17-1558-cv

United States Court of Appeals

for the

Second Circuit

LIBERIAN COMMUNITY ASSOCIATION OF CONNECTICUT, on behalf of themselves and those similarly situated, LOUISE MENSAH-SIEH, on behalf of herself and her minor children B.D. and S.N., on behalf of themselves and those similarly situated, VICTOR SIEH, on behalf of themselves and those similarly situated, EMMANUEL KAMARA, on behalf of themselves and those similarly situated, ASSUNTA NIMLEY-PHILLIPS, on behalf of themselves and those similarly situated, LAURA SKRIP, on behalf of themselves and those similarly situated, RYAN BOYKO, on behalf of themselves and those similarly situated, ESTHER YALARTAI, on behalf of themselves and those similarly situated, BISHOP HARMON YALARTAI, on behalf of themselves and those similarly situated, MARY JEAN O, on behalf of themselves and those similarly situated,

Plaintiffs-Appellants,

NATHANIEL SIEH, on behalf of themselves and those similarly situated.

Plaintiff,

(For Continuation of Caption See Inside Cover)

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF CONNECTICUT

BRIEF FOR *AMICI CURIAE* MARK BARNES AND LEANA WEN IN SUPPORT OF APPELLANTS

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– v. –

DANNEL P. MALLOY, Governor, RAUL PINO, Commissioner of Public Health, JEWEL MULLEN, Former Commissioner of Public Health,

Defendants-Appellees.

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INTEREST OF *AMICI CURIAE*

Amici are public health experts who believe that quarantine policies must be scientifically justified and consistent with due process requirements. They respectfully submit this Brief as *amici curiae* in support of Plaintiffs-Appellants.[1]

Mark Barnes, J.D., L.L.M. is a partner at Ropes & Gray LLP who has served in senior positions at the New York State Department of Health and the New York City Department of Health, where, among other duties, he spearheaded groundbreaking regulatory standards for civil detention and quarantine of persons with drug-resistant tuberculosis. In 1993, Mr. Barnes served as legal advisor to the health reform efforts at the Clinton White House. He was president of the New York State Bar Association Health Law Section in 2007-08. As Executive Vice President and Chief Administrative Officer at St. Jude Children's Research Hospital, Mr. Barnes established a vaccine study center in Zimbabwe in collaboration with Africa University. He started and was the first executive director, and later chair of the oversight committee, of Harvard University's extensive AIDS treatment programs in Nigeria, Tanzania and Botswana. He has held faculty appoint-

[1] Counsel for all parties have consented to the filing of this *amici curiae* brief. No counsel to any party authored this brief in whole or in part, and no person or entity other than *amici* and their counsel made a monetary contribution intended to fund the preparation or submission of this brief.

ments at the Columbia and Harvard schools of public health, and teaches public health law and health care law at Yale Law School.

Leana S. Wen, M.D., M.Sc., FAAEM is the Commissioner of the Baltimore City Health Department (BCHD), the oldest continuously operating health department in the United States, formed in 1793. With a $130 million budget and 1,000 employees, BCHD's responsibilities include maternal and child health, youth wellness, school health, senior services, animal control, restaurant inspections, emergency preparedness, STI/HIV treatment, and acute and chronic disease prevention.

INTRODUCTION AND BACKGROUND

The American system for responding to infectious disease epidemics reflects the basic structure of American federalism. The federal government, through the Centers for Disease Control and Prevention ("CDC"), exercises authority with respect to ports of entry and interstate travel and leadership in establishing standards and practices. State and local public health authorities have "broad police-power authority to protect the public's health"[2] within their jurisdictions.

The Ebola epidemic began in West Africa in March 2014. In response, public health experts and aid workers from around the globe traveled there to combat

[2] Control of Communicable Diseases, 82 Fed. Reg. 6890, 6909 (Jan. 19, 2017) (to be codified at 42 C.F.R.), https://www.gpo.gov/fdsys/pkg/FR-2017-01-19/pdf/2017-00615.pdf [the "2017 Rule"].

the epidemic.[3] In August 2014, CDC issued its first set of guidelines for managing asymptomatic individuals (*i.e.*, individuals exhibiting no symptoms of Ebola) traveling into the United States from West Africa.[4] By October 23, 2014, four cases of Ebola were diagnosed in the United States.[5] In October 2014, CDC issued a second set of guidelines, somewhat more restrictive of travelers than the first.[6] CDC at no point recommended quarantine, however.[7] Numerous professional organizations supported CDC's approach, in some cases explicitly urging states to follow CDC's guidance.[8]

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[3] *See* Ctrs. for Disease Control & Prevention, *2014-2016 Ebola Outbreak in West Africa* (updated June 22, 2016), https://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/index.html.

[4] *See* Ctrs. for Disease Control & Prevention, *Notes on the Interim U.S. Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure* (updated Feb. 19, 2016), https://www.cdc.gov/vhf/ebola/exposure/monitoring-and-movement-of-persons-with-exposure.html ["CDC Ebola Guidance"].

[5] *See* Ctrs. for Disease Control & Prevention, *Cases of Ebola Diagnosed in the United States* (updated Dec. 16, 2014), https://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/united-states-imported-case.html.

[6] *See* CDC Ebola Guidance, *supra* note 4.

