



FEAR, POLITICS, AND EBOLA

How Quarantines Hurt the Fight Against Ebola and Violate the Constitution



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Fear, Politics, and Ebola

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i. Foreword

A multitude of expert panels have been convened over the past year to draw lessons learned from the manifold global failures to respond to the Ebola epidemic in West Africa. Yet comparatively little attention has been paid to the widespread failure in the United States—which did not experience an epidemic—to appropriately manage public anxiety and support people returning from the affected region.

This report is a critical first step of an overdue national reckoning.

The Ebola epidemic firmly entered the American consciousness in October 2014 with the tragic death in Dallas of Liberian Thomas Eric Duncan. His infection, and the subsequent illness of two of his nurses at Texas Health Presbyterian Hospital, sparked disproportionate, nation-wide hysteria and outsized fear of an outbreak in the United States.

The report correctly places responsibility for the ensuing panic squarely at the feet of our nation's political leaders. Through sheer or willful ignorance, or simple political expediency, many governors enacted quarantine measures and other restrictive policies that not only misled the public, but threatened to actually undermine—rather than protect—public health both at home and in Ebola-affected countries.

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national reckoning.**

Our leaders were enabled by a fear-mongering mass media that also ignored established medical science, further stoking panic and compounding an already immense public disservice.

My own colleagues experienced the fallout first hand.

After working with Doctors Without Borders/Médecins Sans Frontières (MSF) in Guinea, Dr. Craig Spencer returned home to New York in October 2014. When he developed the first signs of Ebola infection, he immediately self-isolated and informed local health

authorities, which took swift action to safely hospitalize him. He followed strict protocols for returning aid workers that were based on firm medical evidence—namely that asymptomatic individuals are not contagious. Before he fell ill—and after—Craig followed the guidelines to the letter. Yet he was vilified as a reckless liar and a threat to public health.

Kaci Hickox, a Doctors Without Borders nurse, returned to the United States the day after Craig was hospitalized. Although she displayed no symptoms, she was quarantined under a hastily arranged New Jersey state policy, notably enacted just days before mid-term elections. She posed no public health threat whatsoever. Yet fear, and perhaps politics, trumped science. Like Craig, she too was cruelly stigmatized.

Quarantine policies had a trickledown effect. After returning from Guinea I was not permitted to return to work for 21 days, despite not coming into direct contact with Ebola patients. For volunteers like me who take time off to work overseas, the restrictions effectively cut my field time in half. Quarantine measures and the additional restrictions and stigma they inspired were fundamentally paradoxical; they served as a

disincentive for aid workers, thus impeding ending the epidemic at its source, the only way to truly prevent it from reaching our own shores.

Many field staff chose to remain in Europe until their 21-day incubation period had passed, or to stay isolated from family members, despite being symptom-free. At a time when traumatized aid workers needed emotional support, aid agencies faced significant hurdles caring for returned staff.

As this report makes abundantly clear, the Ebola virus is difficult to catch. In order for it to spread, a person must come into direct contact with the bodily fluids of a highly infectious individual or body. The authors lay out in plain language the scientific and medical facts. These facts were dutifully communicated by the nation's leading medical figures during the peak of national hysteria in October and November 2014. But common scientific sense went largely unheeded.

Science, not misinformation and fear, must drive public health policy, including—even especially—when it is not politically expedient. This report serves as an indispensable recounting of a collective failure, and as a stark exercise in lessons learned. It is essential reading for the citizens of this country, and its elected leaders.

— **Deane Marchbein, MD**

President, Doctors Without Borders/Médecins Sans Frontières USA

ii. Glossary

Self-monitoring

A monitoring regime under which those potentially exposed to an infectious disease assume responsibility for assessing and reporting their own health status. For Ebola, this would involve taking one's temperature twice daily and reporting a fever or other possible symptoms to the relevant authorities.

Active monitoring

A regime under which public health officials regularly check in with potentially exposed individuals. For Ebola, individuals are asked to take their temperature twice daily, monitor themselves for symptoms, and report their health status regularly to a public health authority. No explicit movement restrictions are imposed.

Direct active monitoring

Direct 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. The monitored individual must discuss any plans for travel, work, and use of public spaces.

Controlled movement

Restrictions on the movement of potentially exposed individuals, such as screenings, travel limitations and restrictions, and social-distancing measures.

Quarantine

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.

Isolation

The separation of an individual who is showing symptoms of an infectious disease. Isolation is a precaution typically taken in hospitals to prevent disease transmission.

I. Introduction

The 2014–2015 Ebola epidemic was the largest and most serious such outbreak in history, resulting in more than 28,000 infections and over 11,000 deaths through August 2015.¹ In three West African countries—Guinea, Liberia, and Sierra Leone—thousands died as public health systems floundered.

Weak local health care systems meant that an adequate response to Ebola could not be mounted without help from abroad. Health care workers from around the world traveled to West Africa to administer care and coordinate public health efforts to curb the infection rate. American health care workers played an important role in the response, and U.S.-based relief organizations sent considerable staff and resources to West Africa.

In the face of any international health crisis, the unhindered participation of the global health community is critical to reducing harm and saving lives. The response of health departments within the United States, however, actually hurt the effort to combat Ebola. Public policy in the United States, motivated by misinformation and unwarranted fear, resulted in scientifically unjustified quarantines and other restrictions. These measures primarily affected returning health care workers, who deserved to be celebrated as heroes rather than treated as pariahs.

This punitive response discouraged individuals from going to West Africa, diverted the resources of relief organizations, and infringed on the constitutional rights of an unknown number of Americans. Returning health care workers faced logistical nightmares and personal, psychological, and social trauma. “The hardest part of the work I did in Liberia,” says Aubrey E, a nurse who volunteered with Partners In Health, “was when I returned and was stuck at home for 21 days.”

We do not know precisely how many people in the United States were quarantined. Such data is not publicly available, and despite repeated requests, state and federal officials did not provide us with this information. Remarkably, as far as we could determine, no governmental entity has even collected this data. We do know, however, that no one needed to be quarantined. Quarantine, by definition, is the separation from others of someone who *is not experiencing symptoms or showing signs of infection*. Nearly 40 years of encounters with Ebola—and an overwhelming consensus in the medical and public-health communities—have shown that

Nearly 40 years of encounters with Ebola have shown that infected patients do not transmit the disease before symptoms appear.

¹ World Health Organization (WHO), *Ebola Situation Reports* (Sept. 2, 2015), <http://apps.who.int/ebola/ebola-situation-reports>.

infected patients do not transmit the disease before symptoms appear, and therefore quarantine was not and is not needed to prevent the spread of Ebola in the United States for anyone who is willing and able to self-monitor for symptoms. In fact, no one quarantined in the United States developed Ebola, and no one transmitted Ebola outside of a hospital setting.

Because the Ebola quarantines of 2014–2015 were not medically necessary, they violated the U.S. Constitution. A quarantine is a form of imprisonment and therefore a very significant incursion on an individual's freedom. Under the Constitution, quarantines are permitted only when the state has a compelling interest in imposing one and when such interventions are the least restrictive measures available to prevent the spread of disease. Because the Ebola quarantines were not medically necessary, they did not satisfy those criteria. Furthermore, quarantined individuals are legally entitled to due process of law, including a timely hearing before a judge or other neutral arbiter. Few of the states that imposed quarantines did this. States are also required to quarantine under humane conditions, and not all states did so.

Ebola is a serious and potentially fatal infectious disease. However, experts say the danger posed by Ebola to the U.S. population was vastly overstated. In previous decades, many Americans traveled abroad to respond to previous outbreaks of Ebola and other highly infectious diseases and returned home without facing quarantine or other restrictions on their movement, and without infecting others in the United States. The Ebola quarantines and other movement restrictions put in place throughout the nation beginning in late 2014 were motivated by fear and by politics, not by medical science.

Media outlets gain readers and viewers when they report on the next “apocalypse,” while governors and other politicians may believe that an overly aggressive response to a foreign threat like Ebola makes them look strong. For example, Governor Dannel Malloy of Connecticut, running a tight race for re-election, declared a public health emergency before any case of Ebola transmission had been known to occur inside the United

States. With the media and politicians stoking fears, quarantine measures were widely supported by the American public. There was little room in the political sphere or popular media for rational discussion of Ebola.

Aside from a handful of widely publicized cases, the human impacts of the quarantines did not receive wide attention. Although the exact number of people quarantined or otherwise restricted in their movements in the United States is unclear, a review of these incidents

from media reports shows that hundreds of health care workers returning from harrowing work in West Africa were essentially confined to their homes and shunned by their communities. Children entering or returning to the United States from affected countries were separated from their parents and prevented from going to school. International medical relief organizations found it more difficult to recruit desperately needed volunteers, and found their management staff spending valuable time dealing with quarantines in the United States rather than helping manage the crisis in West Africa. Stigma against the West African community grew. Tax dollars were spent to administer and enforce quarantine orders rather than to tend to

There was little room in the political sphere or popular media for rational discussion of Ebola.

pressing public health concerns.

