; (2) adequate written notice of the grounds for commitment; (3) adequate notice of the hearing and opportunity for discovery; (4) an expeditious hearing by an independent judiciary to avoid unnecessary confinement; (5) the right to be present, confront witnesses, and present witnesses; (6) clear and convincing standard of proof; and (7) the right to a transcript for use on appeal.¹⁰¹

Procedural due process in the context of infectious disease control can incorporate flexibility in responding to different diseases and different individuals that offer a wide range of risks to the public.¹⁰² For example, for an easily transmissible disease that poses a serious threat of harm, judicial approval could be sought after initial apprehension.¹⁰³ Regardless, a determination by an independent judge should be obtained as early as possible. Quarantine orders for some diseases may last only a few days, so the judicial determination must happen within hours or days so as not to render the hearing meaningless. Even persons accused of a crime are entitled to a hearing before a judge within forty-eight hours, absent an extreme emergency.¹⁰⁴ Remarkably, these regulations require no judicial determination at all.

Moreover, petitions for quarantines for suspected infection must also comply with the substantive due process requirements discussed above. These include scientific evidence to support the necessity of confinement, including evidence that the person is a potential risk to the public if not confined, a reasonable duration for confinement based on the characteristics of the disease in question, and a reasonable place and manner (home-based quarantine is always preferable if safe).¹⁰⁵ Procedures that fail to meet these basic requirements are prone to errors that result in the unnecessary confinement of healthy people.

Once a person is apprehended for suspected infection, they can be held for seventy-two hours before the Director is required to present them

the same procedural protections as are afforded to those who are charged with a criminal offense.”).

101. *Greene v. Edwards*, 263 S.E.2d 661, 663 (W. Va. 1980).

102. *See Mathews v. Eldridge*, 424 U.S. 319, 321 (1976) (describing factors courts can consider in determining what procedures are due when government deprives anyone of liberty or property: (1) the private interest affected; (2) the risk of an erroneous deprivation and the probative value of additional or different procedures; and (3) the government’s interest, including fiscal and administrative burdens caused by additional or different procedures).

103. *Parmet, AIDS*, *supra* note 27, at 80–81.

104. *Cty. of Riverside v. McLaughlin*, 500 U.S. 44, 56–57 (1991).

105. *Rothstein*, *supra* note 20, at 6; *Ulrich*, *supra* note 11, at 261–62; *see also Jew Ho v. Williamson*, 103 F. 10, 23–24 (C.C.N.D. Cal. 1900) (holding that the individuals selected for quarantine were based on ethnicity and had no evidentiary support to actually help minimize the spread of infection).

with a written Federal Order of Quarantine.¹⁰⁶ Within seventy-two hours after serving that first order, the Director must reassess whether the individual should continue being held.¹⁰⁷ Only after the Director has finalized and served a second Federal Order based on his reassessment is an individual allowed to request the only review discussed in the regulations, a medical review.¹⁰⁸ The term medical review is itself somewhat misleading, as the purpose is to ascertain not whether the person might be infected, but instead “whether the Director has a reasonable belief that the individual is infected with a quarantinable communicable disease in a qualifying stage.”¹⁰⁹ This medical review is not required unless the individual under Federal quarantine expressly requests the review.¹¹⁰ And, once the review is requested, the regulations provide no time limit on when the review must take place, only stating that the review be conducted “as soon as practicable.”¹¹¹

Therefore, a close look at the regulations makes clear that the CDC has the authority to hold an individual for seventy-two hours before providing them information in writing as to why they are being detained. But the CDC can hold that person for at least 144 hours (six days) before they are allowed to request a medical review.¹¹² And with no hard deadline on when this review must be conducted, a more accurate description of the regulations is that an individual can be held for an indeterminate amount of time before the regulations require a medical review. And yet, this is not the end of the process.

Once that medical review is conducted, the written report is provided to the Director, who again has no specified deadline for reviewing the report or issuing a decision afterward, only needing to do so “as soon as

106. 42 C.F.R. § 70.14(b) (2017). In practice, the Director’s function is likely to be delegated to a local public health or CDC employee.

107. *Id.* § 70.15(a). The text does not say whether the reassessment must begin or end within this second seventy-two-hour period.

108. *Id.* § 70.16(b).

109. *Id.* § 70.16(c).

110. *Id.* § 70.16(a).

111. *Id.* § 70.16(a), (m).

112. In 2005, the CDC proposed new quarantine regulations that were attacked by many public health experts as ineffective, overly restrictive, and lacking protection for individual rights. Control of Communicable Diseases, 70 Fed. Reg. 71,892 (proposed Nov. 30, 2005). In those proposed regulations, the CDC introduced the odd concept of “provisional quarantine,” which would allow the agency to hold people for up to three business days before a review. Parmet, *J.S. Mill*, *supra* note 57, at 215–16. This notion, which died when those proposed regulations were tabled, would have provided more protection for individual rights than the current regulations, where an individual can be held for an indeterminate amount of time. For criticisms of the 2005 proposed rules, see, for example, Electronic Privacy Information Center, Comments on Proposed Rule for Control of Communicable Diseases, 70 Fed. Reg. 71,892 (Jan. 30, 2006). Jennifer B. Nuzzo et al., *Comments from the Center for Biosecurity of UPMC on Proposed Revisions to Federal Quarantine Rules*, 4 BIOSECURITY & BIOTERRORISM: BIODEFENSE STRATEGY PRAC. & SCI. 204 (2006); New England Coalition for Law and Public Health, *Comments on Interstate and Foreign Quarantine Regulations Proposed by the Centers for Disease Control and Prevention Department of Health and Human Services Control of Communicable Diseases*, 42 C.F.R. Parts 70 and 71 (Feb. 2006).

practicable.”¹¹³ Once the report is reviewed and the Director has made a final decision, the Director must issue a third Federal Order to continue, modify, or end the quarantine.¹¹⁴ Only after this third Order is served is an individual allowed to appeal the Order, but an appeal cannot be made unless there is “a showing of significant, new or changed facts or medical evidence.”¹¹⁵

Yet, due process requires periodic review of the justification for confinement.¹¹⁶ Since a person cannot be confined absent grounds for confinement, the state cannot continue to confine a person when those grounds no longer exist.¹¹⁷ Although the 2017 regulations provide for periodic review, they fail to require review of the evidence for both elements of the two-factor test (the disease and the individual’s likely behavior) and therefore offer inadequate review to determine the probability that a person poses a danger to the public.¹¹⁸ There should be no obligation placed on the individual to produce new evidence to receive a new review of their confinement. All reviews of commitment based on contagious disease and dangerousness should be quite prompt, since the period of contagion (and dangerousness) may be relatively brief, perhaps less than a few weeks. But even a short period of confinement is a deprivation of liberty if unjustified in the first place. Allowing an unreasonable and ambiguous length of time in confinement without a hearing violates due process rights to an expeditious review to ensure a person’s liberty is not being infringed unnecessarily.

Many comments on the regulations as first proposed expressed concern about the lack of a timely review afforded to individuals. The CDC, rather than increase the protections to conform to traditional procedural

113. 42 C.F.R. § 70.16(m).

114. *Id.*

115. *Id.* Therefore, according to the regulations, before an individual can challenge their detention, which can only occur on a showing of significant new or changed facts or medical evidence, the prior steps must occur: (1) the individual is interviewed/inspected; (2) the individual is isolated due to suspected exposure or infection; (3) the first quarantine order is issued; (4) the first quarantine order is reassessed; (5) a second quarantine order is issued after reassessment; (6) a medical review must be requested by the individual; (7) medical review is conducted; (8) the medical reviewer issues a report; (9) the medical review report is evaluated by the Director; (10) the Director issues a third quarantine order. 42 C.F.R. §§ 70.14–16.

116. *J.R. v. Hansen*, 803 F.3d 1315, 1325 (11th Cir. 2015) (“The Constitution demands that when a state exercises its power to involuntarily commit its citizens on an ongoing basis, it must *require*, not merely *permit*, review of the propriety of their commitment.”) (emphasis in original); *Doe v. Austin*, 848 F.2d 1386, 1396 (6th Cir. 1988) (“[D]ue process requires that some periodic review take place”) (emphasis omitted); *Clark v. Cohen*, 794 F.2d 79, 86 (3d Cir. 1986) (same); *Hickey v. Morris*, 722 F.2d 543, 549 (9th Cir. 1983) (same).

117. *O’Connor v. Donaldson*, 422 U.S. 563, 574–75 (1975); *see also Jackson v. Indiana*, 406 U.S. 715, 738 (1972) (“[D]ue process requires that the nature and duration of commitment bear some reasonable relation to the purpose for which the individual is committed.”).

118. *Hansen*, 803 F.3d at 1325 (11th Cir. 2015) (The “propriety of ongoing commitment” includes both parts of the two-factor test.).

elements, relies on the availability of habeas corpus.¹¹⁹ Indeed, the regulations make it clear that “[n]othing in this section shall affect the constitutional or statutory rights of individuals to obtain judicial review of their Federal detention.”¹²⁰ But habeas corpus cannot be the sole process available.¹²¹ The Court of Appeals for the Eleventh Circuit provided this succinct summary: “[N]o case has permitted habeas to be the primary review procedure. We assume this is because habeas is by its very nature not a periodic, state-initiated review, which, as we have just explained, is required.”¹²²

This is critical because the regulations do not require that an individual’s constitutional right to judicially challenge their detention be included in their written notice.¹²³ The notion that the general public is aware of their habeas corpus rights and is likely to challenge their quarantine in federal court was contradicted during the recent Ebola scare. Though there is no definitive evidence of how many involuntary quarantine orders were officially issued, one report suggested eighteen states issued at least forty formal quarantine orders.¹²⁴ This does not include the

119. *But see* Christopher Ogolla, *Non-Criminal Habeas Corpus for Quarantine and Isolation Detainees: Serving the Private Right or Violating Public Policy?*, 14 DEPAUL J. HEALTH CARE L. 135, 149 (2011) (arguing that, in principle, the writ of habeas corpus can ensure that health officers’ decisions are not arbitrary and capricious, but in practice, in the early twentieth century, courts deferred to health officers’ judgment and rarely overturned quarantine orders). The author notes that most denials of the writ occurred early in the twentieth Century, with few cases after the 1920s. *Id.* at 153. This would be prior to many of the advances in modern medicine, increased knowledge in public health principles for infectious disease control, and greater protection for constitutional rights.

120. 42 C.F.R. § 70.14(d) (2017).

121. *Williams v. Wallis*, 734 F.2d 1434, 1439 (11th Cir. 1984).

122. *J.R. v. Hansen*, 803 F.3d 1315, 1324 (11th Cir. 2015) (citing *Parham v. J.R.*, 442 U.S. 584, 607 (1979)).

123. *See* 42 C.F.R. § 70.14 (a)(1)–(7) (2017) (stating that the written order, served to the individual, contain: (1) identity of the quarantined individual or group; (2) location of the quarantine; (3) explanation of the factual basis for the reasonable belief that the individual is in the qualifying stage of a quarantinable communicable disease; (4) explanation of the reasonable belief that the individual is moving or about to move from one State to another or is a probable source for someone who may do so; (5) explanation that the Federal order will be reassessed within 72 hours and an explanation of the medical review; (6) explanation of the criminal penalties for violating the Federal order; and (7) explanation that if a medical examination is required, the examination will be conducted by an authorized and licensed health worker, and with prior consent). It is worth noting that these requirements are for the Federal order, which can be served upon the individual up to seventy-two hours after initial apprehension. There is nothing in the regulations that require any information be provided to the individual prior to this order.

124. ACLU & GHJP, *supra* note 19, at 29. The authors of this report submitted surveys to the Departments of Health in each state about their quarantine guidelines and how many people have been subjected to restrictions and only six states responded. *Id.* at 28. One state, Connecticut, reported quarantining nine people, but the authors knew of at least one additional person who was quarantined unofficially for two days in a hotel room. *Id.* The report states that no governmental entity collects data on quarantine, and that unofficial quarantines or “voluntary” quarantines were used on numerous occasions. *Id.* at 7, 25–27. Many other quarantines were described as “voluntary,” because they were not directly disobeyed and, thus, never forced government officials to submit an official order. Yet, the quarantine of Dr. Colin Buck, who received official written notice that “failure to comply with [home] quarantine is punishable by six months in jail,” demonstrates that some of these “voluntary” quarantines were involuntary. *Id.* at 27.