[7] "Quarantine" is defined as the separation of an asymptomatic individual who may have been exposed to disease. *See* p. 18, *infra*; Nat'l Conference of State Legislatures, *State Quarantine and Isolation Statutes* (Oct. 29, 2014), http://www.ncsl.org/research/health/state-quarantine-and-isolation-statutes.aspx. "Isolation" is the term for the separation of individuals who are showing symptoms of an infectious disease. *See id.*

[8] *See, e.g.*, Ass'n for Profs. in Infection Control & Epidemiology, *Joint Statement: Leading infectious disease medical societies oppose quarantine for asymptomatic healthcare personnel traveling from West Africa* (Oct. 31, 2014),

After the Ebola epidemic subsided, CDC undertook a comprehensive rule-making proceeding under the Administrative Procedure Act. Following notice and extensive public comment, CDC issued the final rule, "Control of Communicable Diseases" in January 2017 (the "2017 Rule"). This rule governs quarantines that may be imposed under federal jurisdiction, including establishing a number of due process protections.[9]

All 50 states—as well as the District of Columbia, and large municipalities (like New York City and Baltimore) and territories—have their own statutes that authorize quarantine practices within their jurisdictions.[10] For example, the Connecticut statute at issue in this case provides:

> [I]f the Governor has declared a public health emergency, the commissioner, if so authorized by the Governor . . . , may order into quarantine or isolation, as appropriate,

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https://apic.org/For-Media/Announcements/Article?id=4d3c286c-1ef6-4aef-95f6-85f3f020af47 ["APIC Ebola Guidance"]; Council of State & Territorial Epidemiologists, Press Release (Oct. 28, 2014), http://www.evaluategroup.com/Universal/View.aspx?type=Story&id=537727 ["CSTE Ebola Guidance"]; Alice Park, *Ebola Quarantines 'Not Grounded on Science,' Say Leading Health Groups*, TIME (Oct. 27, 2014), http://time.com/3542069/ebola-quarantines-not-grounded-on-science-say-leading-health-groups; Infectious Diseases Soc'y of Am., *IDSA Ebola Guidance* (Aug. 21, 2014), http://www.idsociety.org/2014_ebola ["IDSA Ebola Guidance"].

[9] *See* 2017 Rule, *supra* note 2, at 6900.

[10] *See* Nat'l Conference of State Legislatures, *supra* note 7 (summarizing all 50 states' quarantine statutes); *see also* Tara Kirk Sell *et al.*, *US State-Level Policy Responses to the Ebola Outbreak, 2014-2015*, J. PUB. HEALTH MGMT. & PRACTICE, Jan.-Feb. 2017, at 11.

> any individual . . . whom the commissioner has reasonable grounds to believe to be infected with, or exposed to, a communicable disease . . . or at reasonable risk of having a communicable disease . . . or passing such communicable disease . . . to other persons if the commissioner determines that such individual or individuals pose a significant threat to the public health and that quarantine or isolation is necessary and the least restrictive alternative to protect or preserve the public health.

Conn. Gen. Stat. Ann. § 19a-131b(a).

The claims in this case arise from a quarantine instituted by Defendants in October 2014. In the midst of a heated reelection campaign, Defendant Governor Dannel Malloy declared a public health emergency,[11] and on October 16, 2014, Defendants implemented a mandatory 21-day quarantine for *all individuals* who had traveled to Ebola-affected areas.[12] The quarantine violated both due process and the Connecticut statute, which authorized quarantine only where "necessary and the least restrictive alternative to protect or preserve the public health." As CDC and medical experts had publicly stated, asymptomatic individuals cannot

[11] Letter from Dannel P. Malloy, Governor, State of Connecticut, to Hon. Denise Merrill, Sec'y of State, *et al.* (Oct. 7, 2014), http://www.governor.ct.gov/malloy/lib/malloy/2014.10.07_Declaration_of_Public_Health_Emergency.pdf.

[12] *See* Gov. Dannel P. Malloy, Press Release (Oct. 16, 2014), http://portal.ct.gov/office-of-the-governor/press-room/press-releases/2014/10-2014/gov-malloy-outlines-states-efforts-to-safeguard-against-ebola ["Connecticut Press Release"].

spread the Ebola virus,[13] while fever precedes the stage at which Ebola is contagious, such that an individual can be isolated well before becoming a threat to others.[14] Defendant Malloy's press release effectively acknowledged the quarantine's overbreadth in stating: "*If you are not sick,* but have traveled to affected areas or been in contact with an infected individual, you will be required to stay at home for 21 days . . . . This is called quarantine."[15]

The Connecticut quarantine contravened sound health policy and the science-based consensus of federal agencies and expert professional organizations. Quarantines are government-imposed deprivations of liberty. Accordingly, they require procedural due process protections and a reasonable scientific basis. Due process protections must be at least as strong as those found in the Connecticut statute and CDC's 2017 Rule, and the Constitution may well require additional protections such as notice of and jurisdictionally authorized judicial review. Defendants' sweeping quarantine policy ignored scientific necessity and Connecticut's own statutory requirements. It thereby denied individuals fundamental con-

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[13] *See* Ctrs. for Disease Control & Prevention, *Interim Table of State Ebola Screening and Monitoring Policies for Asymptomatic Individuals* (Aug. 31, 2015), https://www.cdc.gov/phlp/docs/interim-ebolascreening.pdf ("No identifiable risk includes: . . . Contact with an asymptomatic person who had contact with person with Ebola").

[14] Jeffrey M. Drazen *et al.*, *Ebola and Quarantine*, 371 NEW ENG. J. MEDICINE 2029, 2029 (Nov. 2014), http://www.nejm.org/doi/pdf/10.1056/NEJMe1413139.

[15] Connecticut Press Release, *supra* note 12 (emphasis added).

stitutional rights. *Amici* respectfully submit that quarantines are constitutionally permissible only when scientifically justified for a particular disease, appropriate for the particular individual, and imposed in accordance with reasonable due process protections.