It is time to reflect on the missteps authorities took in responding to Ebola in the United States, and to correct them where necessary. It is critical that we do so. While a few states moderated their quarantine policies after public hysteria died down, many continue to mandate quarantine in inappropriate circumstances, and those policies will remain in place in any future outbreaks.² In our age of global travel and trade, new epidemics of Ebola—and diseases that from a public health standpoint are far more dangerous—will inevitably emerge and cross international borders. We need to learn from the mishandling of the U.S. Ebola epidemic that wasn't, and respond to future health scares with smart policies based on decades of scientific evidence, not reactive policies based on misinformation and political grandstanding. Punitive and scientifically baseless approaches violate the law and make us less safe.

² In August 2015, for example, six Birmingham, Alabama, firefighters were quarantined after coming into contact with a sick man who had just returned from West Africa, though the authorities did not even know whether that man was positive for Ebola (he was later found not to be). Sneha Shankar, *Ebola Outbreak: Alabama Man Being Tested for Virus, 6 Firefighters, 2 Family Members Quarantined*, International Business Times, Aug. 5, 2015, <http://www.ibtimes.com/ebola-outbreak-alabama-man-being-tested-virus-6-firefighters-2-family-members-2039362>.

II. The Science and History of Ebola

The 2014 Ebola outbreak in West Africa

The West African Ebola outbreak of 2014 was recognized early in the year, though it had likely begun the previous December.³ On March 23, Guinea became the first country to report the outbreak to the World Health Organization (WHO),⁴ and the disease eventually spread and became epidemic in three African countries—Guinea, Liberia, and Sierra Leone—where thousands died and thousands more were infected.

After receiving word of the outbreak in March 2014, the international medical community began to mobilize. Non-governmental organizations (NGOs) and government agencies sent staff and volunteers to West Africa to respond to the crisis, among them many American citizens and permanent residents. Numerous organizations were involved, and during the height of the Ebola outbreak in fall 2014, hundreds of people were moving between the United States and West Africa as part of the public health response.⁵

Despite the involvement of numerous international relief organizations on the ground, the severity of the epidemic went unrecognized for months by the international community. Finally, on August 8, 2014, the WHO declared a Public Health Emergency of International Concern. “The possible consequences of further

international spread are particularly serious in view of the virulence of the virus, the intensive community and health facility transmission patterns, and the weak health systems in the currently affected and most at-risk countries,” wrote the WHO in declaring the emergency. “A coordinated international response is deemed essential to stop and reverse the

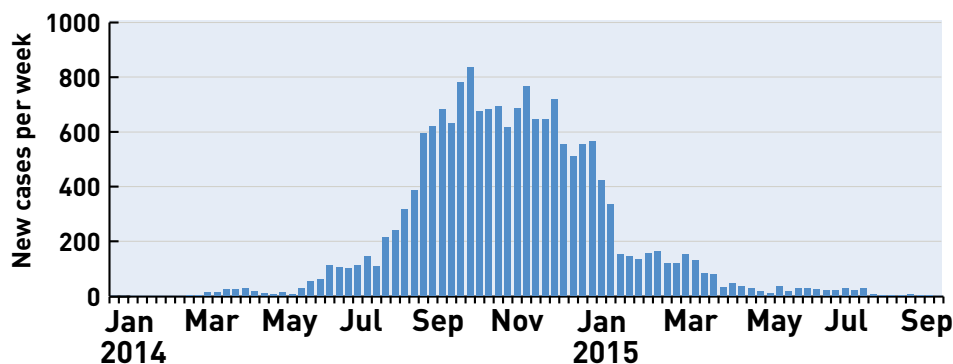


Figure 1: The number of Ebola cases in West Africa rose dramatically during the fall of 2014. Public fears rose concurrently in the United States.

³ Sylvain Baize et al., *Emergence of Zaire Ebola Virus Disease in Guinea*, *New Eng. J. Med.* 371, no. 15, Oct. 9, 2014.

⁴ World Health Org. (WHO), *Ebola Virus Disease in Guinea* (Mar. 23, 2014), http://www.who.int/csr/don/2014_03_23_ebola/en/.

⁵ Doctors Without Borders was among the first organizations to respond, and many others followed suit, including Partners In Health, Mercy Corps, International Medical Corps, International Rescue Committee, Samaritan’s Purse, and West African Medical Mission. Governments also sent health care workers and other resources to support the response, with the United States sending personnel from a number of federal agencies and departments including the Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), the Department of Health and Human Services (HHS), the Department of State, and the Department of Defense.

international spread of Ebola.”⁶

The number of cases surged between September and December 2014. In the most affected countries, the incidence of new cases reached several hundred per week. Epidemiologists warned that the disease could claim hundreds of thousands of lives if the world community did not provide substantial help. Through August 2015, when it appeared that the epidemic was winding down, over 28,000 people had been infected with Ebola and over 11,000 had died from the disease (Figure 1).⁷

How Ebola spreads

The death in October 2014 of Liberian Ebola victim Thomas Eric Duncan, and the drama that surrounded it, riveted the nation. Two weeks later there was widespread alarm in the United States when it was discovered that Dr. Craig Spencer, a physician with Médecins Sans Frontières (MSF⁸), had come down with symptoms of the disease and had been traveling around New York City in the days before his illness. But the risk of transmission to others from Dr. Spencer was practically non-existent.

Most cases of Ebola begin with the onset of fever and malaise, followed by vomiting and diarrhea.⁹ Ebola is known as a hemorrhagic fever, but contrary to popular belief, it does not commonly cause overt bleeding.¹⁰ Symptoms typically appear between 8 and 10 days after exposure, but the onset of illness has been reported as varying from a minimum of 2 days to a maximum of 21 (hence the recommended quarantine period of 21 days).¹¹ And Ebola is certainly a highly deadly disease, killing between 20 and 80 percent of those who develop symptoms (though the mortality rate for those who receive proper medical care is at the lower end of this range, and perhaps as low as 5 to 10 percent).

Ebola is not a very infectious disease.

But while Ebola is a very *deadly* disease, it is not a very *infectious* one. That is, if you get it, your chance of dying is high—but your chance of getting it from another infected person is extremely low, unless you are a caregiver of someone with Ebola in the late stages of the disease and lack access to the necessary protective equipment and the training to use it properly. Compared to other major infectious diseases such as influenza, measles, tuberculosis, pertussis (whooping cough), or SARS, it is not an easy disease to catch.¹²

Ebola Virus Disease first emerged in 1976, when two outbreaks were detected in Sudan and the Democratic Republic of the Congo. Since then there have been a total of 26 outbreaks of Ebola. After four decades

6 WHO, *Statement on the 1st meeting of the IHR Emergency Committee on the 2014 Ebola Outbreak in West Africa* (Aug. 8, 2014), <http://www.who.int/mediacentre/news/statements/2014/ebola-20140808/en/>.

7 WHO, *supra* note 1.

8 Known in English as Doctors Without Borders.

9 Mike Bray and Daniel Chertow, *Clinical Manifestations and Diagnosis of Ebola Virus Disease*, UptoDate (Mar. 2015), <http://www.uptodate.com/contents/clinical-manifestations-and-diagnosis-of-ebola-virus-disease>.

10 *Ibid.*

11 CDC, *Signs and Symptoms: Ebola (Ebola Virus Disease)* (Nov. 2014), <http://www.cdc.gov/vhf/ebola/symptoms/index.html>.