2815 military service members who were quarantined,¹²⁵ nor does it factor in the numerous “voluntary” quarantines that came amid official pressure.¹²⁶ The CDC itself has reported that 29,789 people were “monitored” in some fashion by state, local, and territorial health departments.¹²⁷ What we do know is that only one was challenged in federal court.¹²⁸ As the Ninth Circuit noted, “No matter how elaborate and accurate the habeas corpus proceedings available under [state law] may be once undertaken, their protection is illusory when a large segment of the protected class cannot realistically be expected to set the proceedings into motion in the first place.”¹²⁹

The review that the regulations do provide is questionable in other respects. Rather than providing for independent judicial review and impartial oversight, the medical review is to be conducted by an individual of the Director’s choosing, as long as it is not the official who issued the initial quarantine order.¹³⁰ This official is charged only with reviewing whether the Director has a “reasonable belief that the individual is infected with a quarantinable communicable disease in a qualifying stage,”¹³¹ based on the evidence presented at the review.¹³²

The primary purpose of the review is not to assess whether the individual is infected, exposed, or at risk to behave so as to transmit a harmful disease. A physical medical examination is only conducted if the medical reviewer believes “such an examination would assist in assessing the individual’s medical condition.”¹³³ In fact, the medical review can be conducted over the phone or by any means the medical reviewer deems practicable.¹³⁴ At the conclusion, the designated reviewer is tasked with making a recommendation, with no deadline mentioned and no specification as to whether the Director must follow it or not.¹³⁵

125. Sheri Fink, *Ebola Crisis Passes, but Questions on Quarantines Persist*, N.Y. TIMES (Dec. 2, 2015), <https://www.nytimes.com/2015/12/03/health/ebola-crisis-passes-but-questions-on-quarantines-persist.html> [<https://perma.cc/72EU-49QH>].

126. ACLU & GHJP, *supra* note 19, at 29. The report states that there were at least 233 *de facto* quarantines that stemmed from official pressure. The report also states that many individuals underwent quarantine based on community pressure. *Id.*

127. Hyacinte Julien Kabore et al., *Monitoring of Persons with Risk for Exposure to Ebola Virus—United States, November 3, 2014–December 27, 2015*, 65 MORBIDITY & MORTALITY WKLY. REP. 1401 (2016).

128. *Mayhew v. Hickox*, No. CV-2014-36, 2014 Me. Trial Order LEXIS 1 (Dist. Ct. Me. Oct. 31, 2014). And this quarantine began as a “voluntary” quarantine. ACLU & GHJP, *supra* note 19, at 26–27.

129. *Doe v. Gallinot*, 657 F.2d 1017, 1023 (9th Cir. 1981); *see also id.* at 1022–23 (rejecting the state’s argument that “habeas corpus review on demand adequately protects against erroneous” commitments).

130. 42 C.F.R. § 70.16(e) (2017). The medical reviewer can be “a physician, nurse practitioner, or similar medical professional qualified in the diagnosis and treatment of infectious diseases.” *Id.* § 70.1.

131. *Id.* § 70.16(c).

132. *Id.* § 70.16(e).

133. *Id.* § 70.16(i).

134. *Id.* § 70.16(k).

135. *Id.* § 70.16(e).

As an important aside, it is also unclear whether this medical examination mentioned in § 70.16(i), which is ordered as a part of the medical review, corresponds to the medical examination that the Director may require as part of a Federal order for quarantine according to § 70.12(a).¹³⁶ The medical examination in § 70.12(b) shall be conducted only with prior informed consent, and performed by an “authorized and licensed health worker.”¹³⁷ What is clear is that individuals have a common law right to refuse any diagnostic or therapeutic medical procedure, which was recognized as constitutionally protected by the Supreme Court in *Cruzan v. Director, Missouri Department of Health*.¹³⁸ This raises the question of whether a refusal could justify continued confinement, a question left unanswered by the regulations.¹³⁹

Persons who are civilly committed retain the right to refuse treatment, including medication.¹⁴⁰ The exception to this principle—permitting administering anti-psychotic medication to prevent a person civilly committed for mental illness from imminent harm to himself or others in the institution¹⁴¹—simply does not apply in cases of commitment for contagious disease.¹⁴² The medications available to treat a contagious disease are designed to cure an infection, not to forestall or end violent behavior.

The U.S. Supreme Court may not have recognized a confined person’s right under the Fourteenth Amendment to anything beyond reasonably safe conditions of confinement, freedom from bodily restraints, and nutritionally adequate food.¹⁴³ Nevertheless, federal appeals courts have recognized that persons in civil commitment are entitled to better conditions of confinement than prisoners convicted of a crime.¹⁴⁴ Furthermore, it bears repeating that in the case of quarantine it is unknown whether these individuals are infected, which distinguishes them from those who

136. *Id.* §§ 70.12(a), 70.16(i).

137. *Id.* § 70.12(b).

138. 497 U.S. 261, 269 (1990).

139. A full analysis of this question is beyond the scope of this paper. Yet, the two-factor test laid out above should be applied here. Though it would be more difficult for the government to justify continued confinement without confirmation of infection, other information regarding the characteristics of the disease and the individual could warrant confinement. It is important that continued confinement not be used as a coercive threat to pressure an individual to undergo a diagnostic or medical procedure that they would otherwise refuse.

140. *Mills v. Rogers*, 457 U.S. 291, 301–03 (1982) (anti-psychotic medication), *on remand sub nom.*, *Rogers v. Okin*, 738 F.2d 1, 3 (1st Cir. 1984); *Green v. Dormire*, 691 F.3d 917, 922 (8th Cir. 2012) (anti-psychotic medication); *City of Newark v. J.S.*, 652 A.2d 265 (N.J. Super. Ct. 1993) (TB medication).

141. *Washington v. Harper*, 494 U.S. 210, 236 (1990).

142. Nonetheless, due process is necessary to establish that the forcible use of psychotropic drugs is necessary to prevent harm to a civilly committed patient. *Mills*, 457 U.S. at 300–01; *Jurasek v. Utah State Hosp.*, 158 F.3d 506, 510–11 (10th Cir. 1998); *Kulas v. Valdez*, 159 F.3d 453, 455 (9th Cir. 1998).

143. *Youngberg v. Romeo*, 457 U.S. 307, 312 (1982); *see also Ingrassia v. Schafer*, 825 F.3d 891, 897 (8th Cir. 2016) (nutritionally adequate food); *Mitchell v. Washington*, 818 F.3d 436, 443 (9th Cir. 2016) (adequate medical care); *Belbachir v. Cty. of McHenry*, 726 F.3d 975, 979 (7th Cir. 2013) (safety); *Davis v. Rennie*, 264 F.3d 86, 97 (1st Cir. 2001) (safety).

144. *Mitchell*, 818 F.3d at 443; *Belbachir*, 726 F.3d at 979.

are known to be infected and refuse effective medical treatment or threaten to behave in ways that could infect others.

In *Foucha v. Louisiana*, the Supreme Court affirmed that the State has the burden of proof in a civil commitment proceeding.¹⁴⁵ The Court held that even if the confinement itself were constitutional, it would be “improper absent a determination in civil commitment proceedings.”¹⁴⁶ Indeed, the individual whom the state seeks to confine is “entitled to constitutionally adequate procedures to establish the grounds for his confinement.”¹⁴⁷

The Supreme Court has sanctioned less stringent procedures in certain circumstances, but the reasoning and the holdings of those decisions do not apply to the involuntary confinement of competent adults with no proof of infection. In *Parham v. J.R.*, the Supreme Court upheld a Georgia statute authorizing parents and guardians to voluntarily seek admission of their child or ward to a state mental health treatment hospital subject to a determination by the hospital superintendent that the child is mentally ill and will likely benefit from hospital care.¹⁴⁸ The Court found that a full adversary hearing before a judge was not constitutionally required for such children, since the “questions are essentially medical in character,” and the focus of the determination was whether the child was mentally ill and could benefit from treatment in the facility, as opposed to confining the individual for the protection of the public.¹⁴⁹ Moreover, the Court emphasized that to place too onerous a requirement for oversight would be a “significant intrusion into the parent-child relationship,” where, absent evidence of abuse or neglect, there is a “presumption that parents act in the best interests of their child.”¹⁵⁰ In the case of committed children, the Court noted that state departments of child welfare who have custody of children have a statutory and *parens patriae* duty to act in the child’s best interest.¹⁵¹

None of these reasons apply to the involuntary civil commitment of a competent adult believed to potentially have a contagious disease: the state does not seek to provide treatment for the adult and has no obligation to act in the adult’s best interest; and commitment does not depend solely on the adult’s medical condition but also on his likelihood of transmitting infection to others. Instead, in seeking the civil commitment of an adult, the state acts as an adversary with the goal of protecting the public

145. *Foucha v. Louisiana*, 504 U.S. 71, 75 (1992); *see also* *O’Connor v. Donaldson*, 422 U.S. 563, 580 (1975) (Burger, J., concurring) (“Commitment must be justified on the basis of a legitimate state interest, and the reasons for committing a particular individual must be established in an appropriate proceeding.”).

146. *Foucha*, 504 U.S. at 78.

147. *Id.* at 79. The determination is made on a case-by-case (individual) basis, rather than relying on group characteristics.

148. *Parham v. J.R.*, 442 U.S. 584, 605, 620–21 (1979). The hospital superintendent was assumed to be a neutral factfinder. *Id.* at 606.

149. *Id.* at 609.

150. *Id.* at 610.

151. *Id.* at 605, 618.

rather than helping the adult. This calls for an adversary hearing before a judge.¹⁵²

As stated above, due process allows some flexibility in procedures, and the Supreme Court recognizes that “certain narrow circumstances” may justify a limited confinement prior to a hearing.¹⁵³ This is acceptable when the statute in question “carefully limited the circumstances under which detention could be sought . . . and was narrowly focused on a particularly acute problem in which the government interests [were] overwhelming.”¹⁵⁴ As the Court states, in this country “liberty is the norm, and detention prior to trial or without trial is the carefully limited exception.”¹⁵⁵ Yet, these quarantine regulations cannot be categorized as a narrow set of circumstances where an individual may be held prior to a civil hearing. And the regulations certainly do not require the government “to convince a neutral decision maker by clear and convincing evidence that no conditions of release can reasonably assure the safety of the community,” in a “full-blown adversary hearing.”¹⁵⁶

This medical review lacks the adversarial protections typically required for due process. The individual is authorized to choose a representative, including a family member, at his or her own expense, but there is no requirement for representation by an attorney.¹⁵⁷ The regulations do permit some financial assistance for the indigent, but only for those making less than 200% of the federal poverty line qualify, and only if that person requests assistance and can certify, under penalty of perjury, that they are indeed indigent.¹⁵⁸ Any single individual making \$24,280 or more will

152. The case of *Washington v. Harper*, 494 U.S. 210 (1990), is similarly distinguishable. In this case, the Court held that a mentally ill inmate could be administered antipsychotic drugs against their will if prescribed by a psychiatrist and approved after review by another psychiatrist, without any other procedural hearing. *Id.* at 222. This case, unlike one of quarantine, relates to an individual who is already confined in a prison, is mentally ill and unable to control their behavior, and is being provided medication that is for their own benefit. Therefore, this case cannot negate the procedural due process requirements for quarantine.

153. *Foucha v. Louisiana*, 504 U.S. 71, 80 (1992).

154. *Id.* at 81.

155. *Id.* at 83.

156. *Id.* at 81. Interestingly, in *Foucha*, the Supreme Court struck down a law that did not entitle the individual to an adversarial hearing but instead placed the burden on the detainee to prove they did not pose any danger to the community, which has similarities to the new quarantine regulations. *Id.* at 81–82.