ARGUMENT

I. The Court Should Address the Constitutional Parameters of Sound Quarantine Policy, Which Is a Pressing Legal and Health Policy Issue

A. Epidemics of Dangerous Infectious Diseases Present Particular Challenges to the Legal System

As this case exemplifies, outbreaks of infectious diseases may subject government officials to intense public and media scrutiny, sometimes bordering on hysteria and panic.[16] This can lead to demagoguery rather than decisions made on the basis of scientific evidence and constitutional principles.

In these circumstances, the courts may need to make difficult and sensitive decisions under extremely urgent timelines because they are faced with substantial deprivations of liberty and potentially devastating public health consequences. Although public health experts rarely advise the use of quarantines, and many state laws impose procedural requirements on their use, a few states adopted unnecessary and overly restrictive quarantines during the Ebola epidemic. Connecticut's

[16] *See* Br. of Plaintiffs-Appellants 8, 14-15, 63.

quarantine was among the broadest and most restrictive.[17] Many other states complied with CDC recommendations, including using active-monitoring techniques and "CDC CARE" reporting kits that CDC distributed at airports.[18]

One example of both overreaching state action and the critical role of courts involves Kaci Hickox, a nurse who had worked with Ebola patients for Médecins sans Frontières ("MSF") in Sierra Leone. Hickox had no symptoms when she landed at Newark Airport. Nevertheless, the State of New Jersey forced her to live in a tent outside University Hospital in Newark for three days before she was allowed to return home to Maine.[19] Maine then held Ms. Hickox under an in-home quarantine for four more days. She was not released until a court, in a statutorily required hearing, denied the State's request for a quarantine. Recognizing "the misconceptions, misinformation, bad science and bad information being spread

[17] *See* ACLU & YALE GLOB. HEALTH JUSTICE P'SHIP, FEAR, POLITICS, AND EBOLA: HOW QUARANTINES HURT THE FIGHT AGAINST EBOLA AND VIOLATE THE CONSTITUTION 25-26 (2015), https://www.aclu.org/sites/default/files/field_document/aclu-ebolareport.pdf ["Fear, Politics"].

[18] *See* Ctrs. for Disease Control & Prevention, *Travel and Border Health Measures to Prevent the International Spread of Ebola* 60 (July 8, 2016), https://www.cdc.gov/mmwr/volumes/65/su/pdfs/su6503a9.pdf.

[19] *See* Fear, Politics, *supra* note 17, at 22.

from shore to shore in our country with respect to Ebola," the court allowed only the far less restrictive measure of direct active monitoring.[20]

B. In Deciding this Case, the Court Can Articulate Legal Principles that Will Guide Government Response to the Next Epidemic

This case presents the opportunity for reflection and deliberation about the critical legal issues presented by quarantines, as well the development of a full record. A complete record will provide a robust basis for adjudicating constitutional rights concerning quarantines, including requirements for decisions grounded in sound science and affording appropriate procedural protections. This approach is vital not only to adjudicating this case, but also to articulating an authoritative legal framework to guide the conduct of public officials, affected individuals, aid organizations, and lower courts when the next epidemic occurs.[21]

Such a framework will provide all affected parties with the predictability and certainty necessary to guide reasoned and effective emergency response efforts—and to hold officials to account when they fail to meet those standards. It will benefit the judicial system by enabling courts to act more quickly and confidently in

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[20] *See Mayhew v. Hickox*, No. CV-2014-36, slip op. 3 (Me. Dist. Ct. Oct. 31, 2014), https://www.scribd.com/document/245131708/Maine-Judge-Order-Pending-Hearing.

[21] By this argument, *amici* do not suggest that existing law was unclear such that Defendants' quarantine policy may have been permissible. Defendants' quarantine failed to meet even those due process requirements set forth in the Connecticut statute—such as scientific necessity and individualized treatment—and thus clearly violated established constitutional rights as well.

the inevitable emergencies that will arise, and to better ensure consistent treatment of individuals subject to future quarantines.

That there will be a next epidemic and more quarantines is not a hypothetical scenario. Future epidemics are probable if not inevitable, according to public health experts and epidemiologists. "The Ebola epidemic is not over, and there are concerns it could spike again."[22] But Ebola is not alone. "New threats keep coming. The C.D.C. has monitored more than 300 outbreaks of various diseases in 160 countries. Infectious illnesses are believed to cause 15 percent of all deaths worldwide."[23] Indeed, as a leading researcher found, "90 percent of epidemiologists polled said they expect a large pandemic in their children or grandchildren's lifetime."[24]

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[22] Declan Butler, *How to Beat the Next Ebola*, NATURE (Aug. 5, 2015), http://www.nature.com/news/how-to-beat-the-next-ebola-1.18114.

[23] Clyde Haberman, *Chasing Cures for Deadly Scourges, and Getting in Our Own Way*, N.Y. TIMES (May 14, 2017), https://www.nytimes.com/2017/05/14/us/retro-report-disease-eradication.html.

[24] Nahid Bhadelia, *Has The World Learned The Wrong Lessons From The Ebola Outbreak?*, NPR (Jan. 19, 2016), http://www.npr.org/sections/goatsandsoda/2016/01/19/463567887/have-we-learned-the-wrong-lessons-from-the-ebola-outbreak (citing W. Bruine de Bruin *et al.*, *Expert judgments of pandemic influenza risks*, GLOB. PUB. HEALTH, June 2006, at 178, 183-84, https://pdfs.semanticscholar.org/3cbe/9c0301a7e7fc90436dc543bca6b0061c3ab5.pdf).