12 The Henry J. Kaiser Family Foundation, *Ebola Characteristics and Comparisons to Other Infectious Diseases*, <http://kff.org/infographic/ebola-characteristics-and-comparisons-to-other-infectious-diseases/> (last visited Aug. 27, 2015).

of encounters with Ebola, medical professionals and scientists have built an extensive scientific literature and a considerable base of knowledge about how the disease is transmitted and how to provide effective supportive care. Given the seriousness of Ebola, public health experts' practice is to rush to the site of any outbreak and trace those in close contact with every suspected or confirmed case ("contact tracing") to map the course of infections. And the evidence from four decades of such contact tracing provides a clear and uniform picture: person-to-person transmission of Ebola occurs only when the bodily fluids of an infected individual—saliva, blood, vomit, diarrhea, or semen—come into direct contact with broken skin or mucous membranes.¹³ Transmission requires direct, close contact with an Ebola patient in the later stages of the disease or after their death. There has never been a documented case of Ebola transmission from an asymptomatic individual.¹⁴

The infectiousness of these bodily fluids depends on the "viral load"—the concentration of infectious virus in the bodily fluids. With high viral load, individuals' bodily fluids are more infectious, and with lower viral loads, their bodily fluids are less so. Early in the symptomatic period, an infected individual has an extremely low viral load and is unlikely to spread the virus. However, the level of virus in the blood skyrockets as symptoms progress, and remains high even after the patient has died.^{15,16} A study of over 700 patients in Liberia found that none had contracted Ebola from a person who exhibited only a fever.¹⁷ Although there has been much concern in the United States about someone transmitting Ebola when

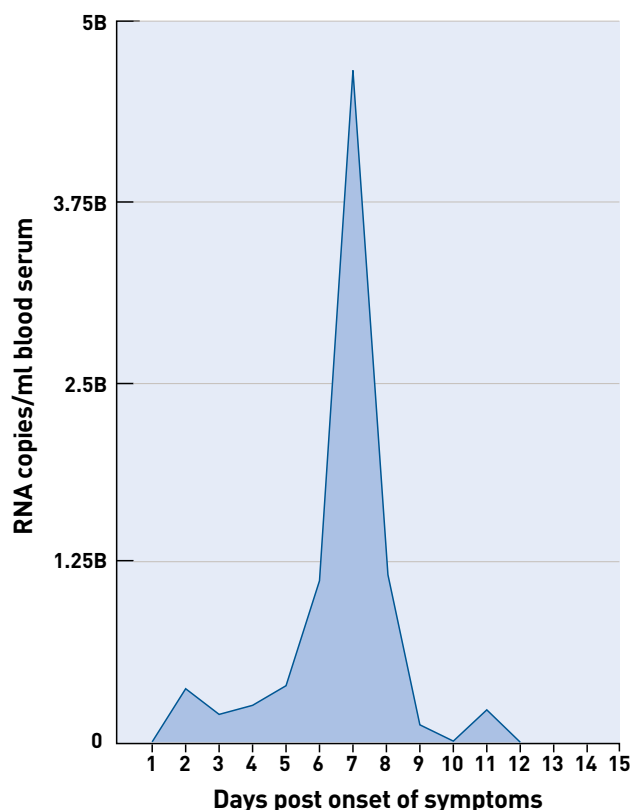


Figure 2: Ebola viral load explodes 4-5 days after onset of symptoms. No virus is generally detectable in the blood before that onset.

13 Linda Meyers, Thomas Frawley, Sarah Goss, & Christopher Kang, *Ebola Virus Outbreak 2014: Clinical Review for Emergency Physicians*, *Annals of Emergency Med.*, Oct. 23, 2014.

14 Lindsey R. Baden et al., *Ebola — An Ongoing Crisis*, *New Eng. J. Med.* 371, no. 15, 1458–59 (Oct. 9, 2014). In rare cases sexual transmission may occur from those who have recovered from Ebola Virus Disease, because the virus may persist in semen (see Suzanne E. Mate et al., *Molecular Evidence of Sexual Transmission of Ebola Virus*, *New Eng. J. Med.* (Oct. 14, 2015), <http://www.nejm.org/doi/full/10.1056/NEJMoa1509773?query=featuredEbola#t=article>). However, this is irrelevant for quarantine policy for people who have never experienced acute Ebola virus disease, and can be addressed via safer sex and hygiene practices (see World Health Organization, *Persistent virus in people recovering from Ebola virus disease*, Oct. 14, 2015, <http://www.who.int/csr/disease/ebola/virus-persistence/en/>).

15 Towner JS, Rollin PE, Bausch DG, et al. Rapid diagnosis of Ebola hemorrhagic fever by reverse transcription-PCR in an outbreak setting and assessment of patient viral load as a predictor of outcome. *Journal of virology*. 2004;78(8):4330–4341.

16 Dowell SF, Mukunu R, Ksiazek TG, Khan AS, Rollin PE, Peters CJ. Transmission of Ebola hemorrhagic fever: a study of risk factors in family members, Kikwit, Democratic Republic of the Congo, 1995. *Commission de Lutte contre les Epidemies a Kikwit. The Journal of infectious diseases*. 1999;179 Suppl 1:S87–91.

17 Daniel S. Chertow et al., *Ebola Virus Disease in West Africa—Clinical Manifestations and Management*, *New Eng. J. Med.* 22, 2054–57 (2014).

they first experience symptoms, people are very unlikely to transmit the disease at that stage. “People who are not very sick are not vomiting and having diarrhea and therefore don’t have a mechanism to shed virus,” said Dr. Daniel Bausch of Tulane University, a virologist and expert on hemorrhagic fevers who has spent much time in Africa and worked for the Centers for Disease Control and Prevention (CDC), who also contributed to the training of clinicians headed to West Africa.¹⁸

Much of the Ebola transmission in West Africa during this outbreak has been linked to burial processes, funeral rites, and the provision of care to individuals in homes and in hospitals and other treatment centers when their viral loads are extremely high.¹⁹ Care providers are at particular risk because they are likely to have direct contact with infected fluids, and because personal protective equipment is tricky to remove and can fail—or is not used at all because the disease wasn’t expected.

Scientists do not speak in absolute terms—they rarely say “never”—and this has made it difficult for the general public to understand how Ebola is transmitted and to gauge the risk to themselves and their families. Scientists, however, have attempted to address irrational concerns about the contagiousness of the virus. Vincent Racaniello, Professor of Microbiology & Immunology in the College of Physicians and Surgeons of Columbia University, surveyed 23 existing studies and case reports on Ebola disease, and found that transmission never resulted from contact with an asymptomatic person who subsequently developed Ebola. “All transmissions that could be assessed involved an obviously sick individual, and never from anyone who was healthy,” he observed.²⁰ In an interview, he concluded that the risk of contracting Ebola from an asymptomatic person is effectively zero, and that far greater risks are assumed by each of us in our everyday lives.

The preeminent American medical journal, the *New England Journal of Medicine*, explained in an editorial at the height of alarm over Ebola in the United States,

We have very strong reason to believe that transmission occurs when the viral load in bodily fluids is high, on the order of millions of virions per microliter. This recognition has led to the dictum that an asymptomatic person is not contagious; field experience in West Africa has shown that conclusion to be valid.... Furthermore, 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.²¹

Both the White House and the CDC, recognizing the scientific consensus, have acknowledged that asymptomatic individuals are not contagious.²²

Other observations strongly support these conclusions. Available data show that no passenger or crewmember

18 See NPR, *Dr. Daniel Bausch Knows The Ebola Virus All Too Well*, Sept. 22, 2014, <http://www.npr.org/sections/goatsandsoda/2014/09/22/349882298/dr-daniel-bausch-knows-the-ebola-virus-all-too-well>.

19 Bray, see *supra* note 9; Daniel G. Bausch et al., *Assessment of the Risk of Ebola Virus Transmission from Bodily Fluids and Fomites*, *J. of Infectious Diseases* 196.Supp. 2, S142–S147 (2007).

20 Virology Blog, *Nobel Laureates and Ebola Virus Quarantine* (Nov. 4, 2014), <http://www.virology.ws/2014/11/04/nobel-laureates-and-ebola-virus-quarantine/>.

21 Jeffrey M. Drazen, et al., *Ebola and Quarantine*, *New Eng. J. Med.* 371 at 2029–2030, Nov. 20, 2014.

22 The White House, *President Obama Provides an Update on the US-led Response to Ebola* (Oct. 25, 2014), <https://www.whitehouse.gov/ebola-response>; CDC, *Ebola (Ebola Virus Disease) Fact Sheet* (June 5, 2015), <http://www.cdc.gov/vhf/ebola/pdf/ebola-factsheet.pdf>.

on a flight has ever contracted Ebola, even while transporting a person with Ebola.²³ The case of Patrick Sawyer—who traveled on several international flights with active diarrhea and vomiting and yet infected no one during air travel—highlights the difficulty of transmission even where bodily fluids from an infected individual are present.²⁴ The case of Thomas Eric Duncan in the United States teaches us the same lesson. No one in the emergency room Duncan visited early in the course of his illness became infected, nor did any of his family members—and they were living with him in a small apartment for days after he fell ill.²⁵ Craig Spencer’s fiancée did not contract Ebola despite living with Spencer until he was hospitalized.²⁶

Even when fulminant disease is present, those using personal protective equipment (PPE) properly within a well-equipped modern hospital have not contracted the disease. Nina Pham, the nurse who cared for Thomas Eric Duncan at Texas Presbyterian Hospital, contracted Ebola because she was not wearing proper PPE during Duncan’s second visit to the hospital and because the decontamination protocols in place were inadequate.²⁷ The breach in PPE was not emphasized in the early reporting surrounding Nina Pham, which gave the misimpression that transmission had occurred with proper equipment and protocols (such as proper decontamination) in place. This was an error in public communication of risk and of the nature of the cases in Texas, which undermined public confidence in public health officials and raised fears of a generalized epidemic in the United States.