157. 42 C.F.R. § 70.16(f) (2017). While a legal representative may be chosen, those who are frightened and confused may use this authorization to select a family member or spouse, rather than someone with legal expertise who understands and can assert their constitutional rights. Guaranteeing legal representation at any hearing or “review” would do greater justice to the rights of anyone being held.

158. *Id.* § 70.16(f).

Indigent means an individual whose annual family income is below 200% of the applicable poverty guidelines updated periodically in the Federal Register by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2) or, if no income is earned, liquid assets totaling less than 15% of the applicable poverty guidelines.

Id. § 70.1. The 2018 federal poverty guideline for an individual is \$12,140 (except Alaska and Hawaii). Office of the Assistant Sec’y for Planning & Evaluation, *Poverty Guidelines*,

have to cover the bill.¹⁵⁹ Furthermore, if the government is to cover the medical expenses, it is the Director, not the individual, who is charged with appointing a representative.¹⁶⁰ Prior to the review, the individual or their representative will be given reasonable opportunity to examine the available records that will be used during the review.¹⁶¹ At the review, the individual and their advocate are able to submit medical or other evidence, though it is the Director's appointed medical reviewer who determines, at their own discretion, whether to allow the quarantined party to present any medical experts on their behalf.¹⁶²

The importance of due process protections is made clear in the litigation stemming from the Ebola scare in the United States. Maine Governor Paul LePage and his Commissioner of Health, Mary Mayhew, petitioned the Augusta District Court for an order to subject Kaci Hickox, a nurse who returned home after caring for Ebola patients in Sierra Leone, to remain inside her Fort Kent home and submit to direct monitoring, in the belief that she might have been infected with Ebola.¹⁶³ Judge Charles LaVerdiere issued a carefully considered opinion based on civil commitment principles. He found no evidence that Nurse Hickox was infected or that she would pose any risk to the public.¹⁶⁴ In fact, given her training and experience, Nurse Hickox knew far more than the officials about the symptoms of Ebola and what to do and where to go (the hospital) if any symptoms appeared. Nurse Hickox has since been a strong supporter of having lawyers and legal representation in cases such as hers.¹⁶⁵

DEPT OF HEALTH & HUMAN SERVS. (Jan. 13, 2018), <https://aspe.hhs.gov/poverty-guidelines> [<https://perma.cc/F6MF-MCU7>].

159. *See id.*

160. 42 C.F.R. § 70.16(f).

161. *Id.* § 70.16(g).

162. *Id.* § 70.16(f).

163. Despite the misapplication of quarantine, this procedure is more closely aligned with due process protections, given that they sought a judicial order rather than simply issuing an administrative order from the health department.

164. *Mayhew v. Hickox*, No. CV-2014-36, 2014 Me. Trial Order LEXIS 1 (Dist. Ct. Me. Oct. 31, 2014) (“The State has not met its burden at this time to prove by clear and convincing evidence that limiting Respondent’s movements to the degree requested is ‘necessary to protect other individuals from the dangers of infection. . . .’”). Ms. Hickox agreed to an order that she continue to stay in contact with the health department until November 10, 2014, and notify them if any symptoms appeared. *Id.* No symptoms ever appeared, and the order expired. Nurse Hickox never had Ebola. This case also shows the importance of having independent judicial oversight, rather than review by an employee of the agency that gave the initial quarantine order.

165. Kaci Hickox, *When a Nurse Needs an Attorney: U.S. Quarantine Policy*, PETRIEFLOM CENTER BILL OF HEALTH BLOG (May 31, 2017), <http://blogs.harvard.edu/billofhealth/2017/05/> [<https://perma.cc/CC48-LECM>]. Ms. Hickox recently settled her lawsuit against New Jersey with an agreement that enhances rights for those who are subjected to quarantine orders. Under the settlement, anyone who is quarantined in New Jersey can contest the order, has the right to legal counsel, is given prior notice of any hearings, the right to send and receive communications, and the right to privacy so long as it does not interfere with vital public health needs. Marc Santora, *New Jersey Accepts Rights for People in Quarantine to End Ebola Suit*, N.Y. TIMES (July 27, 2017), <https://www.nytimes.com/2017/07/27/nyregion/new-jersey-accepts-rights-for-people-in-quarantine-to-end-ebola-suit.html> [<https://perma.cc/CV8M-GWKH>].

Adherence to due process requirements may help protect individuals from being mistakenly confined, but they do not ensure that officials are held accountable for violating individual rights. Of the relatively few cases challenging civil commitment, most have been brought under either 42 U.S.C. § 1983¹⁶⁶ or habeas corpus.¹⁶⁷ While § 1983 appears to offer a remedy after the fact, courts often grant qualified immunity to state officials who reasonably or even mistakenly believe their actions did not violate a clearly established constitutional right.¹⁶⁸ Most reported cases of relevant § 1983 claims involve persons civilly committed for mental illness and dangerousness, often after committing sex crimes, who are more likely to have legal representation than persons subjected to quarantine or isolation. Thus, § 1983 does not appear to offer a significant remedy to persons wrongfully confined for having a contagious disease.

New Jersey Governor Chris Christie and Connecticut Governor Daniel Malloy were each sued in separate state court actions for violating the rights of their citizens by imposing unnecessary and scientifically unjustified quarantines of persons believed to have been exposed to Ebola.¹⁶⁹ Yet, the trial courts initially dismissed both lawsuits on the ground that the government officials were entitled to qualified immunity for their actions.¹⁷⁰

The defense of qualified immunity prevents those who are harmed from pursuing justice and removes any potential deterrence of capricious official actions.¹⁷¹ Despite the quarantines' lacking any evidentiary basis and the harms that were suffered, there was no avenue of redress for those whose rights were violated. The application of qualified immunity not only allows officials to avoid accountability for constitutional violations, but also may encourage officials to believe that they can act with

166. See, e.g., *Parham v. J.R.*, 442 U.S. 584, 587 (1979); *J.R. v. Hansen*, 803 F.3d 1315, 1319 (11th Cir. 2015); *Ammons v. Wash. Dep't of Social & Health Servs.*, 648 F.3d 1020, 1022–23 (9th Cir. 2011).

167. See, e.g., *Greene v. Edwards*, 263 S.E.2d 661, 661–62 (W. Va. 1980).

168. See, e.g., *Hydrick v. Hunter*, 500 F.3d 978, 1000 (9th Cir. 2007); *Hickox v. Christie*, 205 F. Supp. 3d 579, 588–89 (D.N.J. 2016); *Liberian Cmty. Ass'n of Conn. v. Malloy*, No. 3:16-cv-00201, 2017 WL 4897048, at *1, *9–13 (D. Conn. Mar. 30, 2017).

169. *Hickox*, 205 F. Supp. 3d at 584; *Liberian Cmty. Ass'n of Conn.*, 2017 WL 4897048 at *1, *9–13.

170. *Hickox*, 205 F. Supp. 3d at 596, 599; *Liberian Cmty. Ass'n of Conn.*, 2017 WL 4897048 at *1–3. It is worth noting that in *O'Connor v. Donaldson*, the Court found that an official could be liable for damages for violating a person's civil rights under 42 U.S.C. § 1983 if he “knew or reasonably should have known that the action he took within his sphere of official responsibility would violate the constitutional rights of [Donaldson], or if he took the action with the malicious intention to cause a deprivation of constitutional rights or other injury to [Donaldson].” *O'Connor v. Donaldson*, 422 U.S. 563, 577 (1975); see also Brief for Robert M. Palumbos et al. as Amici Curiae Supporting Appellants, *Liberian Cmty. Ass'n of Conn. v. Malloy*, No. 3:16-cv-00201, 2017 WL 4897048 at *23–24 (D. Conn. Mar. 30, 2017) (criticizing the court's analysis on the merits of using quarantine).

171. Another point should be made, though we lack the space to address it in full. As long as officials, including judges, are unclear on the substantive due process standards for confinement, qualified immunity will be a viable defense based on the theory that the constitutional standards were not settled or clear. And with so few cases, judges in one state may be unaware of the standards applicable to such a case and, thus, think the law is unclear.

impunity. In the absence of adequate remedies, therefore, it is all the more important that the legal process for initiating involuntary detention adequately protect individuals from arbitrary confinement. The looser the standards for action—such as a reasonable belief—and the greater the discretion granted to officials, the more likely they are to take the more coercive path, protecting themselves rather than the individual or the public. Thus, the need for due process protections that limit unjustified quarantines prior to their imposition are essential to protecting individual rights.

The 2017 regulations are troubling from both a legal and a medical perspective. Legally, they place substantial power in the hands of the CDC Director and anyone the Director chooses to carry out the regulations. More important, the regulations offer those suspected of being exposed to a disease little protection from erroneous, arbitrary, or discriminatory decisions in an intra-agency review. Medically, they enable scientifically unjustified decisions by CDC officials, such as the quarantine orders seen in the Ebola scare. Decisions that could result in losing one's liberty for weeks demand adherence to clear legal principles. And these legal principles demand evidence-based medicine.

Scientifically supported quarantine not only meets constitutional requirements of necessity,¹⁷² but it also helps to garner trust among the public that it will be protected from real risks and not subjected to arbitrary coercion. Such trust, in turn, can encourage public cooperation with more general public health recommendations to prevent the spread of disease. Therefore, they help to protect the individual and the community.

III. MAINTAINING THE RULE OF LAW

It is well past time to move involuntary quarantine and isolation in all their forms from their archaic formulation—resembling something akin to imprisonment—to the rarely needed, last resort mechanisms that they are and should be.¹⁷³ While contagious disease control remains an essential objective of public health policy, it can be achieved while still respecting individual rights. Constitutional doctrine governing individual liberty interests has progressed far beyond the days in which states could blithely confine individuals merely because they were believed to be mentally ill,¹⁷⁴ and sterilize young women to prevent the birth of “feebleminded” children.¹⁷⁵ Science, medicine, technology, and sociology have also ad-

172. See *supra* notes 29–30 and accompanying text (describing cases dismissing quarantine orders that lacked scientific justification).

173. Donald G. McNeil Jr., *Using a Tactic Unseen in a Century, Countries Cordon off Ebola-Racked Areas*, N.Y. TIMES (AUG. 12, 2014), <https://www.nytimes.com/2014/08/13/science/using-a-tactic-unseen-in-a-century-countries-cordon-off-ebola-racked-areas.html> [<https://perma.cc/9DM8-PZ4M>].

174. DAVID J. ROTHMAN, *THE DISCOVERY OF THE ASYLUM: SOCIAL ORDER AND DISORDER IN THE NEW REPUBLIC* 271 (Routledge 2002) (1971).

175. *Buck v. Bell*, 274 U.S. 200, 205 (1927).

vanced to offer tools to address the needs of the population facing a possible epidemic.¹⁷⁶ A modern approach to infectious disease control requires cooperation among local, state, tribal, and national governments and, most importantly the public.¹⁷⁷ The World Bank, the United Nations, and the National Academy of Medicine, among others, recognize the need for broad cooperation to contain disease outbreaks, but quarantine is not among the measures recommended.¹⁷⁸ There is a symbiotic relationship among respect for individual rights, public trust, and public cooperation with public health recommendations. Cooperation from the public is essential to a more effective effort in containing the spread of disease.

The preceding section argued that the quarantine regulations fail to adequately respect individual rights. Another standard against which to evaluate these regulations is whether they are likely to encourage or inhibit public trust and cooperation. Before doing so, it may be useful to consider the possible motivation for their adoption.¹⁷⁹

A. RULEMAKING AND POLITICS

Despite President Trump's harsh public comments during the Ebola crisis, these quarantine regulations were published under the Obama administration the day before inauguration.¹⁸⁰ So, why the rush to issue these new rules? The comments section in the Federal Register offers two justifications: (1) responding to the Ebola epidemic, as well as outbreaks of MERS and measles;¹⁸¹ and (2) increasing transparency by clarifying and codifying "current practice . . . to make the public aware of their use."¹⁸²

The first justification essentially admits that a significant part of the motivation was the Ebola scare. Dr. Thomas Frieden, who was the Director of the CDC during the Ebola crisis, stated that the "CDC has been preparing for this day, working around the clock," to stop Ebola from

176. See Wendy K. Mariner et al., *Jacobson v. Massachusetts: It's Not Your Great-Grandfather's Public Health Law*, 95 AM. J. PUB. HEALTH 581, 582 (2005).