The CDC's 2017 Rule, enacted at a time of relative calm after the Ebola epidemic subsided, recognizes certain sound due process protections, although it does not, unlike many states, establish a right to judicial review. It provides:

> (1) . . . for written orders of quarantine, isolation, or conditional release, including translation or interpretation services as needed; (2) mandatory review of the Federal order after the first 72 hours; (3) notifying individuals through the written order of their right to request a medical review; (4) an opportunity at the medical review for the detained individual to be heard through an attorney . . . , present experts or other witnesses, submit documentary or other evidence; and confront and cross-examine any government witnesses; (5) a decision-maker independent of those who authorized the original . . . quarantine . . . ; (6) a written statement by the fact-finder of the evidence relied upon and the reasons for the decision; (7) appointment of representatives . . . if the individual is indigent and requests a medical review; and (8) timely notice of the preceding rights.[25]

Although the 2017 Rule does not, unlike many state statutes, provide a clear pathway for judicial review, CDC "agree[d] that access to independent judicial review is essential."[26] The Rule generally articulates important protections and guidance upon which state legislatures and public health officials can build.

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[25] *See* 2017 Rule, *supra* note 2, at 6900.

[26] CDC "assure[d] the public that this final rule does not affect the constitutional or statutory rights of individual to seek judicial review through such traditional mechanisms as a petition for a writ of habeas corpus under 28 U.S.C. 2241." *Id.* at 6914-15. CDC explained that "[a]s a Federal agency, however, HHS/CDC would lack the legal authority through regulation to grant Federal courts with jurisdiction that they would not otherwise possess because only Congress may expand a Feder-

C. A Measured, Scientifically Based Response Is Essential to Effective Control of Epidemics

Effective control of epidemics requires scientifically based responses. Health professionals must be able to travel to impacted countries to treat and seek cures for deadly diseases; scientists and epidemiologists to undertake research; and aid workers to provide humanitarian assistance. Additionally, overly restrictive responses to epidemics needlessly impair commerce and travel, causing both individual and broad societal harm. As international trade continues to increase, and immigrant communities continue to expand in the United States, appropriate policies must facilitate commerce and travel for both economic and personal reasons, subject to reasonable restrictions.

Areas hardest-hit by epidemics often have insufficient health systems that preclude them from responding successfully without international aid. As *The New England Journal of Medicine* reported, "Médecins sans Frontières, the World Health Organization, the U.S. Agency for International Development (USAID), and many other organizations say we need tens of thousands of additional volunteers to control the epidemic."[27] Paul Farmer, co-founder of Partners in Health, explained specifics:

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al court's jurisdiction." *Id.* at 6915. The 2017 Rule also raises due process issues because the "medical review" it provides is not mandatory.

[27] Drazen, *supra* note 14, at 2029.

> Both nurses and doctors are scarce in the regions most heavily affected by Ebola. Even before the current crisis killed many of Liberia's health professionals, there were fewer than fifty doctors working in the public health system in a country of more than four million people, most of whom live far from the capital. That's one physician per 100,000 population, compared to 240 per 100,000 in the United States or 670 in Cuba. Properly equipped hospitals are even scarcer than staff, and this is true across the regions most affected by Ebola. Also scarce is personal protective equipment (PPE): gowns, gloves, masks, face shields etc.[28]

"[W]eak health systems, not unprecedented virulence or a previously unknown mode of transmission, [were] to blame for Ebola's rapid spread."[29]

Yet overly restrictive quarantines in states like Connecticut reduced the number of volunteers traveling abroad without avoiding any meaningful risk of disease. As the Infectious Disease Society of America ("IDSA") warned in 2014, "mandatory involuntary quarantine of asymptomatic healthcare workers . . . carries unintended negative consequences without significant additional benefits."[30] Similarly, the Association for Professionals in Infection Control and Epidemiology ("APIC") warned: "quarantining healthcare professionals returning from caring for Ebola patients in West Africa will deter potential healthcare volunteers and lead to

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[28] Paul Farmer, *Diary*, LONDON REV. BOOKS, Oct. 2014, at 38, https://www.lrb.co.uk/v36/n20/paul-farmer/diary.

[29] *Id.*

[30] Park, *supra* note 8.

increased difficulty in assembling care teams in West Africa and the U.S."[31] Other experts agreed: "Quarantines of all individuals returning from the three affected countries would cripple the vital rescue mission in West Africa by placing a chilling effect on health workers, aid organizations, and journalists going to the region."[32] According to MSF, the quarantines "caused some volunteers to reduce their tours in the hardest hit countries of Guinea, Liberia and Sierra Leone."[33] A survey after the Ebola epidemic ended found that "International Medical Corps saw nearly a 25% drop in recruitment from the United States after quarantine restrictions were put in place," and MSF "experienced difficulty even in assigning short trips because the additional time required for quarantine or restricted movements made it less feasible for field workers to make themselves available."[34]

The reasons that unfounded quarantines and other overly restrictive responses to epidemics have a chilling effect on travel to provide medical and other humanitarian assistance, as well as other business and personal needs, are clear:

- Psychological, social, and emotional trauma.

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[31] *Id.*

[32] Lawrence O. Gostin, *The United States' Misguided Self-Interest On Ebola*, HEALTH AFFAIRS BLOG (Oct. 31, 2014), http://healthaffairs.org/blog/2014/10/31/the-united-states-misguided-self-interest-on-ebola.

[33] Park, *supra* note 8.

[34] *See* Fear, Politics, *supra* note 17, at 31.