With tens of thousands of Ebola cases in and near cities in West Africa with international airports, there was reasonable concern about the disease spreading to other countries. In fact, isolated cases in countries like the United States should have been expected. Such cases did not, however, create a risk of a generalized epidemic in this country. If Ebola was a blazing fire spreading across West Africa, then it was to be expected that an occasional “ember” would land in the United States. But Ebola can become an epidemic only in places where those embers can spark a larger fire—places where patients with symptoms cannot be quickly isolated and treated, and where basic supplies (such as bleach, rubber gloves, and burial bags) are in catastrophically short supply. When the outbreak hit, Liberia had only recently emerged from civil war, and had only approximately one doctor for every 100,000 residents (the United States has one doctor for every 350 residents).²⁸ Liberia, Sierra Leone and Guinea had weak

We don’t ask if hepatitis B will mutate to become airborne, so why do we ask it for Ebola?

— Dr. Daniel Bausch, Tulane University

23 Regan et al., Public Health Response to Commercial Airline Travel of a Person with Ebola Virus Infection — United States, 2014, *Morbidity and Mortality Weekly Report (MMWR)* 64, no. 03, 63–66 (Jan. 30, 2015).

24 James Nye, Ebola Victim Who Sparked Fears of a Worldwide Outbreak Was American, *Mail Online* (July 29, 2014).

25 *Ibid.*

26 Soon after Spencer was diagnosed, his fiancée and two of his friends were served quarantine notices. The New York Civil Liberties Union represented all three in getting their quarantines ended early. It also assisted Spencer in avoiding unnecessary quarantine when he returned from a subsequent trip to West Africa.

27 National Nurses United, *Statement by RN’s at Texas Health Presbyterian Hospital as provided to National Nurses United* (Oct. 15, 2014), <http://www.nationalnursesunited.org/blog/entry/statement-by-registered-nurses-at-texas-health-presbyterian-hospital-in-dal/>.

28 Data is from 2010. Akhenaten Benjamin, Siankam Tankwanchi, Çağlar Özden, & Sten H. Vermund, *Physician Emigration from Sub-Saharan Africa to the United States: Analysis of the 2011 AMA Physician Masterfile*, *PLOS Medicine* (Sept 17, 2013), <http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1001513>.

health infrastructures, almost non-existent public health capacity to monitor and diagnose diseases, and little spending devoted to health. Their few already overburdened hospitals were quickly overwhelmed, and it took months for the international community to begin to fill the gap. The American public health system is well enough staffed, trained, and equipped to prevent even a small-scale Ebola outbreak, and the risk of a major outbreak of Ebola in the United States is negligible.

Some scientists inadvertently fueled the public's misunderstanding of the risk of Ebola by musing in the press about the possibility of the airborne transmission of the virus. Ebola cannot travel efficiently through the air, and though it can be aerosolized briefly in certain rare circumstances (such as intubations), and can spread through the splashing of large droplets (like any fluid-borne disease), it is not airborne.²⁹ The likelihood of a human virus like Ebola mutating so as to change its mode of transmission is next to zero.³⁰ Such a drastic change in mode of transmission has never been seen in a human virus before. While it is a theoretical scientific possibility, it is extraordinarily unlikely and should not drive public policy with respect to Ebola (any more than it should with respect to other non-airborne diseases such as HIV or hepatitis B). While open and free inquiry is a key part of scientific discourse, scaremongering in the pages of the New York Times about the remote possibility of airborne Ebola transmission, in the midst of public panic about an outbreak, was gratuitous and misleading, and contradicted a large body of scientific knowledge.³¹

An overwhelming scientific consensus that Ebola quarantines don't make sense

There is broad consensus in the scientific community that, because the risk of transmission from asymptomatic individuals infected with Ebola is so low, quarantines of asymptomatic individuals with potential Ebola exposure are unnecessary.³²

Quarantines could be effective tools for preventing the transmission of a disease that fits—at a minimum—two biological conditions: It is often infectious before symptoms appear, and it is deadly or has other serious medical consequences.

While Ebola is highly deadly, it is not transmitted before symptoms arise and therefore does not meet the minimum criteria required to justify quarantine.

Even when a disease may fulfill these criteria, quarantines have been rarely used in recent history because of:

- The severity of these measures.

29 Seth Judson et al., *Understanding Ebola Virus Transmission*, 7 *Viruses*, 511-521 (2015). Ed Yong, *Ebola From Pigs to Monkeys*, *The Scientist* (Nov. 15, 2012), <http://www.the-scientist.com/?articles.view/articleNo/33277/title/Ebola-from-Pigs-to-Monkeys/>.

30 Vincent Racaniello, *What We Are Not Afraid to Say About Ebola Virus*, *Virology Blog* (Sep. 18, 2014), <http://www.virology.ws/2014/09/18/what-we-are-not-afraid-to-say-about-ebola-virus/>. Taj Azarian et al., *Impact of Spatial Dispersion, Evolution, and Selection on Ebola Zaire Virus Epidemic Waves*, 5 *Sci. Rep.* (2015).

31 Michael Osterholm, *What We're Afraid to Say About Ebola*, *N.Y. Times* (Sep. 11, 2014), <http://www.nytimes.com/2014/09/12/opinion/what-were-afraid-to-say-about-ebola.html>.

32 Jeffrey M. Drazen, M.D. et al., *Ebola and Quarantine*, 371 *New Eng. J. Med.* 2029 (Nov. 20, 2014), <http://www.nejm.org/doi/pdf/10.1056/NEJMe1413139>; Interview with VR, Interview with Daniel Bausch, Interview with LM; WHO, *Ebola Virus Disease Fact Sheet N. 103* (Aug. 2015), <http://www.who.int/mediacentre/factsheets/fs103/en/>; Osterholm et al., see *supra* note 30.

- The ethical and legal issues involved.
- The feasibility of successful implementation.
- Questions about their effectiveness.
- The adverse complications of their use on public and individual health.
- The availability of other less restrictive treatment or prevention approaches.³³

In short, quarantine is an intervention of last resort, and requires an extensive analysis of disease-specific criteria as well as the broader considerations outlined above. Most infectious diseases fail this test, and quarantine “should not be considered a primary public health strategy in most imaginable circumstances.”³⁴ In the United States, quarantine and other harsh measures have been deployed in the past in response to outbreaks of plague and smallpox, and “have consistently accelerated rather than slowed the spread of disease, while fomenting public distrust and, in some cases, riots.”³⁵ The most recent use of large-scale quarantine for SARS in parts of Asia and in Canada also sparked controversy about the effectiveness of these measures.³⁶

There may be extraordinary and individualized cases where a deadly disease is not infectious in the asymptomatic phase and yet quarantines would make sense, if, for example, the possibly infected individuals refused to or were unable to monitor themselves for the onset of symptoms, and less-restrictive alternatives were for some reason unworkable. Health care workers returning from the fight against Ebola in West Africa do not, however, fit into that narrow category. They have monitored themselves for symptoms, and as with Dr. Craig Spencer from MSF, contacted health authorities and agreed to be isolated when they saw that they had elevated temperatures suggesting onset of disease. They also have a major incentive to self-report at the earliest signs of disease, because early treatment can dramatically improve the chances of survival, as health care workers would well know.

Movement restrictions short of full quarantine may be justified in some circumstances—for example, it might be appropriate to ban someone who had documented exposure to the disease from boarding a cruise ship that lacks the facilities to deal with an Ebola patient, in case that person does become ill. Overall, these kinds of exceptional cases will be rare, and not a basis for large-scale quarantine or movement-restriction of health care workers and others who may have come in contact with someone with the disease.

Many different voices within the scientific community have spoken out against the Ebola quarantines. Dr. Anthony Fauci, the Director of the National Institute of Allergies and Infectious Diseases at the National Institutes of Health (NIH), is a clinician who has treated Ebola patients and been a leader in the country’s response to every major infectious threat in the United States for over 30 years. Dr. Fauci has unequivocally

33 A notable exception was the 2003 SARS epidemic. J. Barbera, et al., *Large-Scale Quarantine Following Biological Terrorism in the United States: Scientific Examination, Logistic and Legal Limits, and Possible Consequences* 2711–2717, *JAMA*, 286(21).

34 *Ibid.*

35 George J. Annas, Wendy K. Mariner and Wendy E. Parmet, *Pandemic Preparedness: The Need for a Public Health—Not a Law Enforcement/ National Security—Approach*, ACLU (Jan. 2008), https://www.aclu.org/sites/default/files/field_document/asset_upload_file399_33642.pdf.