177. See COMM'N ON A GLOBAL HEALTH RISK FRAMEWORK FOR THE FUTURE, THE NEGLECTED DIMENSION OF GLOBAL SECURITY: A FRAMEWORK TO COUNTER INFECTIOUS DISEASE CRISES 2 (2016) [hereinafter GHRF COMMISSION] ("Building effective public health systems requires more than surveillance systems, laboratory networks, and clinical capabilities. Engaging and communicating with communities is critical. Community awareness enhances surveillance.").

178. *Id.*; see also The World Bank, *supra* note 6, at 11–12.

179. Robert Gatter, *Ebola, Quarantine, and Flawed CDC Policy*, 23 U. MIAMI BUS. L. REV. 375, 399 (2015).

180. On August 1, 2014, then-candidate Donald Trump tweeted, "The U.S. cannot allow EBOLA infected people back. People that go to far away places to help out are great-but must suffer the consequences!" Steven Hatch, *How the Ebola Crisis Helped Launch Donald Trump's Political Career*, MOTHER JONES (Apr. 3, 2017), <http://www.motherjones.com/politics/2017/04/trump-ebola-tweets/> [<https://perma.cc/4CNA-AD9N>].

181. Quarantine Regulations, *supra* note 12, at 6890.

182. Quarantine Regulations, *supra* note 12, at 6894.

spreading within our borders.¹⁸³ When the first domestic case of Ebola appeared in Texas Presbyterian Hospital, Frieden attempted to calm the public's nerves by describing the differences between the United States and the West African region where the epidemic was at its peak. According to the CDC Director, "the United States has a strong health care system and dedicated public health professionals—all hard at work right now—to make sure this case will not threaten the community at large, or the nation."¹⁸⁴ This all meant that despite the first Ebola case in the United States, the CDC Director was confident "we will stop Ebola in its tracks."¹⁸⁵

While these comments were certainly aimed at assuaging public fears, they likely were more harmful than helpful to the CDC. After all, the "strong health care system" had failed to diagnose Thomas Duncan on his first visit.¹⁸⁶ Once nurses caring for Mr. Duncan, the initial case of Ebola in the U.S., became infected (one flew on a commercial flight after caring for Mr. Duncan), the CDC and its Director began to lose their credibility.¹⁸⁷ Some called for Dr. Frieden's resignation, with many believing that efforts to contain Ebola were "mismanaged, causing risk to scores of additional people."¹⁸⁸ President Obama then put Ron Klain, a lawyer, in charge of coordinating the national Ebola response.¹⁸⁹

After these events, it is possible that the agency simply wanted to strengthen—or clarify, as the agency put it—its ability to take more concrete action in the event of another contagious disease scare. The options for concrete action are limited, since the CDC has no legal authority over hospitals or health care providers. But, it does have authority to carry out the federal quarantine statute, and the agency may have believed that greater regulatory powers under that statute might help prevent a disease like Ebola from entering the country. It might also protect the CDC from future criticism. The CDC may have been unwilling to risk being blamed

183. Tom Frieden, *Why U.S. Can Stop Ebola in its Tracks*, CNN (Oct. 2, 2014), <http://www.cnn.com/2014/10/02/opinion/frieden-ebola-first-patient/index.html> [<https://perma.cc/CS75-C58M>].

184. *Id.* This language is particularly interesting given the fact that the CDC has no legal authority over the health care system. The CDC's influence over hospitals and health care workers comes in the form of data, research, training, and offering their expertise as a resource.

185. *Id.*

186. Greg Botelho & Jacques Wilson, *Thomas Eric Duncan: First Ebola Death in the U.S.*, CNN (Oct. 8, 2014), <http://www.cnn.com/2014/10/08/health/thomas-eric-duncan-ebola/index.html> [<https://perma.cc/7YDY-K3B6>].

187. Lauren French & Jennifer Haberkorn, *CDC Director in Hill Hot Zone*, POLITICO (Oct. 16, 2014), <http://www.politico.com/story/2014/10/hearing-will-have-public-health-officials-grilled-on-ebola-111943> [<https://perma.cc/QN55-DQ87>].

188. Will Dunham, *U.S. Lawmakers Blast Government's Ebola Response, Urge Travel Ban*, REUTERS (Oct. 16, 2014), <http://www.reuters.com/article/us-health-ebola-usa-idUSKC N0I517E20141016> [<https://perma.cc/V5J2-6YDN>].

189. Erin Dooley & Mary Bruce, *President Obama Names Ron Klain "Ebola Czar"*, ABC NEWS (Oct. 17, 2014), <http://abcnews.go.com/Politics/ron-klain-meet-president-obamas-ebola-czar/story?id=26269061> [<https://perma.cc/ST9B-P6DD>].

for a future outbreak.¹⁹⁰

The second stated justification, increasing transparency, is also a curious one. Agencies do not typically issue regulations to merely make the public aware of practices they already use. The Federal Register states that “[i]ncreased clarity around due process may result in fewer resources and time expended by individuals under orders and HHS/CDC in disagreements over HHS/CDC’s authority to issue Federal public health orders that limit an individual’s movement.”¹⁹¹ Could the real motivation be to reduce the “potential costs of litigation,” which the comments cite as an added benefit to this new transparency?¹⁹²

Both justifications suggest that the CDC hoped to strengthen its role and reputation in outbreaks, whether through enhanced authority or increased clarity about its authority. Indeed, during Ebola they were largely ignored by states and blamed by the public, often unfairly. If the agency is going to have its credibility questioned, why not assert its jurisdiction more authoritatively in the regulations?

Yet these regulations can hardly be described as an effective method of increasing the credibility of an agency long known for its technical and scientific infectious disease expertise, data collection, and data analysis. Fortifying the agency’s ability to quarantine people based on reasonable belief of infection alone is unlikely to raise public esteem for an agency whose foundation is supposed to be science and data.

Indeed, the CDC already made what appeared to be politically motivated policy decisions while under political fire.¹⁹³ When Dr. Craig Spencer went to the hospital and was diagnosed with Ebola after travelling through New York City, the CDC amended its Ebola guidelines to provide a stricter policy for quarantining individuals who were asymptomatic, even though the CDC surely knew that they could not spread the disease.¹⁹⁴ Maine followed the CDC’s new guidance, but the Maine district court judge found that the Constitution did not permit the involuntary isolation of an asymptomatic person.¹⁹⁵ Such an order lacked scientific justification and ran counter to medical understanding of how

190. See Gatter, *supra* note 179, at 389–90 (“the agency could not take the political embarrassment of yet another mistake.”).

191. Quarantine Regulations, *supra* note 12, at 6962.

192. Quarantine Regulations, *supra* note 12, at 6962.

193. See Gatter, *supra* note 179, at 389–90 (“[T]he CDC and its director came under fire for its missteps and perceived failure to protect Americans adequately.”).

194. See Gatter, *supra* note 179, at 393–95 (putting the CDC’s new issuance of amended guidelines into the context of the cases of Ebola in the U.S.). Conversely, the CDC could have held up Dr. Spencer as an illustration of why strict quarantines were unnecessary. As a physician with Ebola expertise, once he began experiencing symptoms, he sought hospital services to test and treat him. The prior actions he took, whether riding public transit or a night out bowling, provided no risk to the public. This was a missed opportunity for public education, one of the most important roles the CDC should embrace. For Dr. Spencer’s own account of his experience, see Craig Spencer, *Having and Fighting Ebola—Public Health Lessons from a Clinician Turned Patient*, 372 *NEW ENG. J. MED.* 1089 (2015).

195. *Mayhew v. Hickox*, No. CV-2014-36, 2014 Me. Trial Order LEXIS 1, 2–3 (Dist. Ct. Me. Oct. 31, 2014).

Ebola is transmitted.¹⁹⁶ Issuing amended guidelines did not enhance the CDC's credibility,¹⁹⁷ and the 2017 quarantine regulations are unlikely to do so either.

B. PUBLIC TRUST

The most important partner in containing the spread of disease is the public.¹⁹⁸ Quarantine is one of the most drastic measures the state can take in the name of public health, and public trust is essential to its success.¹⁹⁹ People who fear a forced quarantine have no desire to spread disease or go untreated. In fact, the first case of Ebola in the United States during the scare stemmed from Thomas Duncan, mentioned above, seeking treatment for feeling ill. It was the hospital and its employees who missed the diagnosis at his initial visit. When Mr. Duncan returned, the hospital somehow allowed the infection to spread to a nurse. Mr. Duncan had no insidious desire to spread the infection nor was he unwilling to cooperate with behavioral guidelines.

People are concerned with being held unnecessarily, isolated from family and friends, stigmatized, and potentially losing employment or housing. Without assurances that their concerns will be satisfied—that they will not suffer the harms they fear—the public is less likely to voluntarily take recommended precautions, such as staying home and avoiding contact with other people.²⁰⁰ There is widespread agreement among public health experts that public cooperation with health recommendations depends upon understanding what the risk is, how to avoid it, and why.²⁰¹ Accurate information provides the basis for that understanding, which in turn allows the public to trust the recommendations and cooperate with them.

The SARS outbreak is an example of an international incident that required the coordination of local, state, national, and even global gov-

196. Gatter, *supra* note 179, at 377–78; *see also* Mark A. Rothstein, *From SARS to Ebola: Legal and Ethical Considerations for Modern Quarantine*, 12 *IND. HEALTH L. REV.* 227, 259–61 (2015) (describing how the changes in quarantine policy ran counter to the known epidemiological understanding of Ebola transmission).

197. *See* Rothstein, *supra* note 196, at 260–61 (“The CDC’s revision of its guidance, however, by following more aggressive state policies, may have increased doubts about the adequacy of CDC’s initial recommendations, thereby seeming to confirm the wisdom of the expanded quarantine measures imposed by some state governments.”).

198. *See* GHRF COMMISSION, *supra* note 177, at 2 (“Trust and cooperation of the local population is a vital component of any response strategy.”).

199. Parmet, *AIDS*, *supra* note 27, at 54.

200. *See, e.g.*, Clete DiGiovanni et al., *Factors Influencing Compliance with Quarantine in Toronto During the 2003 SARS Outbreak*, 2 *BIOSECURITY & BIOTERRORISM: BIODEFENSE STRATEGY, PRAC. & SCI.* 265, 267–70 (2005) (discussing the need to help those who are in quarantine with their care, supplies and income).

201. GHRF COMMISSION, *supra* note 177, at 2; *see also* Judith Walzer Leavitt, *Public Resistance or Cooperation?: A Tale of Smallpox in Two Cities*, 1 *CONTROVERSIES IN SCI. & TECH.: FROM MAIZE TO MENOPAUSE* 311, 321 (Daniel Lee Kleinman, Abby J. Kinchy, & Jo Handelsman eds., 2005).

ernance to minimize the damage.²⁰² Uncertainty surrounding the nature of the infection and best practices in controlling it allowed its initial rapid spread.²⁰³ A few countries relied heavily on quarantine to the detriment of containment efforts. During the SARS outbreak, a rumor that the Chinese government was planning a large-scale involuntary quarantine caused nearly 250,000 people to flee.²⁰⁴ Despite the fact that most people were willing to take precautionary measures voluntarily, the threat of coercive government action caused many to panic.²⁰⁵ People who fear unnecessary confinement may be more likely to lie or simply avoid interacting with the government or health care system in general. Today, it is relatively easy for people who might be infected to avoid coercive government actions by going someplace else, where they may spread infection to others, thereby putting other communities—or even other countries—at risk. In this way, coercion can undermine the very public health goal it is intended to serve.