- Financial costs (*e.g.*, transportation, housing, lost wages, child expenses, legal and administrative fees).
- Increasing the time involved in aid trips, making them inconvenient if not impracticable.
- Causing or extending separation from family and loved ones.
- Stigmatizing aid workers and members of the affected community.[35]

Restrictive quarantines impede medical aid as well as the flow of humanitarian supplies such as food, medicine and protective gear into regions in need.[36] They hinder the global exchange of information crucial to controlling epidemics. They divert relief organizations' resources into dealing with the quarantines rather than the disease itself.[37]

Impediments to an effective response not only imperil those immediately affected abroad, but they also endanger potential victims in the United States, because "to stop an epidemic of this type requires controlling it at its source."[38] Improper quarantines waste tax dollars used to administer unnecessary quarantines rather than to effectively address public health concerns. Such quarantines also de-

[35] *See id.* at 7-9, 31-33.

[36] *See id.*

[37] *See id.*

[38] Drazen, *supra* note 14, at 2029.

tract from the legitimacy of a state's public health response, perhaps misleading the American public and compounding existing panic.[39]

In light of these challenges, to address epidemics effectively, health professionals must be able to travel freely between the United States and affected countries, limited only by science-based public health measures and practices applied in accordance with due process requirements.

II. State Public Health Officials Have Front-Line Responsibilities to Protect the Public by Implementing Scientifically Sound Quarantine Practices in Accordance with Due Process Principles

A. Protecting Public Health and Safety by Responding to Epidemics Is Primarily the Responsibility of State and Local Officials

The use of quarantine as a means of responding to epidemics dates to the Middle Ages.[40] In the United States, quarantine has long been recognized as a traditional police power of the state.[41] At the turn of the last century, the Supreme Court described "the powers on the subject of health and quarantine exercised by

[39] *See* Fear, Politics, *supra* note 17, at 7-9, 31-33.

[40] *See* Wendy E. Parmet, *AIDS and Quarantine: The Revival of an Archaic Doctrine*, 14 HOFSTRA L. REV. 53, 55-59 (1985).

[41] *See Jacobson v. Massachusetts*, 197 U.S. 11, 25 (1905); 2017 Rule, *supra* note 2, at 6909.

the states from the beginning."[42] In 1905, the Court recognized that state quarantines are authorized by states' general "police power."[43]

State and local public health authorities continue to "have primary responsibility for the imposition of public health measures occurring within their jurisdictions," including epidemics.[44] The federal government, through CDC, "acts in time-sensitive circumstances to prevent communicable disease spread, such as at ports of entry, upon the request of a State or local public health authority of jurisdiction, or when State or local control is inadequate."[45]

All states have enacted laws providing a legal basis for quarantine orders.[46] Some states, like Connecticut, also authorize declarations of disaster or emergency, which "can temporarily change the legal environment to allow increased response capabilities and legal waivers of potential barriers to the public health response."[47] Of course, even where they authorize quarantines, such statutes and executive actions must meet constitutional standards. *See, e.g.*, *Addington v. Texas*, 441 U.S. 418, 425 (1979) ("This Court repeatedly has recognized that civil commitment for

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[42] *Compagnie Francaise de Navigation a Vapeur v. State Bd. of Health, La.*, 186 U.S. 380, 396 (1902).

[43] *Jacobson*, 197 U.S. at 25.

[44] 2017 Rule, *supra* note 2, at 6909.

[45] *Id.*

[46] *See* Nat'l Conference of State Legislatures, *supra* note 7.

[47] *See* Sell, *supra* note 10, at 11.

any purpose constitutes a significant deprivation of liberty that requires due process protection.").

B. Due Process Requires an Appropriate Scientific Basis for Quarantine Decisions

Although quarantines may be an effective approach to epidemics in appropriate circumstances, to be legally sound, their use must be supported by science. Public health officials and expert organizations such as CDC, IDSA, the Council of State and Territorial Epidemiologists ("CSTE"), and APIC all have recognized that the use of quarantines during the Ebola epidemic was unsupported by science or sound health policy.[48]

Quarantine is defined as the "separation of an individual who is not sick or showing any symptoms of disease, because he or she may have been exposed to an infectious pathogen and, if infected, may be capable of transmitting it."[49] Isolation, by contrast, is the "separation of an individual who is showing symptoms of an infectious disease."[50] Quarantine and isolation are not the only approaches to addressing epidemics. Others include (1) self-monitoring, where "those potentially exposed to an infectious disease assume responsibility for assessing and reporting their own health status"; (2) active monitoring, where "public health officials regu-

[48] *See, e.g.*, APIC Ebola Guidance, *supra*; CSTE Ebola Guidance, *supra* note 8; Park, *supra* note 8; IDSA Ebola Guidance, *supra* note 8.

[49] Fear, Politics, *supra* note 17, at 6.

[50] *Id.*

larly check in with potentially exposed individuals"; and (3) direct active monitoring, meaning the "[d]irect observation of potentially exposed individuals by a public health authority, which visits the potentially exposed individual at least once daily to check for fever and other symptoms."[51] In addressing epidemics, all of these strategies may appropriately play a role.

Needless to say, our understanding of epidemiology has evolved significantly since the Middle Ages. "With modern, in-depth understanding of specific diseases, [a] more specific and medically valid response [than quarantine] is appropriate than that used in the era of poor scientific understanding that established the practice of quarantine."[52] With respect to Ebola, for example, "we now know that fever precedes the contagious stage, allowing workers who are unknowingly infected to identify themselves before they become a threat to their community."[53]

Twenty-first century technology also has significantly reduced the need for quarantines. For example, medical personnel can now "monitor people with devices that can be placed on their wrists and that can send back (in real time) their pulse, temperatures and even their blood oxygen levels," at far less cost than a

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[51] *Id.*

[52] Cécile M. Bensimon, *Evidence and Effectiveness in Decisionmaking for Quarantine*, AM. J. PUB. HEALTH, Apr. 2007, at S44, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1854977.