36 D. Barbisch, K. L. Koenig, & F. Y. Shih, *Is There a Case for Quarantine?: Perspectives From SARS to Ebola*. Disaster Med. and Pub. Health Preparedness 1–7, Mar. 23, 2015.

stated that quarantines are unjustified and that monitoring of those returning from disease-affected areas is sufficient to stop any Ebola outbreaks on our shores.³⁷

Furthermore:

- The Infectious Disease Society of America, the Society for Healthcare Epidemiology of America, and the Association for Professionals in Infection Control and Epidemiology all unequivocally opposed the quarantine of returning health care workers in an unprecedented joint statement in October 2014.³⁸
- The President of the American Medical Association has criticized the quarantines as well: “It is critical that we respect and support U.S. health professionals who are volunteering to help bring this epidemic under control in West Africa.”³⁹
- The AMA’s Code of Medical Ethics emphasizes that decisions related to quarantine or isolation must be based on scientifically sound information.⁴⁰

Ebola has now reached the United States twice and may very well do so again, but this is not the first deadly infectious disease to arrive here. In fact, several such cases have occurred in the past decade without inciting national panic. In 2008, a woman in Colorado was diagnosed with Marburg virus, a hemorrhagic fever virus related to Ebola, after returning from a trip to Uganda.⁴¹ In March 2014, just as the 2013–2015 Ebola outbreak was beginning to draw international attention, a man was hospitalized in Minnesota with what turned out to be a case of Lassa Hemorrhagic Fever, a disease with many similarities to Ebola. Both patients received proper treatment under safe conditions and survived their infections. Neither case drew much media attention, let alone calls for quarantines and border closures.

Indeed, in 2014 a much less publicized Ebola outbreak occurred in the Democratic Republic of the Congo.⁴² Like every previous Ebola outbreak, no travel or other restrictions were placed on health care workers or others traveling from Congo to the United States. Individuals were trusted to self-monitor and take appropriate precautions. And in neither the 2014 Congo outbreak nor any of the prior outbreaks was anyone in the United States infected with Ebola by a health care worker.

Simply put, the evidence does not support quarantines and movement restrictions for asymptomatic people who may have been exposed to the Ebola virus. What it does support is close monitoring of such people, and

37 Benjamin Bell, *Infectious Disease Specialist Dr. Anthony Fauci Rejects Mandatory Quarantine*, ABC News (Oct. 26, 2014), <http://abcnews.go.com/Health/infectious-disease-specialist-dr-anthony-fauci-rejects-mandatory/story?id=26465651>; NBC News, *Fauci: Returning Ebola Health Workers Shouldn’t Face ‘Draconian’ Rules* (Oct. 26, 2014), <http://www.nbcnews.com/storyline/ebola-virus-outbreak/fauci-returning-ebola-health-workers-shouldnt-face-draconian-rules-n234141>.

38 Assoc. for Prof’ls in Infection Control and Epidemiology, *Joint Statement: Leading Infectious Disease Medical Societies Oppose Quarantine for Asymptomatic Health Care Personnel Traveling from West Africa* (Oct. 31, 2014), <http://www.apic.org/For-Media/Announcements/Article?id=4d3c286c-1ef6-4aef-95f6-85f3f020af47>.

39 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/>.

40 *Id.*

41 CDC, *Imported Case of Marburg Hemorrhagic Fever: Colorado, 2008*, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5849a2.htm> (last visited Aug. 4, 2015).

42 CDC, *2014 Ebola Outbreak in Democratic Republic of the Congo*, <http://www.cdc.gov/vhf/ebola/outbreaks/drc/2014-august.html> (last visited Aug. 4, 2015).

rigorous training of health care workers who may come into contact with an Ebola patient. But Ebola quarantines provide no public health benefits, hurt people for no reason, and harmed the fight against Ebola in West Africa. After nearly four decades of rational American responses to Ebola epidemics, the quarantines set a dangerous precedent for dealing with future public health crises, which require sound scientific evidence to guide effective policy.

Ebola quarantines waste scarce public-health resources, and impose a multitude of costs.

Ebola quarantines also waste scarce public-health resources, and impose a multitude of costs on public-health authorities and individuals alike. Many of those costs are hidden. For individuals, they can include costs associated with transportation, housing, lost wages and business opportunities, legal and administrative fees, health care delivery, and child or elder care expenses for quarantined individuals unable to perform such duties. They also squander the valuable time of public-health and law-enforcement personnel. In some cases, states station shifts of police officers outside individuals' homes for 24 hours a day during the 21-day quarantine period. In many jurisdictions, public health officials are required to pay home visits to quarantined individuals at least once a day to take their temperature and to monitor for other Ebola symptoms. All of this is expensive. Many of the economic costs of mandatory quarantine are borne by strapped state and local health departments that are already swamped with other responsibilities.⁴³

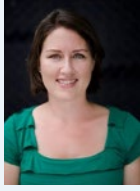
It's important to recognize that quarantines also took a psychological toll on many of those affected. Dr. Dorothy Morgos, a clinical psychologist who provides mental health services to returning MSF field staff, observed that combined with the stresses of Ebola missions, quarantine "increased the risk of chronic stress and compassion fatigue," and that the lack of proper mental health support for those in quarantine hurt "relationships with family and friends, increased the sense of isolation, heightened perception of community rejection and fear, [and] brought unwanted public attention." As a result, she wrote,

returning field staff were not able to properly process the emotional impact of the Ebola mission upon return, having to deal instead with the new challenges presented by the quarantine procedures. Field staff reported fearing returning home after an intense Ebola mission. They were isolated from the natural emotional support systems and communities, which usually act as a major mitigating/buffer factor following adverse critical exposure. Overall, the "home return process" following an Ebola mission had an unexpected long term negative impact as exhibited in reported symptoms such as delayed chronic emotional reactions, increased burn out symptoms and other related mental health issues.⁴⁴

Bad policies not only hurt hundreds of men, women, and children across the country, but they also cut into scarce resources available for protecting members of the broader public from diseases far more likely to affect them than Ebola virus disease.

43 Jessica Firger, *Ebola in the U.S.: Who Pays the Bills?*, CBSNews (Oct. 31, 2014), <http://www.cbsnews.com/news/ebola-in-the-us-who-pays-the-bills/>.

44 Email from MSF, Sept. 9, 2015.



“I was not in a position of power,” Dr. Jessica Bender says of the movement restrictions she faced when she returned from Liberia. Dr. Bender, a physician from Boston, worked in an Ebola Treatment Unit but didn’t end up treating any Ebola patients. There weren’t any new cases after she arrived, so instead, Dr. Bender treated patients with other conditions at a government hospital.

After six weeks in Liberia, “I just wanted to get home to my husband,” Dr. Bender says. Even though she didn’t treat Ebola patients and wore protective equipment while working in the Liberian hospital, health authorities determined Dr. Bender had some risk of Ebola exposure. “It was a bizarre experience to sign up to go to Liberia as part of the Ebola response and yet not actually take care of any Ebola patients,” she says. “Coming home to be treated the same as other clinicians who actually were involved in the care of Ebola patients was even more bizarre.”

Testimonial Dr. Jessica Bender

Being in the Some Risk category meant Dr. Bender had to keep herself isolated from the public. “I was told I had to stay away from public gatherings—concerts and movies—and from the hospital and any patient care. But I tried to go out once a day to go for a walk in the snow.”

“I went a little stir-crazy,” she says. “I live in a tiny apartment, and it was also the worst winter in Boston. My husband went out of town so I was alone for a week. It wasn’t easy.”

Despite the movement restrictions imposed on her, health officials did not serve Dr. Bender notice or inform her of her legal rights. “No one told me that I had the legal right to challenge these restrictions,” she says. “But I had seen what happened with Kaci Hickox. I didn’t want to be the one to cause that sort of panic or hysteria.”

The hospital where Dr. Bender normally works also felt the strain from the quarantine. “I tried to catch up on my administrative and teaching work from home, but obviously it wasn’t what I wanted to be doing,” she says. “My colleagues at work had to pick up a lot of slack.”

The quarantine policies are still in place throughout the United States. For health professionals like Dr. Bender who work both in the United States and West Africa, the quarantines are an unnecessary added stress.

“This quarantine is still on my mind and is going to affect me in my future work,” says Dr. Bender. “I plan on going back to Liberia. Before the Ebola outbreak I spent some time in a Liberian teaching hospital and saw a great need for medical education,” says Dr. Bender. In the wake of the Ebola outbreak, there is an even greater need for experienced health professionals to work in Liberia. “Two of the physicians I worked with [in Liberia] died during the outbreak.”

Dr. Bender worries that the quarantines will keep her from her family and friends. “I have a friend getting married in the fall and I’m supposed to go to that wedding,” says Dr. Bender. “But if I’m working in a hospital in Liberia and then fly back to the United States, will I be allowed to go to the wedding?” She also worries about whether her loved ones will be able to visit her in Liberia. “Being there for 6 months, I want my husband and family to come visit me. But will they face quarantines when they return home?”

“I felt very healthy when I returned,” says Dr. Bender. “I don’t see how I posed any risk to the general public. I don’t think the quarantines placed on people in my situation, who never even saw any Ebola patients, protected the public any way. I think it just served as a barrier for other clinicians to go to West Africa and work to prevent Ebola so it doesn’t spread and effect America.”