In contrast, countries like Canada that implemented strict infection control measures in hospitals were able to bring the SARS epidemic under control without resorting to involuntary isolation, except in a few instances.²⁰⁶ About 30,000 people voluntarily stayed home (known as “sheltering in place”).²⁰⁷ While the United States may not have a strong tradition of social solidarity like Canada, its population does have a reputation for fiercely defending individual rights. Thus, the use of involuntary isolation or quarantine may find greater resistance in this country than elsewhere.²⁰⁸ The well-publicized case of Ms. Hickox, her quarantine, and the stigma and public resentment she faced undoubtedly influenced public perceptions about the negative impact of quarantine orders.²⁰⁹

202. Jason W. Sapsin et al., *SARS and International Legal Preparedness*, 77 *TEMP. L. REV.* 155, 167 (2004).

203. Laura C. Rosella et al., *Pandemic H1N1 in Canada and the Use of Evidence in Developing Public Health Policies—A Policy Analysis*, 83 *SOC. SCI. & MED.* 1, 1 (2013).

204. Mariner et al., *supra* note 176, at 587.

205. *Id.* The Director of the CDC Division of Global Migration and Quarantine, Marty Cetron, has emphasized that locking people up and using armed guards triggers the human instinct to flee. Instead, he notes, “what you really need is a compelling argument, public trust, and community engagement to voluntarily participate.” Marty Cetron, Dir., CDC Div. of Glob. Migration & Quarantine, Panelist at O’Neill Institute’s Colloquium: The West African Ebola Epidemic: How Can It Be Contained and How Can We Prevent the Next One? (Sept. 3, 2014), <https://www.c-span.org/video/?321282-1/discussion-combating-ebola-epidemic> [<https://perma.cc/3TLH-FKEB>].

206. Mark A. Rothstein et al., *Quarantine and Isolation: Lessons Learned from SARS, A Report to the Centers for Disease Control and Prevention* 55–56, 59, *INST. FOR BIOETHICS, HEALTH POLICY & LAW* (Nov. 2003), http://biotech.law.lsu.edu/blaw/cdc/SARS_REPORT.pdf [<https://perma.cc/SW53-TLW3>]; Tomislav Svoboda et al., *Public Health Measures to Control the Spread of the Severe Acute Respiratory Syndrome During the Outbreak in Toronto*, 350 *NEW ENG. J. MED.* 2352, 2359–60 (2004).

207. George J. Annas, *The Statue of Security: Human Rights and Post-9/11 Epidemics*, 38 *J. HEALTH L.* 319, 333 (2005).

208. Rothstein et al., *supra* note 196, at 259, 278–79.

209. Kevin Sack et al., *Life in Quarantine for Ebola Exposure: 21 Days of Fear and Loathing*, *N.Y. TIMES* (Oct. 18, 2014), <http://www.nytimes.com/2014/10/19/us/life-in-quarantine-for-ebola-exposure-21-days-of-fear-and-loathing.html> [<https://perma.cc/7RCZ->

There is no evidence that the public is reluctant to cooperate with public health officials, especially in the midst of an outbreak, as long as the public has confidence in official recommendations.²¹⁰ But public officials must earn that trust. This requires public health officials to obtain accurate information, communicate honestly with the public, and ensure that the public has the resources necessary to cooperate with reasonable recommendations.

The public needs to be able to trust that public health officials are making reasonable and objective decisions based on credible evidence. Thus, the first requirement for controlling the spread of disease is accurate information. This includes information about the infectious agent, how it can be diagnosed, its pathogenicity, how it is transmitted, whether there is any vaccine or treatment, as well as the absence of knowledge or the degree of uncertainty about any facts. It also includes information for public health officials about where people have traveled, what they have been exposed to, and whom they have been in contact with—to identify where a pathogen may be.²¹¹ These are the factors that public health officials regularly evaluate in order to decide what preventive or mitigating measures are appropriate. This information should be shared with the public, together with recommendations for avoiding exposure to infection and what to do if people believe they may have been exposed or infected.

Therefore, the second requirement for gaining public trust is transparency. Honestly communicating what is and is not known can reassure the public that officials care about the welfare of those who are asked to shelter in place or are involuntarily placed under movement restrictions, rather than treating them as threats to the public. Unexplained recommendations can appear arbitrary. Measures that seem arbitrary or punitive have the potential to cause people to cease complying with public health policies in general.²¹² In contrast, transparency about what the public can do is more likely to encourage people to embrace a positive role for themselves— as partners in the effort to contain the epidemic, rather than suspects to be tracked down and locked up like criminals.

6TZQ (describing the impact of stigma on individuals who were exposed but never infected).

210. George J. Annas, *Bioterrorism, Public Health, and Civil Liberties*, 346 *NEW ENG. J. MED.* 1337, 1339 (2002); see also Leavitt, *supra* note 201, at 319 (describing the speed at which New Yorkers were vaccinated, with thousands lining up and waiting patiently to receive their inoculation). Cultural norms in the United States may appear to conflict with public cooperation from government orders during an outbreak. Mark A. Rothstein, *Are Traditional Public Health Strategies Consistent with Contemporary American Values?*, 77 *TEMP. L. REV.* 175, 177, 188–92 (2004). However, the desire to avoid contagious diseases and to be treated for infection are strong as well, and government assistance could be seen as beneficial in these circumstances. Moreover, providing assistance to those in quarantine and isolation, such as finances for lost wages and treatment, would help reduce the resistance that these cultural norms may generate.

211. This is why the regulations themselves detail information they require from airline and vessel staff. 42 C.F.R. §§ 71.4–71.5 (2017).

212. Parmet, *J.S. Mill*, *supra* note 57, at 218.

C. FACILITATING PUBLIC COOPERATION

A third requirement for encouraging public cooperation in controlling epidemics is making it possible for people to cooperate. The National Academy of Medicine committee offers two lessons from the historical use of quarantine:

Two lessons leap out: first that caregiving is an essential component of an outbreak response strategy, in part because it is the right thing to do, and in part because it is essential to enlisting community support; and second, that effective community engagement requires understanding the context, including the history, that will inform people's attitudes and behaviors.²¹³

An important aspect of community engagement is that it requires a holistic understanding of the harms people can and do endure during epidemics, including those stemming from a liberal use of coercive movement restrictions.

When discussing the Ebola scare in the United States, the evaluation of harm is typically focused on the spread and lethality of the disease. Many claim the Ebola response was a resounding success, because there were so few cases. Yet, infection is not the only harm to the public during an outbreak.²¹⁴ Indeed, the hysteria, politicization, and rejection of evidenced-based legal decisions created more harm than the disease itself. People were threatened by law enforcement and public officials.²¹⁵ Children were bullied in schools.²¹⁶ Individuals were not allowed to work, or in some circumstances dismissed from their jobs.²¹⁷ While the spread of misinformation, largely through the media, carries much of the blame, those who embraced, enforced, or advocated for overly strict quarantine measures certainly fanned the flames.²¹⁸

People want to be protected from contracting diseases and treated when they are unlucky enough to become infected. The 2017 regulations focus almost exclusively on the former, with little regard for the latter.

213. GHRF COMMISSION, *supra* note 177, at 44.

214. See Parmet, *J.S. Mill*, *supra* note 57, at 210 (“[T]he American law of quarantine deviates from Mill’s principles by disregarding the social costs and disparate impact of quarantine and by authorizing quarantine even when a different, less coercive mix of public policies would better protect the public’s health.”); see also Ulrich, *supra* note 11, at 283 (“The Ebola ‘outbreak’ in the United States was relatively small and, yet, hundreds of lives were impacted by the actions of the government, rather than by the disease itself.”).

215. See, e.g., ACLU & GHJP, *supra* note 19, at 27 (describing a physician at Stanford who was threatened with six months in jail if he fought a “voluntary” quarantine).

216. See Amanda Terkel, *Oklahoma Teacher Will Have to Quarantine Herself After Trip to Ebola-Free Rwanda*, HUFFPOST POLITICS (Oct. 28, 2014), http://www.huffingtonpost.com/2014/10/28/ebola-rwanda-oklahoma-teacher_n_6062726.html [<https://perma.cc/E4UK-PCRE>] (finding two boys beaten by other students in the Bronx after returning from a trip to Senegal, which had one case of Ebola).

217. For example, contacts of Thomas Eric Duncan were subjected to mandatory quarantine after his death from Ebola. Though none of them became infected, many were unable to return to work or school afterward. Sack et al., *supra* note 209.

218. See Ulrich, *supra* note 11, at 258 (“[F]ailure to assess the harm caused by those in leadership positions whose desire to appease the fearful masses lead them to make decisions and wield the law in a manner that may have jeopardized disease control efforts.”).

Ignoring the harm that individuals in quarantine can face is another way to deter public cooperation.

To adequately address potential harm, the regulations should take into account not only medical treatment for the disease but also indirect harms such as the cost of treatment, lost wages, discrimination, and stigma.²¹⁹ There is ample evidence to suggest that people are willing to, and frequently do, avoid necessary medical care, ignore medical guidance, and behave in ways detrimental to their health because of financial concerns.²²⁰ For most people, quarantine, whether voluntary or involuntary, means lost wages due to absence from work and often treatment expenses. These financial considerations could influence people's willingness to cooperate with public health recommendations. Lost wages for the good of the public's health should be deemed a public cost.²²¹ For example, during the SARS outbreak, the government in Singapore provided economic assistance to individuals and businesses affected by quarantine, while in Hong Kong individuals received daily material and financial assistance.²²² The CDC's 2017 regulations, however, ignore these legitimate concerns.

Under the 2017 regulations, the CDC Director may authorize payment only for the care and treatment of those who are involuntarily quarantined, but payment is at the Director's discretion and subject to availability of federal appropriations.²²³ With public health constantly a target for budget cuts, it is unclear whether appropriations will be available at any given time. The regulations make clear that the CDC will be only a secondary payer, relying first on any public or private insurance the detainee has to pay for care.²²⁴ This does little to help those who are uninsured or underinsured. Even the indigent, who can request that the CDC pay for an advocate during medical review, have no assurance that treatment costs will be covered.²²⁵

Individuals who might have a contagious disease but need to keep working may avoid health care providers and medical testing in order to escape the possibility of quarantine. This is especially true if they are only

219. See Parmet, *J.S. Mill*, *supra* note 57, at 218 ("Mill argued that policymakers must look beyond the direct costs of the deprivation of liberty of those who are detained."). While the regulations' ability to tackle issues of discrimination and stigma may be limited, a more humane approach to the use of quarantine, coupled with CDC efforts to inform the public, could go a long way to aiding the momentum of no longer allowing those who sacrifice their liberties for the public's protection to be ostracized and abused. See also Ulrich, *supra* note 11, at 278 ("The inability of the government to provide accurate information to the public and enact complimentary legislation to minimize harms suffered only adds to the injurious effects of infectious diseases.").

220. See generally DAVID M. CUTLER, *YOUR MONEY OR YOUR LIFE: STRONG MEDICINE FOR AMERICA'S HEALTHCARE SYSTEM* (2004).

221. An alternative would be to have the employer bear the cost. Whatever the mechanism, people that cooperate with public health recommendations should not bear the financial burden. There is no way to protect against lost wages other than to replace them.

222. Sapsin et al., *supra* note 202, at 160.

223. 42 C.F.R. § 70.13(a)–(b) (2017).

224. *Id.* § 70.13(c).

225. *Id.* § 70.16(f).

paid for hours actually worked.²²⁶ After all, employers and coworkers would be unlikely to know that they may have been exposed to infection. In addition, the possibility of having to pay for expensive medical treatment may be a serious deterrent to public compliance. Currently there is little legal protection for people who lose wages or are terminated for missed work as a result of a voluntary or involuntary quarantine. Massachusetts is the only state to offer compensation to those who are subjected to involuntary quarantine, providing two dollars a day under a 1907 statute.²²⁷ Iowa is the only state affording a remedy of reinstatement for individuals who are terminated due to quarantine.²²⁸ A small minority of states prohibit employment discrimination; however, most of these laws do not apply to voluntary quarantines.²²⁹ The absence of these protections makes it financially difficult, if not impossible, for a large segment of the population to cooperate with recommendations for social distancing, for example, as well as involuntary quarantine.

These financial hardships disproportionately affect lower income populations. Financial considerations become more troubling under these regulations since individuals can be held for an indeterminate amount of time. To encourage cooperation and incentivize individuals to make the right decisions for the public and for themselves, there must be protections for employment and compensation for lost wages and treatment costs. In addition, there should be a provision for ensuring that anyone quarantined or isolated at home receives whatever is necessary—food, water, medicines, household supplies, and trash disposal—to live relatively comfortably.²³⁰ These steps can mitigate the trauma and cost of quarantine and show people that they are being treated with respect.