[53] Drazen, *supra* note 14, at 2029.

quarantine.[54] "Today, we can also deploy innovative technologies to replace some of that laborious footwork. Now, with mobile technologies, cloud computing and participatory epidemiology, we can make this a much more efficient process."[55] Recognizing the power of technology, CDC urges the use of "electronic or internet-based monitoring" in the 2017 Rule.[56]

CDC's 2014 Ebola recommendations reflected these medical and technological advances as well. "The CDC guidance [did] not specify that individuals with any level of Ebola exposure should be quarantined."[57] Rather, CDC "urged states to adopt a more nuanced 'tiered' approach to risk, ranging from the highest risk (e.g., health workers known to have had skin exposure or a needle stick) to moderate risk (e.g., health workers treating Ebola patients without a known exposure) through to low risk (e.g., travelers who have had no contact with individuals known to have Ebola)."[58] Initially, in August 2014, CDC "recommended self-monitoring for most exposures, and controlled movement for higher risk expo-

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[54] Aileen Marty, *How to avoid Ebola quarantines*, CNN (Nov. 6, 2014), http://www.cnn.com/2014/11/06/opinion/marty-ebola-quarantine/index.html.

[55] Larry Brilliant, *Ebola: What Should We Do Now?*, WALL ST. J. (Oct. 17, 2014), http://web.archive.org/web/20161104193210/www.wsj.com/amp/articles/ebola-what-should-we-do-now-1413572275.

[56] *See* 2017 Rule, *supra* note 2, at 6901-02.

[57] Sell, *supra* note 10, at 15.

[58] Gostin, *supra* note 32.

sures,[59] with the goal of applying the least-restrictive measures necessary to protect communities and travelers."[60]

CDC's October 2014 revised guidance "shifted responsibility for monitoring travelers and other potentially exposed people to public health authorities, rather than relying on these people to monitor themselves."[61] Even then, however, CDC did not view quarantines as medically necessary or advisable. Rather, "[p]ost-arrival monitoring of travelers by health departments (active monitoring) and a higher standard of monitoring for healthcare workers (direct active monitoring that included daily direct observation by public health officials) served as alternatives to more stringent measures."[62]

Epidemiology experts generally echoed CDC's recommendations. In August 2014, IDSA announced that it "support[ed] the policies promoted by the US public health experts," including CDC,[63] and recommended self-monitoring:

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[59] "Controlled movement" is not equivalent to quarantine. Rather, controlled movement is "preclusion from long-distance travel on commercial conveyances such as aircraft, ships, buses, or trains." *Travel and Border Health Measures to Prevent the International Spread of Ebola*, *supra* note 18, at 60.

[60] CDC Ebola Guidance, *supra* note 4.

[61] *Id.*

[62] *Id.*

[63] Infectious Diseases Soc'y of Am., *IDSA Statement on Involuntary Quarantine of Healthcare Workers Returning From Ebola-Affected Countries*, http://www.idsociety.org/2014_ebola_quarantine (last visited July 6, 2017).

> Persons with either a high or low risk exposure to [Ebola] should be monitored for 21 days. This entails twice daily checks for fever, self-monitoring for symptoms and reporting any new health developments to health authorities. Restriction of activities and movement also need review with the exposed person.[64]

In October 2014, a group of leading epidemiology organizations—including IDSA, APIC, and others—announced that they were "opposed to mandatory quarantines being imposed on asymptomatic healthcare workers returning from Ebola-stricken countries in West Africa."[65] Those expert organizations recommended quarantine only as a last resort:

> As part of an evidence-based approach, the aforementioned organizations support the active monitoring and reporting (twice daily, for fever and symptoms of Ebola) of all healthcare personnel who provide care for Ebola patients, including returnees from Ebola outbreak areas in West Africa. Mandatory quarantine should only be implemented for those who do not adhere to such monitoring and reporting.[66]

Individual organizations also issued statements rejecting quarantines as scientifically unjustified. CSTE stated:

> Recent decisions by governors to enforce quarantines on health professionals and other individuals returning from Ebola-affected countries in West Africa are not rooted in science and provide a serious disincentive for health pro-

[64] IDSA Ebola Guidance, *supra* note 8.

[65] APIC Ebola Guidance, *supra* note 8.

[66] *Id.*

> fessionals to fight this disease at its source. [CSTE]—representing the nation's "disease detectives" working on the frontlines to stop Ebola here at home and overseas—supports the [CDC's October 2014 recommendations].[67]

APIC likewise opined: "Forced quarantines of healthcare workers with no symptoms of Ebola who have risked their lives to protect others, are unnecessarily harsh and are not aligned with scientific evidence."[68] According to MSF, forced quarantine for asymptomatic individuals "is not grounded on scientific evidence and could undermine efforts to curb the epidemic at its source."[69] The president of the American Medical Association emphasized that "decisions related to quarantine or isolation" must "be based on scientifically sound information."[70]

C. Quarantined Individuals Must Be Afforded Due Process Protections

Not only must quarantines be supported by state-of-the-art epidemiological science, but they must also afford due process protections. The World Health Organization ("WHO") has recommended that quarantine "be used as a last resort

[67] CSTE Ebola Guidance, *supra* note 8.

[68] Park, *supra* note 8.