III. The Federal Response to Ebola

In the United States, states and municipalities have the primary responsibility for leading and implementing public health programs within their borders. Federal agencies like the CDC handle interstate or international public health issues, but also provide national leadership and guidance on matters of state jurisdiction.

While the federal response to the Ebola epidemic in West Africa was better than those of many U.S. states, the early reaction to the crisis involved several missteps that fed a growing unease across the country. When Thomas Duncan was diagnosed, CDC Director Dr. Thomas Frieden stated that the United States would “stop [Ebola] in its tracks” and that all hospitals across the United States were well prepared to contain Ebola cases.⁴⁵ Shortly thereafter, the two Dallas nurses were diagnosed with Ebola, showing that hospitals were not in fact sufficiently prepared, and allowing alarmists to argue that Frieden was also wrong that we would be able to prevent widespread transmission of Ebola in the United States.

When the first case of Ebola reached the United States in September 2014, U.S. authorities failed to effectively manage the affected patient, the public health response, and public understanding of the disease. The early mismanagement of the case of Thomas Eric Duncan, a Liberian man who traveled to Dallas unknowingly carrying Ebola, as well as the subsequent infection of the two nurses that had taken care of him, set off a national panic and a chain of events that led to unnecessary quarantines. This led to the loss of some credibility for the CDC, and an opening for politicians and others to attempt to reshape federal policy on Ebola in ways that catered to fear and ignored sound evidence.

Duncan was treated at Texas Presbyterian Hospital in Dallas with guidance from the CDC, which provides technical assistance to state and local health departments and public and private health care facilities regarding the control of infectious diseases such as Ebola. While the CDC had assured the public that U.S. hospitals were well prepared to contain Ebola, Texas Presbyterian Hospital, at least, was not. It lacked clear protocols and management, and staff did not know how to safely and

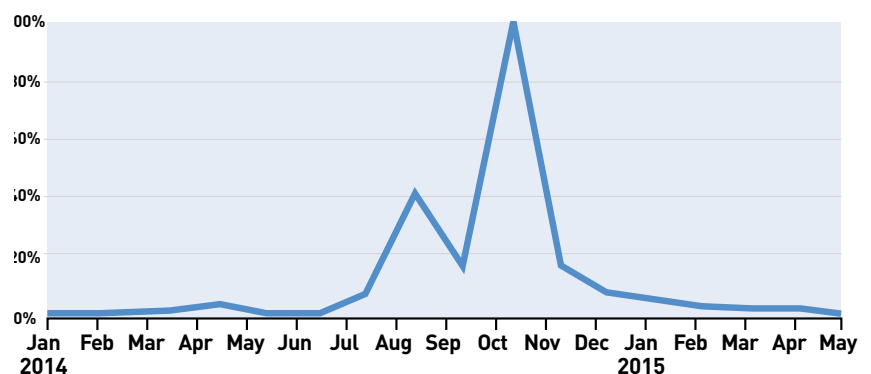


Figure 3: Interest in Ebola as measured by Google Trends analysis.

⁴⁵ Michael Muskal, *Four Ebola Quotes That May Come Back to Haunt CDC's Thomas Frieden*, L.A. Times, Oct. 16, 2014, <http://www.latimes.com/nation/nationnow/la-na-four-ebola-quotes-haunt-frieden-20141016-story.html>.

properly care for an Ebola patient. Staff nurses Nina Pham and Amber Vinson cared for Duncan in the later stages of his illness when his viral load must have been extremely high—but hospital management allegedly did not facilitate staff training for the proper use of personal protective equipment.⁴⁶ Nurses who worked at the hospital reported “gloves with no wrist tape, flimsy gowns that did not cover their necks, and no surgical booties.”⁴⁷ Although the CDC did send infectious disease specialists to the hospital after Duncan was diagnosed, as CDC Director Frieden himself later acknowledged, they should have sent “a more robust hospital infection control team and been more hands-on.”⁴⁸ The CDC should have transferred Duncan to a specialized Ebola treatment center, where appropriately trained and equipped staff would have been able to provide for his care. “I wish we put teams... on the ground when the first patient was diagnosed,” Frieden said.⁴⁹

Further problems followed the infection of the two nurses at Texas Presbyterian Hospital. One of the nurses was allowed to board two commercial flights despite having reported a low-grade fever after her recent direct contact with Duncan. After she was diagnosed with Ebola, the CDC was left scrambling to track down the 130 passengers who had flown with her. A program was put in place to monitor each passenger, but fortunately, due to the vanishingly small chance of transmission from a person with only early symptoms, no further infections occurred.⁵⁰

Overall, Duncan’s case and the infection of the two nurses eroded confidence in the agency, and also fueled Ebola hysteria in the American public.

CDC’s initial stumbles allow political interference with the shaping of federal policy

In the end, the CDC developed a new plan to send a rapid response team “within hours” to any health care facility with a confirmed Ebola case.⁵¹ Unfortunately, a number of politicians latched on to these missteps, engaging in hysterical grandstanding based on a variety of agendas other than public health.⁵² Members of Congress called for travel bans against all travelers returning from West Africa,⁵³ and debate emerged

46 National Nurses United, *Statement by RN’s at Texas Health Presbyterian Hospital as provided to National Nurses United* (Oct. 15, 2014), <http://www.nationalnursesunited.org/blog/entry/statement-by-registered-nurses-at-texas-health-presbyterian-hospital-in-dal/>.

47 Geoffrey Mohan et al., *Nurses At Dallas Hospital Describe Poor Safety Measures With Ebola Victim*, L.A. Times (October 14, 2014), <http://www.latimes.com/nation/la-na-ebola-dallas-20141014-story.html>.

48 Geoffrey Mohan, *Nurses at Dallas Hospital Describe Poor Safety Measures with Ebola Victim*, L.A. Times, Oct. 14, 2014, <http://www.latimes.com/nation/la-na-ebola-dallas-20141014-story.html#page=1>.

49 Ilene MacDonald, *CDC Outlines New Ebola Protocol With Rapid Response Teams*, Fierce Healthcare (Oct. 15, 2014), <http://www.fiercehealthcare.com/story/cdc-outlines-new-ebola-protocol-rapid-response-teams/2014-10-15>.

50 See *supra* note 18.

51 Laura Smith-Spark, Laura Perez Maestro & Alexander Felton, *Ebola Cases Could Soar to 10,000 a Week*, CNN (Oct. 15, 2014), <http://www.cnn.com/2014/10/14/world/europe/ebola-outbreak/>; CDC, *Infection Prevention and Control Recommendations for Hospitalized Patients Under Investigation (PUIs) for Ebola Virus Disease (EVD) in U.S. Hospitals*, <http://www.cdc.gov/vhf/ebola/healthcare-us/hospitals/infection-control.html> (last visited Aug. 5, 2015); Jim McKay, *Ebola Response Provides Key Lessons for Risk Communications*, Emergency Management (Jan. 13, 2015) <http://www.emergencymgmt.com/health/Ebola-Response-Provides-Lessons-Risk-Communications.html>.

52 Gregg Gonsalves, *Stop Playing Cowboy on Ebola*, Foreign Policy, Oct. 28, 2014, <http://foreignpolicy.com/2014/10/28/stop-playing-cowboy-on-ebola/>.

53 Mark Berman and Lenny Bernstein, *Congress Presses for Ebola Travel Ban*, Wash. Post., Oct. 16, 2014, http://www.washingtonpost.com/national/health-science/congress-presses-for-ebola-travel-ban/2014/10/16/61a71172-5579-11e4-892e-602188e70e9c_story.html.

over the rules for screening and monitoring returning health care volunteers who had direct contact with Ebola patients. Some politicians called for drastic steps, including a ban on all travel from Ebola-endemic countries, which would have significantly hurt efforts to get American health care workers to West Africa to respond to the crisis. “It needs to be solved in Africa, but until then, we should not be letting these people in, period,” declared Rep. Fred Upton, a Republican from Michigan.⁵⁴ There were even calls to close the U.S.-Mexico border, though Mexico has never had a case of Ebola.⁵⁵

As national hysteria about Ebola reached a fever pitch, a new imported infection in New York City set off another chain reaction. When Dr. Craig Spencer was diagnosed on October 23,⁵⁶ the CDC already had an established set of recommendations for asymptomatic returning travelers: active self-monitoring and reporting for 21 days.⁵⁷ But in the wake of the hysteria set off by the Duncan case, Dr. Spencer’s case set off a national debate over whether the CDC guidelines were strict enough.