While financial assistance may face political and budgetary obstacles, avoiding unnecessary quarantines that are not scientifically justified would be a way to find some extra resources. For example, the expenses

226. According to one report, seventy-eight percent of full-time workers live paycheck to paycheck. Jessica Dickler, *Most Americans Live Paycheck to Paycheck*, CNBC (Aug. 24, 2017), <https://www.cnbc.com/2017/08/24/most-americans-live-paycheck-to-paycheck.html> [<https://perma.cc/RSS3-BYBC>]. Many workers who are paid hourly do not count as full-time employees and thus are likely to be struggling as much, if not more.

227. MASS. GEN. LAWS ANN. ch. 111, § 95 (Westlaw 2018).

228. Rothstein, *supra* note 20, at 6.

229. Rothstein, *supra* note 20, at 6.

230. The regulations require the CDC Director to provide persons involuntarily detained under the federal rules with “adequate food and water, appropriate accommodation, appropriate medical treatment, and means of necessary communication.” 42 C.F.R. § 70.6(b) (2017). Many escaped quarantines in Africa, or attempted to, over fear of starvation. James Harding Giahue & Bate Felix, *Ebola Outbreak Stirs Anger in Fragile Liberia*, REUTERS (Sept. 6, 2014), <https://www.reuters.com/article/us-health-ebola-politics/ebola-outbreak-stirs-anger-in-fragile-liberia-idUSKBN0H106M20140906> [<https://perma.cc/EQM8-BAU3>]; Terrence McCoy, *The Nightmare of Containing Ebola in Liberia’s Worst Slum*, WASHINGTON POST (Aug. 21, 2014), https://www.washingtonpost.com/news/morning-mix/wp/2014/08/21/the-nightmare-of-containing-ebola-in-liberias-worst-slum/?utm_term=.32503e53ea58 [<https://perma.cc/SJ4L-R7GM>]; Ethan A. Huff, *Ebola Quarantine Zones Quickly Become Starvation Death Traps*, NATURAL NEWS (Sept. 29, 2014), https://www.naturalnews.com/047088_Ebola_quarantine_death_traps.html [<https://perma.cc/963M-NSL9>].

of unnecessarily quarantining the 2815 U.S. military personnel who were never exposed to Ebola totaled approximately \$2,000 per person.²³¹ This \$5.63 million could have easily covered the expenses of those placed in quarantine in the United States, with money to spare. Moreover, reciprocity suggests that if these individuals are foregoing their rights and liberties in the public's interest, the least we can do is provide support for them.

Offering care and support is consistent with an evolution of quarantine from its penal connotation to a more positive association with participation in a public service. Typically, those who become infected, or are simply at risk due to exposure, did nothing wrong. Indeed, the opposite is true for most of those—physicians and nurses—in the United States who were infected with Ebola. By treating those who are subjected to quarantine humanely, the government shows the individuals and the general public that they deserve our praise, admiration, and sympathy, instead of our scorn.

These steps would also help to reduce problems with stigma. Stigma attaches to infections and thus stigma attaches to quarantine. Concealment is the typical individual response, which has the potential to drive an epidemic underground.²³² Though stigma operates through the attitudes and behaviors of people, the law can reinforce and exacerbate it.²³³ Laws that treat people like pariahs instead of patients can help to generate perceived stigma causing high levels of stress for those who are using energy to conceal their disease or potential exposure. And for those who are unable to avoid quarantine, stigma has the potential to generate its own indirect harms, through public ridicule and isolation. To avoid this, law can discourage stigmatizing individuals. Canada, for example, enacted legislation during SARS prohibiting discrimination against quarantined individuals and providing them income replacement.²³⁴ The goal of laws governing epidemics should be to identify and help those who have been exposed, not ostracize them and subject them to additional harms.

IV. THE FEDERAL ROLE

A critique of the CDC's quarantine regulations is not a denial of the agency's critical role in infectious disease control. The concern is that these regulations appear to replicate an archaic approach to contagious disease control, allowing officials to make largely unchecked decisions about individuals' medical status and liberty.

Yet this does raise the question of what the role of the CDC should be. Traditionally, the CDC has performed four functions: collecting data about the prevalence and incidence of diseases; conducting research with

231. Fink, *supra* note 125.

232. Scott Burris, *Disease Stigma in U.S. Public Health Law*, 30 J. L. MED. & ETHICS 179, 179, 181 (2002).

233. *Id.* at 181.

234. Rothstein, *supra* note 20, at 6.

that data; providing information to the states, health professionals, and the general public about how to prevent, control, or treat diseases; and investigating disease outbreaks at the request of a federal, state, or local agency or foreign country.²³⁵ In essence, the CDC is a research and advisory agency, not a care delivery organization. Its comparative advantage among agencies within HHS is its epidemiological and scientific expertise about disease prevention and control. As part of a federal agency, the CDC is, or should be, the premier source of evidence-based guidance on how to prevent the spread of contagious disease. This Part examines why that may not always happen and how to reclaim the agency's value.

A. EXPERTISE AND CREDIBILITY

Given the realities of modern travel, the ability of any single state to completely contain a pathogen is limited. The CDC has the knowledge and experience to recommend control measures and coordinate and monitor a streamlined effort among local, state, tribal, federal, and even international authorities. It can also educate the public on the threat of any disease and best practices to minimize risk of harm. The quarantine regulations are a departure from these functions. Because it is a federal agency, the CDC is the logical agency to investigate the possibility that a quarantinable communicable disease is arriving at our national borders.²³⁶ Within the states, however, the CDC operates largely in its advisory capacity. State and local health departments have primary responsibility for identifying and evaluating possible sources of contagious disease. Thus, the accuracy and credibility of CDC recommendations is of utmost importance if it is to persuade the states to act responsibly.

While the Ebola "crisis" in the United States was anything but a crisis, it was often portrayed as such.²³⁷ Many media outlets stoked the flames of hysteria with misinformation and unnecessary dramatization, such as claims that the virus could mutate into an airborne pathogen or that the number of cases could reach into the millions in a matter of months.²³⁸ In

235. *Data Collection and Reporting*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/nndss/data-collection.html> [<https://perma.cc/M2LY-3BYM>] (last updated Feb. 6, 2018).

236. Both the statute and regulations authorize inspections at the border (e.g., airlines, ships, their passengers and cargo), although the regulations contemplate enforcement by the U.S. Customs and Border Protection. 42 U.S.C. § 267 (2012); Quarantine Regulations, *supra* note 12, at 6939; 42 C.F.R. § 71.20 (2017).

237. Brady Dennis & Peyton M. Craighill, *Ebola Poll: Two-thirds of Americans Worried About Possible Widespread Epidemic in U.S.*, WASH. POST (Oct. 14, 2014), https://www.washingtonpost.com/national/health-science/ebola-poll-two-thirds-of-americans-worried-about-possible-widespread-epidemic-in-us/2014/10/13/d0afd0ee-52ff-11e4-809b-8cc0a295c773_story.html?utm_term=.27cb2caa7d88 [<https://perma.cc/9MYJ-WT8U>]; *see also* Ulrich, *supra* note 11, at 257–58 (describing media coverage of Ebola and how it exacerbated public fear and paranoia).

238. *See, e.g.*, Lizzie Parry, *It Is 'Very Likely' That the Ebola Virus Will Spread Through Airborne Particles, Experts Say*, DAILY MAIL (Feb. 20, 2015), <http://www.dailymail.co.uk/health/article-2961381/It-likely-Ebola-virus-spread-airborne-particles-say-experts.html> [<https://perma.cc/DMS8-CZY3>]; Sarah Larimer, *Will the Ebola Virus Go Airborne? (And*

situations like this, if the public has no trusted source of information, it should not be surprising that the media frames the narrative.

With public fear of Ebola steadily increasing, many public officials let their political interests drive their actions. Governors who were up for reelection in states like New Jersey and Connecticut decided to issue strict quarantine orders to asymptomatic individuals, presumably to appease public demands for protection.²³⁹ In fact, many states rejected the CDC's initial guidance on responding to Ebola and adopted their own more restrictive (and scientifically questionable) quarantine policies. New York Governor Andrew Cuomo held a joint press conference with Governor Christie announcing the same quarantine policies as those used in New Jersey to hold Ms. Hickox.²⁴⁰ Meanwhile, Connecticut Governor Dannel Malloy, in conjunction with the state's Commissioner of Public Health, issued an Ebola response plan that was "more stringent than the guidelines thus far issued by the [CDC]."²⁴¹ This led to involuntary quarantine orders for several individuals, at least some of whom were never exposed to Ebola.²⁴²

These responses call to mind what Priscilla Wald has called the "outbreak narrative," in which officials seek control by controlling other people who can be characterized—rightly or wrongly—as threats.²⁴³ Historically, officialdom often found "threats" of contagious disease among recent immigrants and lower-income populations, who had few resources to challenge unwarranted actions.²⁴⁴ That was not the target population during the Ebola scare in the United States. Still, the temptation to take control—by controlling anyone who could conceivably be called a threat—seemed irresistible to some officials. The concern is that this could happen again, and the quarantine regulations in their current form do nothing to lessen that concern.

Some have made the point that the regulations are not problematic; it

Is That Even the Right Question?), WASH. POST (Sept. 15, 2014), https://www.washingtonpost.com/news/to-your-health/wp/2014/09/15/will-the-ebola-virus-go-airborne-and-is-that-even-the-right-question/?utm_term=.B5d336f59edf [https://perma.cc/QUH7-HJRM]; Michael T. Osterholm, Opinion, *What We're Afraid to Say About Ebola*, N.Y. TIMES (Sept. 11, 2014), <http://www.nytimes.com/2014/09/12/opinion/what-were-afraid-to-say-about-ebola.html> [https://perma.cc/NE9M-Y6D5]; Denise Grady, *Ebola Cases Could Reach 1.4 Million Within Four Months, C.D.C. Estimates*, N.Y. TIMES (Sept. 23, 2014), http://www.nytimes.com/2014/09/24/health/ebola-cases-could-reach-14-million-in-4-months-cdc-estimates.html?_r=0.

239. ACLU & GHJP, *supra* note 19, at 8, 26.

240. Press Release, Governor Andrew Cuomo's Press Office, *Governor Andrew Cuomo and Governor Chris Christie Announce Additional Screening Protocols for Ebola at JFK and Newark Liberty International Airports* (Oct. 24, 2014), <https://www.governor.ny.gov/news/governor-andrew-cuomo-and-governor-chris-christie-announce-additional-screening-protocols-ebola> [https://perma.cc/6ZTN-X8RV].

241. Liberian Cmty. Ass'n of Conn. v. Malloy, No. 3:16-cv-00201, 2017 WL 4897048, at *1-3 (D. Conn. Mar. 30, 2017).

242. *Id.* at 7-8.

243. WALD, *supra* note 95, at 2.

244. WALD, *supra* note 95, at 82-113.

merely depends on who implements them.²⁴⁵ Yet in a country built on a foundation of checks and balances created to protect individual liberty, as well as the public, this assessment misses the point. Regulations should not be developed in the hope that their implementation will not unnecessarily violate individuals' rights. In the current partisan political climate, what any person deems an "appropriate" response may be influenced by political affiliation and the preferences of those in power. For example, the federal government's Ebola response under President Obama was seen as favorable by 76% of Democrats and 54% of Republicans,²⁴⁶ while the federal government's approach to avian flu under President Bush was viewed favorably by 72% of Republicans and 52% of Democrats.²⁴⁷

Ideally, the approach to disease control needs to be depoliticized. In reality, no politician, regardless of party affiliation, is impervious to the pressures of the voters, especially when an election looms.²⁴⁸ It is not enough to simply hope that these new regulations will be implemented fairly. Safeguards must be in place to ensure that evidence-based decisions are being made. The protection of the public's health and the respect of individual liberties are not mutually exclusive.