[69] *Id.*

[70] *Id.*

and should be minimally restrictive,"[71] with safeguards relevant to the circumstances:

> Laws authorizing mandatory confinement must also ensure that basic needs are met, including adequate shelter, food, water and sanitation. They should also provide for appropriate treatment and health care, and respect the cultural or religious expectations of quarantined or isolated individuals to the greatest possible extent. National laws should also include procedural safeguards, by giving individuals who are the subject of a quarantine or isolation order the right to seek review by a court within a reasonable time.[72]

CDC's 2017 Rule likewise provides certain procedural protections for persons subject to federal quarantine, including written notice; mandatory administrative review of the quarantine order; representation by counsel or an advocate; and the opportunity for a "medical review" before an independent decisionmaker.[73] Although the 2017 Rule does not provide for a mandatory administrative hearing or a clear means of judicial review, CDC agreed in principle that "access to independent judicial review is essential," but it lacked the power to grant review jurisdiction in the courts.[74]

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[71] *See* Roger Magnusson, *Advancing the Right to Health: The Vital Role of Law*, WORLD HEALTH ORG. 160 (Jan. 16, 2017), http://apps.who.int/iris/bitstream/10665/252815/1/9789241511384-eng.pdf.

[72] *Id.* at 160-61 (citation omitted).

[73] 2017 Rule, *supra* note 2, at 6900.

[74] *See* note 26, *supra*.

State statutes and policies governing quarantines must (as many do) provide express due process protections rooted in the Constitution, including to ensure an adequate scientific basis for the deprivation of liberty. And courts should ensure that states obey their own statutes when reacting to epidemics. For example, Connecticut's statute requires that written notice be given that specifies the scientific basis for the quarantine.[75] Connecticut law—though it provides for hearings only on request—also requires that quarantined individuals be informed "that they have the right to consult an attorney, the right to a hearing pursuant to this section, clear instructions on how to request a hearing, and that if such a hearing is requested, such individual has the right to be represented by counsel, that counsel will be provided at the state's expense if such individual is unable to pay for such counsel, and that if such a hearing is requested, court fees shall be waived."[76] The Connecticut statute further grants the Probate Court and Superior Court jurisdiction to review quarantine determinations.[77] All of these protections are consistent with constitutional requirements. Why Defendants failed to follow them in this case should be the subject of discovery and the development of a full record for further proceedings.

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[75] Conn. Gen. Stat. Ann. § 19a-131b(c).

[76] Conn. Gen. Stat. Ann. § 19a-131b(d).

[77] *See* Conn. Gen. Stat. Ann. § 19a-131b(f), (m).

III. As a Matter of Constitutional Right, Quarantine Policies and Practices Must Be Scientifically Supported and Provide Fundamental Procedural Protections

Due process requires that quarantine policies must be based on best public health practices and scientific knowledge. As a matter of constitutional right, quarantines must (i) be scientifically justified, (ii) be individualized and the least restrictive means available, and (iii) provide quarantined individuals with procedural rights appropriate to the circumstances. The recommendations of expert organizations such as CDC, IDSA, CSTE, and APIC in many respects track these three elements, and stand in stark contrast to Defendants' frenzied rush to action in this case without regard to science or rational health policy.

Absent strong evidence of unique circumstances, which does not appear to exist in this case, state quarantine actions may be unconstitutional if they are more restrictive than the scientifically-based CDC guidelines and do not afford at least the kinds of procedural protections in the Connecticut statute and probably more. Here, for example, Defendant Malloy proclaimed, "I believe we must go above and beyond what the CDC is recommending," but cited no evidence, scientific or otherwise, for doing so or for ignoring the state's own statutory requirements.[78]

Not only are these elements constitutionally required, but authoritative judicial articulation of these principles will improve public health and bolster an effec-

[78] *See* Connecticut Press Release, *supra* note 12.

tive response to epidemics, including by encouraging a robust response from aid workers and organizations, who will know in advance how policies and regulations will be applied. Also increased will be the legitimacy and credibility of public health measures, thus enhancing voluntary compliance.

A. Quarantines Must Be Scientifically Justified

First, to satisfy constitutional scrutiny, quarantines must be scientifically justified for each specific disease for which they are used. Quarantine is, by definition, a restriction on freedom of movement of a person who does *not* show any symptoms (as contrasted with isolation). Thus, at a bare minimum, quarantine can only be used where the particular disease could be transmitted by an asymptomatic individual, and if potential harm from the disease is serious enough to warrant the extraordinary step of quarantine.

By that standard, quarantine was unjustified in the case of Ebola, because it was scientifically known that Ebola is not contagious when the potentially exposed individual is asymptomatic.[79] Although quarantine was scientifically unjustified as a response to Ebola, quarantines may be appropriate as a tool to respond to other diseases.

[79] *See* Drazen, *supra* note 14, at 2029.

B. Quarantine Decisions Must Be Individualized, with Quarantines Implemented Only Where They Are the Least Restrictive Means Available

Second, to pass constitutional muster, quarantine policies must be tailored to apply flexibly to individuals in different circumstances. For example, during the Ebola epidemic, CDC urged states to classify individuals into one of three tiers of risk, based on their level of exposure to Ebola patients.[80] That tiered approach is supported by scientific evidence, and aid workers and organizations—although recognizing that they may become subject to quarantine if they are exposed to disease—are likely to view such policies as legitimate and reasonable.