The revision of CDC guidelines

Although scientific experts and medical relief organizations adamantly opposed quarantine measures, many politicians and much of the American public supported quarantines out of “an abundance of caution.” In October, the state of New Jersey quarantined Kaci Hickox, a nurse returning from work in Sierra Leone with MSF. Hickox was held in a tent outside University Hospital in Newark for three days before being allowed to return to her home state of Maine under an in-home quarantine. That lasted four days until a judge, following a law that gave Hickox the right to a hearing, properly deemed the entire quarantine unnecessary.⁵⁸

Federal officials sought to contain national panic by issuing a revised set of guidelines on October 27, 2014.⁵⁹ There were three key differences between the CDC’s original guidelines and its revised recommendations:

1. New risk categories were established based on potential exposure to Ebola.
2. State and local health departments were encouraged to use active monitoring (remote health reports from subjects) or direct-active monitoring (daily in-person visits) instead of self-monitoring.

54 Michael McAuliff, *Lawmakers Ignore Experts, Push for Ebola Travel Ban*, Huff. Post (Oct. 16, 2014), http://www.huffingtonpost.com/2014/10/16/congress-ebola_n_5997214.html.

55 Reena Flores and Marina Koren, *These Politicians Want to Close the U.S.-Mexico Border Because of Ebola*, National Journal (Oct. 9, 2014), <http://www.nationaljournal.com/congress/these-politicians-want-to-close-the-u-s-mexico-border-because-of-ebola-20141009>.

56 Shimon Prokupez and Catherine E. Shoichet, *New York Doctor Now Ebola Free, Will Be Released from Hospital*, CNN (Nov. 10, 2014), <http://www.cnn.com/2014/11/10/health/new-york-doctor-craig-spencer-ebola-free/>.

57 Sydney Lupkin, *New Jersey, New York, Illinois, Toughen Ebola Quarantine Rules After Doctor Case*, ABC News (Oct. 24, 2014), <http://abcnews.go.com/Health/york-doctor-ebola-quarantine/story?id=26431431>.

58 AP, *Maine Judge Frees Kaci Hickox from Quarantine*, US News (Oct. 31, 2014), <http://www.usnews.com/news/articles/2014/10/31/maine-judge-frees-kaci-hickox-from-quarantine>.

59 CDC, *Interim U.S. Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure* (May 13, 2015), <http://www.cdc.gov/vhf/ebola/exposure/monitoring-and-movement-of-persons-with-exposure.html>.

3. Stricter protocols were defined for asymptomatic individuals deemed to pose “some risk” of carrying Ebola, including those who had direct contact with patients in West Africa using personal protective equipment.

The risk categories in the revised guidelines were based on exposure level and risk of having contracted Ebola. The risk categories were defined as follows:

High Risk – individuals who have had direct, unprotected exposure to an Ebola patient, their blood, or bodily fluids.

Some Risk – individuals who have had direct contact with known Ebola patients while using appropriate protective measures, or direct patient care in other settings in countries with Ebola outbreaks.

Low Risk – individuals who have been in a country with widespread transmission within 21 days and had no known Ebola exposures.

No Identifiable Risk – individuals who had contact with a person asymptomatic for Ebola.

The new guidelines also stratified people into categories based on whether they were asymptomatic or symptomatic. By integrating risk and presence of symptoms, the guidelines created eight categories, each with a set of recommended protocols. The guidelines recommended direct active monitoring for people in the High Risk and Some Risk categories, and active monitoring for people in the Low Risk category. They further recommended that all individuals with symptoms be immediately isolated, consistent with scientific consensus.

In no case—in either the High Risk, Some Risk, or Low Risk categories—did the guidelines recommend quarantines, even for asymptomatic health care workers. While the revised guidelines recommended restrictions on the congregate public activities of individuals in the High Risk category, not a single returning health care worker has been publicly identified as having been deemed High Risk (which requires accidental exposure such as a needle stick, or having treated patients without protective gear). Most were labeled as Some Risk—and for asymptomatic travelers in that category, the CDC suggested that local officials have discretion to impose movement restrictions, but only if individual circumstances warranted them. In other words, the CDC’s revised guidelines did not contemplate the quarantine of asymptomatic health care workers, and contemplated movement restrictions for them only in narrow circumstances.

The revision of the CDC guidelines was an interagency process that received input from the NIH and the Department of Health and Human Services (HHS), as well as the White House.⁶⁰ The revision was a “team effort,” Dr. Fauci, who took part in the deliberative process, told us. According to The New York Times,

60 Interview with Dr. Anthony Fauci, Director of National Institute of Allergy and Infectious Diseases (NIAID), Bethesda, MD (April 3, 2015).

the process reached as high as President Obama, who was reportedly briefed on, and had input into, the formulation of the guidelines.⁶¹

The revised CDC guidelines were an attempt to standardize the patchwork of inconsistent state Ebola policies. In reality, however, the guidelines did not facilitate any greater clarity or coherence in Ebola policies throughout the country. A key element of the revised guidelines was their flexibility with respect to restrictions on the movements of asymptomatic individuals in the Some Risk category. To be sure, the guidelines discouraged such restrictions except in narrow circumstances, but their imprecision gave cover to states that nonetheless imposed harsh public movement restrictions on many returning field workers—doctors, nurses, and others who, under the initial guidelines, had been required only to actively self-monitor their temperature and report the results to public health officials.

There was no scientific reason to require more, and the initial guidelines were sound public health policy. As we have seen, quarantines—and indeed even movement restrictions in the case of Ebola—are unnecessary for asymptomatic individuals: such individuals cannot transmit the disease even if they are infected, so long as they can safely isolate themselves if symptoms arise. In fact, all Ebola cases in the United States occurred before the new guidelines were released, and none of those cases spread in community settings. Movement restrictions might be justified for subjects who refuse to self-monitor and report or who decide to travel to places far from a health care facility that could isolate them should they come down with symptoms. In every other case, the original CDC guidance was the most reasonable approach for dealing with Ebola in the United States.

The revision of the CDC guidelines, however, was not fully under the control of the CDC. Politics played a significant role. Federal officials were charged with designing scientifically sound protocols that were sensitive to public anxieties of Ebola transmission. “The guidelines were tempered by the worst fears of the American public,” said Dr. Nicole Lurie, Assistant Secretary for Preparedness and Response at HHS, who was involved in the revisions. The CDC and other federal scientific officials effectively had to negotiate with politicians calling for harsh measures for political reasons, or who were driven by fear and unconvinced by the reassurances of scientists. Certain members of Congress and officials within the Obama administration—according to an official interviewed for this report—pushed for blanket quarantines of all returning visitors from West Africa and travel bans to the region. The drafting of the CDC guidelines was “intertwined with election season,” as the official bluntly told us.

The CDC was placed in an extraordinarily difficult position in crafting the new guidelines. The intense political pressure, however, does not change the fact that the revised guidelines lacked scientific justification. Political pressures pushed the CDC to give the states guidance inconsistent with the science of Ebola transmission. This decision had profound implications for returning volunteers and visitors from West Africa and ultimately for public health efforts at the federal, state, and local levels.

61 Helene Cooper et al., *Seeking Unity, U.S. Revises Ebola Monitoring Rules*, N.Y. Times, Oct. 27, 2014, <http://www.nytimes.com/2014/10/28/nyregion/ebola-us.html>.

IV. State Responses to Ebola

States respond to and fuel hysteria with overly restrictive quarantine policies

As the CDC and federal government scrambled to respond to a loss of confidence in their ability to handle the epidemic in the wake of four Ebola cases in the United States, many governors decided to take matters into their own hands and craft policies that rejected the scientific evidence of Ebola transmission and responded to public fears directly. Governors from across the political spectrum responded to the hysteria with policies far more restrictive than the CDC's guidelines. Calling those guidelines "a moving target," Governor Chris Christie of New Jersey instituted a mandatory 21-day quarantine policy for all returning health care workers.⁶²

Governor Malloy of Connecticut announced the most restrictive policy in the nation, directly contrasting his actions to the CDC's guidelines. "I believe we must go above and beyond what the CDC is recommending," he declared.⁶³ Although most state public health departments lack expertise in Ebola epidemiology and management, several governors nonetheless explicitly challenged the expertise of the CDC and its leadership. Governor Christie claimed that the CDC "eventually will come around to our point of view on this."⁶⁴

"In the end, the calculus is simple, and we think the governors have it wrong."

— *Ebola and Quarantine, New England Journal of Medicine*

Starting with Texas and Ohio in the aftermath of the cases there, states began imposing excessively restrictive policies even on those with no real risk of Ebola infection:

- Through quarantine orders and signed agreements, Texas in October quarantined 48 people in response to Duncan's case and effectively quarantined over 100 more by severely restricting their movement.⁶⁵
- Soon, quarantines were extended to cover those who had no contact with Ebola victims. On October 16, in the wake of a feared Ebola case in Connecticut, Governor Malloy announced mandatory quarantines for all people traveling to the state from Liberia, Sierra Leone, and

62 Bill Chappell, *Christie Defends Quarantine and Jabs at CDC Over Ebola*, NPR, Oct. 26, 2014, <http://www.npr.org/blogs/thetwo-way/2014/10/26/359082611/christie-defends-quarantine-and-jabs-at-cdc-over-ebola>.