When a health agency loses credibility, the public can more easily dismiss its recommendations and question its decisions. Schulman argues that, in response to public mistrust, "agencies sense their authority slipping and decide to double down with overreaching recommendations."²⁴⁹ The result is a "cycle of mutual mistrust."²⁵⁰ Something similar may happen if an agency feels its budget may be in jeopardy—perhaps due to a new administration with little regard for public health funding and a desire to cut costs; the agency may seek to defend and strengthen its position by emphasizing its importance to national security, for example, or by asserting more visible control over elements of its portfolio.

According to the explanation for the new regulations, one area where the CDC sought better control is in identifying passengers and crew members on airlines and ships that might carry a quarantinable disease.²⁵¹ The agency argued that airlines rarely reported passengers and often not until several days after arrival, when the person had gone home

245. See Gallucci, *supra* note 97 ("The federal quarantine rules aren't the issue per se, said Scott Burris . . . It's the matter of who will implement these rules that has public health experts concerned.").

246. Joseph J. Fins, Editorial, *Ideology and Microbiology: Ebola, Science, and Deliberative Democracy*, 15 AM. J. BIOETHICS, Apr. 2015, at 1, 2.

247. *Id.*

248. Though concern over the guidelines may stem from the current president's comments during the Ebola outbreak, as mentioned earlier, Democratic governors, such as Governor Cuomo of New York and Governor Malloy of Connecticut, issued strict quarantine guidelines during the Ebola outbreak that ran counter to public health and constitutional principles.

249. Ari N. Schulman, *Science Anxiety*, HEDGEHOG REV., Fall 2016, http://www.iasc-culture.org/THR/THR_article_2016_Fall_Schulman.php [<https://perma.cc/8S35-EUYG>].

250. *Id.*

251. See *supra* note 21 (describing the regulations requirements for airplane staff).

or traveled on.²⁵² The CDC's desire to get more complete data, both to contact the person for purposes of contact tracing and monitoring and to add to its disease database, is clear. The new regulations add more detailed requirements for reporting any "ill person," which includes anyone who has a temperature of 100.4° F or more or "feels warm to the touch" if accompanied by other symptoms, such as "headache with stiff neck" or "appears obviously unwell" or "other indications of communicable disease" to be posted in the Federal Register.²⁵³ How the pilot or cabin crew are to assess which people have these symptoms, as opposed to the common cold or hay fever, for example, remains problematic. Indeed, the airlines opposed the regulations, citing administrative burden and cost, and the final rule now requires only that whatever data the airline maintains be reported within twenty-four hours after the CDC issues an order.²⁵⁴ Still, the belief is that it will make it easier for the CDC to find people who might have tuberculosis (TB), which may be the agency's primary concern.²⁵⁵ These may be the most likely targets for quarantine orders.

Whether these quarantine regulations were issued for any or all of the reasons mentioned above is unclear. But what is clear is that they violate constitutional and public health principles alike. With its diminished credibility after the Ebola scare, the CDC can ill afford overreaching that fosters public mistrust and potentially exacerbates the risk of spreading disease. The CDC's credibility and power ultimately stem from public trust in its science. Yet, "this trust is poisoned by the way science has become weaponized in political debates."²⁵⁶

B. PRAGMATIC PUBLIC HEALTH

The CDC should rise above politicized science and take a more practical approach to infectious disease control. As the agency certainly knows,

252. Quarantine Regulations, *supra* note 12, at 6919, 6930.

253. 42 C.F.R. § 71.1 (2017).

254. *Id.* § 71.4. While this may appear to be a concession to the airlines, airline companies today collect most of the data required anyway, including passport or travel document numbers, telephone numbers, email addresses, date of birth, country of residence, and primary contact person.

255. In 2015, the majority (66.4%) of the 9,557 cases of TB in the United States were among foreign-born persons, consistent with other years. *Reported Tuberculosis in the United States, 2015*, CTRS. FOR DISEASE CONTROL 4 (2016), https://www.cdc.gov/tb/statistics/reports/2015/pdfs/2015_surveillance_report_FullReport.pdf [<https://perma.cc/6EP4-ZA9L>]. The most visible case of TB in a U.S. citizen was that of Andrew Speaker. Neither the state nor the CDC issued any order restricting his movements. After he traveled abroad for his wedding—before planned treatment for multidrug-resistant TB in the U.S.—the CDC mistakenly concluded that he had extensively drug-resistant TB and asked the Department of Homeland Security to put him on the terrorist no-fly list. He took precautions and apparently did not infect anyone. Arriving in the United States, Speaker checked himself into Bellevue Hospital in New York City, as requested by the CDC, and was then served with a federal quarantine order. For a summary of this case, see *Speaker v. U.S. Dep't of Health & Human Servs. Ctrs. for Disease Control & Prevention*, 623 F.3d 1371, 1374–75 (11th Cir. 2010); Mariner, Annas, & Parmet, *supra* note 28, at 361–63.

256. Schulman, *supra* note 249.

quarantine alone cannot, and will not, prevent or control any outbreak. It has not succeeded in the past and is ill-suited to the realities of the contemporary world.

There may be a few instances in which involuntary quarantine of an individual with a quarantinable disease is necessary, but these are remarkably rare cases.²⁵⁷ The regulations ignore the practicalities of implementing them efficiently to protect both the public and the rights of the individual. The regulations rely entirely on various public health officials all within one agency making accurate and fair decisions. From the apprehension of an individual to determine exposure and risk of infection, to the various official orders and re-orders, to the medical examination, to the potential appeal, and all of the procedures in between, the steps it takes to finalize a quarantine are lengthy and unwieldy.

Experience suggests that “[t]he fewer the steps involved in carrying out the program, the fewer the opportunities for a disaster to overtake it.”²⁵⁸ Simplicity in policy is desirable because it increases efficiency and minimizes the possibility of a break in the chain of steps that causes the whole process to collapse.²⁵⁹ What appears to be a single determination—whether an individual poses a risk of spreading a disease to warrant quarantine—is in reality multiple steps that involve the participation and decisions of numerous people. Thus, “the apparently simple and straightforward is really complex and convoluted.”²⁶⁰ These regulations ignore the fact that the longer the chain of steps and the more interconnectedness and interdependence of those steps, the more complex implementation becomes. And the more complex the implementation, the more opportunities for error. If quarantine is viewed as the CDC’s major weapon against an epidemic, the regulations’ complexity and lack of necessary protections make it likely to fail.

A relevant question then is, what actions should be taken by the federal government, and the CDC, that may be more effective than overly strict quarantine measures? Both national and international organizations recognize that a resilient population is more likely to withstand a potential epidemic.²⁶¹ Populations with good nutrition, high literacy rates, adequate income, and access to appropriate medical care, social services, and

257. U.S. *ex rel. Siegel v. Shinnick*, 219 F. Supp. 789, 791 (E.D.N.Y. 1963); *Speaker v. U.S. Dep’t of Health & Human Servs. Ctrs. For Disease Control & Prevention*, 680 F. Supp. 2d 1359, 1360–61 (N.D. Ga. 2009).

258. JEFFREY L. PRESSMAN & AARON WILDAVSKY, IMPLEMENTATION: HOW GREAT EXPECTATIONS IN WASHINGTON ARE DASHED IN OAKLAND; OR, WHY IT’S AMAZING THAT FEDERAL PROGRAMS WORK AT ALL, THIS BEING A SAGA OF THE ECONOMIC DEVELOPMENT ADMINISTRATION AS TOLD BY TWO SYMPATHETIC OBSERVERS WHO SEEK TO BUILD MORALS ON A FOUNDATION OF RUINED HOPES 147 (3d ed. 1984).

259. *See id.* (“The more directly the policy aims at its target, the fewer the decisions involved in its ultimate realization and the greater the likelihood it will be implemented.”). While the authors caution that simplicity in itself is not the goal, “[s]implicity can be ignored, however, only at the peril of breakdown.” *Id.*

260. *Id.* at 93.

261. *See* Margaret E. Kruk et al., *What Is a Resilient Health System? Lessons from Ebola*, 385 *Lancet* 1910, 1910 (2015) (arguing the need for resilience to prevent and re-

sources of reliable information are better prepared to understand the meaning of an outbreak and what to do in response. They are better able to act responsibly than populations lacking some or all of these attributes. For example, a well-educated population is likely to understand how to avoid exposure to an infectious agent and, if exposed or infected, how to avoid transmitting infection to others.

Several federal statutes give HHS authority to issue regulations that help develop a resilient population.²⁶² The Act authorizes the Secretary to “assist States and their political subdivisions in the prevention and suppression of communicable diseases and with respect to other public health matters . . . and shall advise the several States on matters relating to the preservation and improvement of the public health.”²⁶³ For example, HHS can establish vaccination clinics to offer vaccines to the public²⁶⁴ and track influenza vaccine distribution.²⁶⁵ The Secretary may provide technical assistance concerning sexually transmitted diseases.²⁶⁶ The Secretary also “may take such action as may be appropriate to respond to the public health emergency [disease or disorder], including making grants, providing awards for expenses, and entering into contracts and conducting and supporting investigations into the cause, treatment, or prevention of a disease or disorder.”²⁶⁷

The CDC, acting for the Secretary, can and does make grants and assist the states and other entities to prevent or control tuberculosis, including through public education.²⁶⁸ The CDC can also establish fellowship and training programs in disease prevention.²⁶⁹ The CDC can collect data and report on diabetes,²⁷⁰ asthma,²⁷¹ pregnancy complications,²⁷² prenatal and postnatal health,²⁷³ maternal depression,²⁷⁴ oral health and fluoridation,²⁷⁵ hepatitis C,²⁷⁶ human papillomavirus,²⁷⁷ muscular dystrophy,²⁷⁸

spond to epidemics). *See generally* Judith Rodin, *The Resilience Dividend: Being Strong in a World Where Things Go Wrong* (2014).

262. *See generally* Public Health Service, as amended, 42 U.S.C. Ch. 6A, especially §§ 215 and 311; 42 U.S.C. §§ 216, 243, and 361–69 (2012); 42 U.S.C. §§ 264–72 (2012); 31 U.S.C. § 9701 (2012).

263. 42 U.S.C. § 243.

264. 42 C.F.R. § 70.9 (2017).

265. 42 U.S.C. § 247d-1.

266. *Id.* § 247c.

267. *Id.* § 247d. For example, the Public Health Service provided temporary relocation assistance to residents who lived near Love Canal because of the emergency. Emergency Authority of the Secretary of Health and Human Services Under 42 U.S.C. § 243(c)(2), 4B Op. O.L.C. 638 (1980).

268. 42 U.S.C. § 247b-6.

269. *Id.* § 247b-8.

270. *Id.* §§ 247b-9, 247b-9a.

271. *Id.* § 247b-10.

272. *Id.* § 247b-12.

273. *Id.* § 247b-13.

274. *Id.* § 247b-13a.

275. *Id.* § 247b-14.

276. *Id.* § 247b-15.

277. *Id.* § 247b-17.

278. *Id.* § 247b-18.

and mosquito-borne diseases.²⁷⁹

The Secretary of HHS is authorized to conduct or cooperate in research “relating to the causes, diagnosis, treatment, control, and prevention of physical and mental diseases and impairments of man, including water purification, sewage treatment, and pollution of lakes and streams.”²⁸⁰ This type of research can yield recommendations for policies and programs that enable populations to resist or respond to disease outbreaks.²⁸¹

Of particular relevance to preventing contagious disease is the first subsection of the statute that also authorizes federal quarantine. Subsection (a) of § 264 offers HHS far more discretion to issue regulations providing for ways other than quarantine to prevent disease. The authorization to “make and enforce such regulations as in his judgment are necessary to prevent the introduction, transmission, or spread of communicable diseases” is an express congressional authorization of broad rule-making authority with respect to communicable diseases—not limited to quarantinable diseases.²⁸² The statute provides examples of the measures contemplated. Such regulations “may provide for such inspection, fumigation, disinfection, sanitation, pest extermination, destruction of animals or articles found to be so infected or contaminated as to be sources of dangerous infection to human beings, and other measures, as in his judgment may be necessary.”²⁸³ The examples listed suggest that limiting the liberty of individuals is not within the scope of subsection (a); that subject is covered in subsections (c) and (d) concerning foreign and domestic quarantine. Nevertheless, there is plenty of room for positive measures to prevent the communicable diseases from entering the country and spreading across state lines.²⁸⁴

279. *Id.* § 247b-21.