Quarantines must be limited to situations where quarantine is the least restrictive means available. Measures such as self-monitoring, active monitoring, and direct active monitoring may be medically sufficient to address epidemiological risks of certain diseases (as with Ebola),[81] and advanced medical testing and technology enable early detection of diseases.[82]

CDC's Ebola guidance reflected these principles. In August 2014, CDC recommended self-monitoring to meet the goal of applying "the least-restrictive measures necessary to protect communities and travelers."[83] Expert epidemiology

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[80] *See* Gostin, *supra* note 32.

[81] *See*, *e.g.*, Drazen, *supra* note 14, at 2029.

[82] *See*, *e.g.*, Marty, *supra* note 54.

[83] CDC Ebola Guidance, *supra* note 4.

organizations reached the same conclusion. For example, IDSA recommended self-monitoring for 21 days,[84] and APIC recommended twice-daily monitoring and reporting.[85]

CDC updated its guidance in light of increased Ebola concerns in October 2014, but even then, active monitoring and direct active monitoring "served as alternatives to more stringent measures."[86] CDC never recommended quarantine for any risk tier.[87] As APIC cogently observed, quarantines were "not aligned with scientific evidence."[88]

Moreover, the least restrictive means available may evolve during the course of an epidemic, and may vary among individuals. Constitutional requirements embody enough flexibility to reflect that reality. In general, possibly infected individuals have strong incentives to self-monitor and self-report, because early treatment of diseases such as Ebola can dramatically improve recovery and survival prospects. Only if possibly infected individuals refuse or are unable to monitor themselves for the onset of symptoms would a more drastic measure become the least restrictive means available. A joint statement made by several leading epi-

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[84] *See* IDSA Ebola Guidance, *supra* note 8.

[85] *See* APIC Ebola Guidance, *supra* note 8.

[86] CDC Ebola Guidance, *supra* note 4.

[87] *See id.*

[88] Park, *supra* note 8.

demiology organizations in October 2014 followed just this approach in recommending active monitoring, followed by mandatory quarantine, if necessary, "for those who do not adhere to such monitoring and reporting."[89]

C. There Must Be Appropriate Procedural Safeguards for Individuals Subject to Quarantines

Third, the Constitution requires that individuals subject to quarantine should be provided with basic procedural safeguards. The framework for procedural due process required in particular circumstances derives from *Mathews v. Eldridge*, 424 U.S. 319 (1976). *Mathews* holds that "identification of the specific dictates of due process generally requires consideration of three distinct factors: First, the private interest that will be affected by the official action; second, the risk of an erroneous deprivation of such interest through the procedures used, and the probable value, if any, of additional or substitute procedural safeguards; and finally, the Government's interest, including the function involved and the fiscal and administrative burdens that the additional or substitute procedural requirement would entail." *Id.* at 335.

Here, the private interest affected by quarantine (an individual's liberty, as well as the various costs described above (p. 14)) is substantial, and the risk of erroneous deprivation of that interest through blanket quarantine is high. This is es-

[89] *See* APIC Ebola Guidance, *supra* note 8.

pecially true with respect to Ebola, which poses no risk when an individual is asymptomatic. Accordingly, a reasonable balance of the *Mathews* factors would require, at a minimum: (1) adequate notice explaining the basis for the quarantine and rights to review and appeal; (2) a prompt hearing before a neutral decisionmaker with the assistance of counsel, by appointment if necessary; and (3) the right to judicial review of an adverse decision.

An authoritative articulation of the due process rights of individuals and medical and relief organizations will have myriad benefits. The public will know that, if individuals were to be quarantined without medical need, they can contest the decision before a neutral tribunal represented by a lawyer or advocate and can obtain judicial review. That knowledge will encourage travel to assist areas affected by disease. By ensuring that quarantines will be lifted if they are found to be medically unnecessary upon review, such policies also will reduce the costs imposed on individual aid workers, as well as on health organizations and taxpayers otherwise burdened by unnecessary quarantines.

Affording rights to medical and judicial review under *Mathews* is sufficiently flexible to avoid danger to public health. For example, the 2017 Rule provides for "mandatory review of the Federal order *after the first 72 hours*," and the right to request a medical review thereafter.[90] While due process requirements afford

[90] 2017 Rule, *supra* note 2, at 6900 (emphasis added).

some flexibility as to whether a hearing must occur prior to a deprivation of liberty, it is equally clear that a meaningful opportunity for review is essential. *See Zinermon v. Burch*, 494 U.S. 113, 127-128, 132-39 (1990) ("the Court usually has held that the Constitution requires some kind of a hearing *before* the State deprives a person of liberty," but "postdeprivation hearing" may be "constitutionally adequate" where the procedures "are sufficiently reliable to minimize the risk of erroneous determination"). This Court has held, for example, that *Mathews* and *Zinermon* require a hearing prior to a psychiatric commitment, and that "postdeprivation remedies [are] constitutionally insufficient" because pre-deprivation process is not "'unduly burdensome'" under the circumstances. *Bailey v. Pataki*, 708 F.3d 391, 402 (2d Cir. 2013) (quoting *Zinermon*, 494 U.S. at 136-37).

CONCLUSION

Quarantine and isolation can effectively stop the spread of infectious diseases. They are not the only tools available, however, and in many circumstances are far more restrictive and harmful than necessary given the state of modern scientific knowledge and technology. Because future epidemics are inevitable, *amici* respectfully ask the Court to articulate authoritative legal parameters that will provide predictability and stability for judging quarantine laws and practices. Legal standards should reflect best public health practices, including implementing quarantines only when scientifically justified for a particular disease, only when appro-

priate for the particular individual, and only in accordance with reasonable due process protections. For these reasons among others, dismissal of this action should be reversed and the case remanded for further proceedings.

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