280. *Id.* § 241.

281. Certain types of studies are specifically delegated to agencies within HHS. For example, research concerning health statistics, health services, and health care technology is delegated primarily to the Agency for Healthcare Research and Quality and the National Center for Health Statistics (NCHS). *Id.* § 242b. NCHS is also responsible for conducting epidemiological studies and reporting on the incidence and prevalence of diseases and their relationship to various causes, including the physical and behavioral determinants of health. *Id.* § 242k.

282. *Id.* § 264(a).

283. *Id.* The full text reads as follows:

§ 264. Regulations to control communicable diseases

(a) Promulgation and enforcement by Surgeon General

The Surgeon General, with the approval of the Secretary, is authorized to make and enforce such regulations as in his judgment are 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. For purposes of carrying out and enforcing such regulations, the Surgeon General may provide for such inspection, fumigation, disinfection, sanitation, pest extermination, destruction of animals or articles found to be so infected or contaminated as to be sources of dangerous infection to human beings, and other measures, as in his judgment may be necessary.

284. See generally Mariner, Annas, & Parmet, *supra* note 28, at 379–80.

Here, several questions arise. First, how much authority does the federal government have over preventing the introduction and spread of communicable diseases? How much of this authority should the federal government exercise, and how much should be left to the states? And finally, how much federal authority should Congress delegate to administrative agencies?

While the Constitution makes no mention of communicable diseases, there is little doubt that Congress's Article I powers to regulate foreign and interstate commerce, to establish rules of naturalization, to support Armies, and to maintain Navies give it rather broad authority to prevent the introduction and spread of contagious diseases that would interfere with commerce, the national defense, or military capacity. Thus, identification of contagious diseases entering at the nation's borders is not only within the scope of federal authority, but also properly allocated to Congress as a matter of sensible policy. Moreover, the statutes mentioned above delegate substantial authority to the HHS to formulate positive measures to provide information and support to the population. This delegation of authority is far less likely to be challenged than the more specific federal quarantine statute.

Cass Sunstein argues that, in practice, United States courts use a slightly modified version of the nondelegation doctrine, *to wit*, "Executive agencies cannot make *certain kinds of decisions* unless Congress has explicitly authorized them to do so."²⁸⁵ To determine what kinds of decisions are outside agency discretion, he suggests several nondelegation canons drawn from canons of statutory interpretation.²⁸⁶ Of particular relevance here is one canon that Sunstein does not focus on: the "Avoidance Canon."²⁸⁷ It counsels that ambiguous statutes should be construed

285. Cass R. Sunstein, *The American Nondelegation Doctrine 2* (Working Paper, May 22, 2017), <https://ssrn.com/abstract=2972935> [<https://perma.cc/7QK4-249E>] (emphasis added).

286. *Id.* at 3–5. These canons are: statutes in derogation of the common law should be narrowly construed; statutory ambiguities should be construed to avoid possible constitutional violations; absent an express statutory prohibition, statutes should be interpreted to allow agencies to consider the costs of regulation; and ambiguous statutes should not be construed so as to answer "major questions"—answers that "would bring about an enormous and transformative expansion in regulatory authority without clear congressional authorization." *Id.* at 4–5 (citing *Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2444 (2014)) (internal quotations and alteration omitted).

287. *See id.* at 4. The Major Question canon may also be relevant. This argues that regulatory authority over "a significant portion of the American economy" or making decisions of "economic and political significance" requires congressional authorization. *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 159–60 (2000); *see also Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2441 (2014); *Indus. Union Dep't v. Am. Petroleum Inst.*, 448 U.S. 607, 709, 712 (1980). *But see King v. Burwell*, 135 S. Ct. 2480, 2492 (2015); *Massachusetts v. EPA*, 549 U.S. 497, 516–17 (2007). This is distinct from deference to agency interpretation of its own as discussed in *Chevron, U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 843–44 (1984), which applies when Congress has not spoken to an issue or where there is a gap in the statute that the statute authorizes the agency to fill in or complete, although both issues may arise in the same case.

to avoid conflicting with provisions of the Constitution.²⁸⁸ It makes sense that an agency should not take it upon itself to make a rule that could violate a constitutional right unless Congress has expressly authorized it to do so.²⁸⁹ Regulations that make it possible for people to protect themselves against contagious diseases, however, should not raise any constitutional questions. These include providing people who are asked to enter into voluntary quarantine with the resources they need to remain comfortable and the income they need to survive. If people understand that they will not be penalized for cooperating with public health recommendations, they are more likely to volunteer. Moreover, with government providing financial and material support, the public is more likely to consider these volunteers to be generous citizens acting in the public interest, rather than potential disease vectors.

Another approach that would improve public trust and public understanding of governmental action, and reduce unnecessary quarantines, would be to *truly* increase transparency. Rather than simply promulgate regulations that purportedly “codify current practices,”²⁹⁰ the CDC should take steps to collect and share data on quarantine usage nationally. The Ebola scare led to an unacceptable amount of quarantines that wasted resources and did nothing to improve public health. In fact, they continue to waste resources through legal disputes that are working their way through the court system.²⁹¹ Yet we have no definitive knowledge of how many quarantines or isolation orders, be they voluntary or involuntary, were issued in each state. One study attempted to collect this data from the states that issued stringent quarantine orders for Ebola, and concluded that “secrecy is pervasive.”²⁹² Even freedom of information requests have been met with resistance.²⁹³

288. See *Skilling v. United States*, 561 U.S. 358, 405–06, 423, 427 (2010) (discussing the canon of constitutional avoidance, which counsels against an interpretation that would violate the Constitution). See generally Kevin M. Stack, *Interpreting Regulations*, 111 MICH. L. REV. 355, 359 (2012); Abbe R. Gluck, *The States as Laboratories of Statutory Interpretation: Methodological Consensus and the New Modified Textualism*, 119 YALE L.J. 1750, 1761–68 (2010).

289. See, e.g., *Kent v. Dulles*, 357 U.S. 116, 122–23, 130 (1958) (striking down the Secretary’s regulation generally barring passports to Communist Party members as beyond the Secretary’s authority, despite very broad authorization to make “such rules as the President shall designate and prescribe”). But see *Zemel v. Rusk*, 381 U.S. 1, 7–8 (1965) (upholding broad federal authority to restrict travel).

290. Quarantine Regulations, *supra* note 12, at 6923.

291. Though the lawsuit against Connecticut Governor Malloy was dismissed by the District Court, it has been appealed to the Second Circuit Court of Appeals. Brief for Robert M Palumbos et al. as Amici Curiae Supporting Appellants, *Liberian Cmty. Ass’n of Conn. v. Malloy*, No. 3:16-cv-00201, 2017 WL 4897048, at *4 (D. Conn. Mar. 30, 2017).

292. ACLU & GHJP, *supra* note 19, at 27. Surveys were submitted to the Departments of Health of all fifty states and only six states responded. There was also some question as to the accuracy of those who did report. For example, Connecticut responded that they had quarantined nine individuals, yet, the authors discovered at least one other person not included who was “unofficially” quarantined in a hotel room for two days. See ACLU & GHJP, *supra* note 19.

293. ACLU & GHJP, *supra* note 19, at 28.

The CDC published a report noting that state, local, and territorial health departments, and not the CDC itself, “monitored” 29,789 people during the Ebola scare, but did not report whether monitoring was warranted, whether the agency issued any federal orders to do so, or how many people voluntarily complied with the recommendations.²⁹⁴ The report did state that 97% of those monitored were “travelers at low risk” of Ebola infection.²⁹⁵ Among those characterized as low-risk or some-risk, 796 had some symptoms, but only 104 (13%) of these were tested for Ebola.²⁹⁶ None tested positive.²⁹⁷

The manner and breadth at which government officials confine individuals should be transparent. If this is truly a goal of the CDC, they should work diligently with local, state, and federal officials to gather accurate data and share them publicly. These data should include not only official quarantine and isolation orders but also any order of restricted movement whether it be involuntary or “voluntary.” Far too often during the Ebola scare individuals were coerced into accepting “voluntary” quarantines, likely because the agency had no grounds to justify an order for involuntary quarantine.²⁹⁸ A study conducted after the Ebola scare had ceased concluded that at least forty formal quarantine orders were implemented; however, 233 more *de facto* quarantines were put into place under pressure from officials.²⁹⁹

Though the focus of this article has been on the quarantine regulations and, thus, official quarantines, these “voluntary” orders are particularly concerning. If individuals lack protection from violations of their rights and from direct and indirect harm when subject to a formal federal quarantine order, they are even less protected when pressured to stay home under threat of sanctions without a formal order. Increased transparency about the number of both voluntary and involuntary quarantines and isolations is necessary to determine the incidence and prevalence of these measures. Data tracking would enable more informed analysis of whether these measures are used according to constitutional standards. Moreover, such data could be used to determine what resources individuals need in order to enable truly voluntary cooperation with public health recom-

294. Hyacinte Julien Kabore et al., *Monitoring of Persons with Risk for Exposure to Ebola Virus—United States, November 3, 2014–December 27, 2015*, 65 *Morbidity & Mortality Wkly Rep.* 1401, 1401 (2016). The use of “voluntary” quarantines is more troubling because of the inability to ensure due process protections for those individuals. Ulrich, *supra* note 11, at 268.

295. Hyacinte, *supra* note 294, at 1401.

296. Hyacinte, *supra* note 294, at 1403.

297. Hyacinte, *supra* note 294, at 1403. The report characterizes this monitoring as a success, because so many agencies cooperated to carry out the monitoring of so many people. It attributes some of this success to the use of local police departments and federal Department of Homeland Security centers in the states. It does not report the cost of this monitoring. Hyacinte, *supra* note 294, at 1403.

298. ACLU & GHJP, *supra* note 19, at 26–27. Even Kaci Hickox’s home stay in Maine started as “voluntary.” *Id.*

299. ACLU & GHJP, *supra* note 19, at 29. There is also information in the report regarding *de facto* quarantines that stemmed from community pressure.

mendations. A rights-based approach that encouraged the public to seek medical attention and incentivize true voluntary measures would minimize the need for coercive pressure from public health officials. If the CDC in fact seeks to keep the public informed and aware of “current practices,” tracking and sharing data on movement restrictions would be a better mechanism for accomplishing this goal.

V. CONCLUSION

We will always need to protect ourselves from contagious diseases. How we do so is important for both practical and normative reasons. In practice, quarantining a population has never stopped an epidemic. Involuntary quarantine or isolation of an individual is necessary only in rare instances and is certainly not enough to control the spread of disease. If quarantine is our primary tool for disease control, we will not be prepared for the next epidemic.

The measures we choose to predict, prevent, or respond to outbreaks of contagious diseases can sustain or undermine the rule of law. Laws that grant officials broad discretion to impose coercive measures based on questionable standards and with little accountability weaken our constitutional protections against arbitrary punishment. They also encourage skepticism of the need for—and fairness of—official actions, which in turn erodes willingness to cooperate with sensible official recommendations and exacerbates public health emergencies.

There is no need to dilute the principles governing quarantine and isolation in order to protect public health. There are positive alternatives that harness the public’s natural preference for self-protection. These include laws creating and financing public and private programs that enable people to stay home without penalty—retaining their employment or income and access to necessary food, water, smart phones, vaccines, medicines, and other necessities. People who feel respected are more likely to be willing to cooperate voluntarily with sensible restraints on their movements than people who are treated like criminals.

The federal government can implement and expand positive measures like these, as it has in some other areas. HHS and CDC can provide the expertise needed by states, localities, Indian Nations, and the entire population to protect themselves without the use of force. The CDC in particular should stay focused on the science underpinning its recommendations and actions, including recognizing and explaining uncertainty where it exists. Federal quarantine authority should be exercised only at the border and only in the extraordinary circumstances of the threat of a quarantinable disease. The authority to involuntarily quarantine individuals who have not been determined to have a contagious disease and are already inside the country should remain with the states.