63 CT.gov, *Governor Dannel P. Malloy*, <http://www.ct.gov/despp/cwp/view.asp?Q=555086&A=4226> (last visited Aug. 14, 2015).

64 Chappell, *supra* note 58.

65 Manny Fernandez and Frances Robles, *3 Weeks of Isolation and Worry End for 43 People Declared Free of Ebola*, N.Y. Times, Oct. 20, 2014, <http://www.nytimes.com/2014/10/21/us/texas-officials-clear-43-people-after-ebola-monitoring.html>; Kevin Sack et al., *For Those Caught in Ebola Scare, a Life in Quarantine*, The Boston Globe, Oct. 18, 2014, <http://www.bostonglobe.com/news/nation/2014/10/18/for-those-caught-ebola-scare-life-quarantine/HtJE2JxRhJYWIQ235NHTyJ/story.html>.

Guinea—whether or not they had a history of contact with any Ebola victims.⁶⁶

- Shortly after Dr. Craig Spencer became ill, New York, New Jersey, and Illinois announced strict policies for quarantining returning health care workers, with other states following their lead shortly thereafter.⁶⁷

By December, nearly half the country (at least 23 states) had announced quarantine and movement restriction policies that exceeded the CDC’s guidelines.⁶⁸ States with the most severe regulations were clustered in the eastern United States.⁶⁹ In many, though not all, of those states, incumbent governors facing reelection implemented the restrictive policies, increasing suspicion that they were politically motivated.⁷⁰

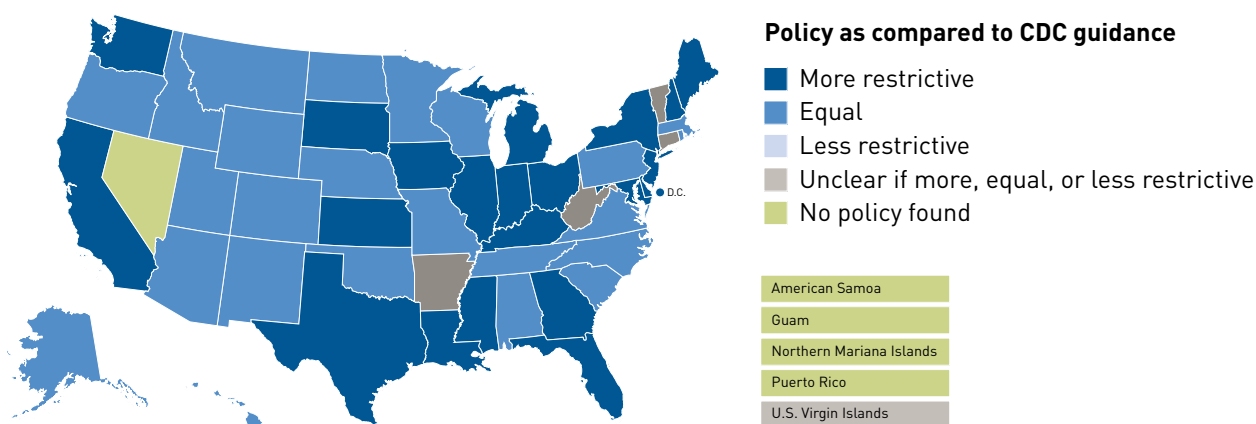


Figure 4: The CDC’s first map of states exceeding their Ebola movement and quarantine guidelines, produced on December 18, 2014.⁷¹

Many of the quarantines were not implemented through official orders, but by coercing individuals to accept “voluntary” quarantines. New Hampshire authorities, for instance, praised two individuals for agreeing to voluntarily quarantine themselves upon their return from West Africa while pointing out that they had the authority to get law enforcement involved if they did not.⁷² Many “voluntary” quarantines were based on implied threats to individuals’ livelihoods, reputations, and families. In October, two people who were asked to

⁶⁶ See *supra* note 59.

⁶⁷ Mark Berman, *New York, New Jersey and Illinois to Quarantine Medical Workers Returning from West Africa*, Wash. Post, Oct. 24, 2014, <http://www.washingtonpost.com/news/post-nation/wp/2014/10/24/new-york-new-jersey-to-quarantine-medical-workers-returning-from-west-africa/>.

⁶⁸ CDC, *Interim Table of State: Ebola Screening and Monitoring Policies for Asymptomatic Individuals*, <http://www.cdc.gov/phlp/docs/interim-ebolascreeing.pdf> (last visited Aug. 4, 2015). Compiled by CDC’s Office for State, Tribal, Local, and Territorial Support, Public Health Law Program & Office of the Associate Director for Policy. The updated table is available at <http://www.cdc.gov/phlp/docs/interim-ebolascreeing.pdf>. This version was accessed December 30, 2014 and is no longer publicly available. We include Connecticut in addition to the 21 states and District of Columbia listed by the CDC.

⁶⁹ *Ibid.*

⁷⁰ Sam Baker And Sophie Novack, *Is Your State Quarantining Ebola Doctors?* National Journal, October 30, 2014, available at: <http://www.nationaljournal.com/health-care/is-your-state-quarantining-ebola-doctors-20141030>.

⁷¹ See *supra* note 55.

⁷² Heather Hamel, *NH Says State Can Enforce Ebola Quarantine if Necessary*, WMUR 9 ABC (Oct. 30, 2014), <http://www.wmur.com/health/nh-says-state-can-enforce-ebola-quarantine-if-necessary/29441594>.

voluntarily quarantine themselves, Dr. Nancy Snyderman and Kaci Hickox, refused to comply with voluntary quarantines and went out in public, with Dr. Snyderman riding in a car to get take-out food and Ms. Hickox going for a bike ride with her boyfriend. Both were then subjected to official quarantine orders and intense media scrutiny, and both eventually left their jobs, with Ms. Hickox later moving across the country.⁷³

Indeed, returning health care workers we interviewed often felt as though they had no choice but to accept “voluntary” quarantines, leaving them with no legal recourse and states with no legal obligations to the health care workers or accountability to the public. In one illustrative case, Dr. Colin Buck, a physician from Stanford University, received official written communication that “failure to comply with [home] quarantine is punishable by six months in jail.” However, the San Mateo County Department of Public Health, which was managing Dr. Buck at the time, claimed in comments to the press that he was voluntarily quarantining himself. He received professional scorn for supposedly agreeing to quarantine himself and felt the reports of his “voluntary” quarantine would harm recruitment of doctors to West Africa as it misrepresented the risk of Ebola infection.

The threat of quarantine led some people to avoid traveling to certain states—or to the United States at all. Some people were kept from their families for three weeks while waiting in Europe or across the country.

And meetings between scientific and medical experts aimed at ending the epidemic were also affected. The Louisiana Department of Public Health warned anyone who had recently been to Liberia, Sierra Leone, or Guinea not to attend the annual meeting of the American Society for Tropical Medicine and Hygiene in New Orleans in November 2014.⁷⁴ That kept 30 frontline Ebola experts away from the meeting, thwarting an important opportunity to exchange knowledge and information critical to responding to the West African epidemic.

The quarantines imposed on health care workers only intensified the fear that led policymakers to embrace quarantine policies in the first place. “There’s no one I care about not infecting with Ebola more than my four-year-old daughter,” says Dr. Noah Rosenberg, who spent two months treating Ebola patients in West Africa. “I was 100 percent comfortable being in close contact with her, but I didn’t want to test that with friends. The fact that you’re under quarantine with the Department of Health makes it difficult to tell them, ‘No, it’s okay.’ That was probably the most difficult part.” Public policy validated mass hysteria.

States secretive on numbers of people quarantined

While governors were often quite public in announcing quarantine policies, states have since been secretive over the implementation and impact of these policies. This secrecy is pervasive; there is little information publicly available on what happened in nearly all of the 23 states that exceeded the CDC’s guidelines. In some cases, not even the policies are entirely clear; at least five states that the CDC did not identify as

73 Lindsey Breyer, *Nancy Snyderman Resigns from NBC News, Months After Breaking Voluntary Quarantine*, Wash. Post, Mar. 12, 2015, <http://www.washingtonpost.com/news/morning-mix/wp/2015/03/12/nancy-snyderman-resigns-from-nbc-news-months-after-breaking-voluntary-ebola-quarantine/>; NBC News, *Kaci Hickox, Nurse in Ebola Quarantine Standoff, Goes for a Bike Ride* (Oct. 30, 2014), <http://www.nbcnews.com/storyline/ebola-virus-outbreak/kaci-hickox-nurse-ebola-quarantine-standoff-goes-bike-ride-n237421>.

74 Brooke Borel, *Louisiana Travel Ban Kept 30 Ebola Experts From Annual Meeting*, Popular Science (Nov. 5, 2014), <http://www.popsoci.com/blog-network/our-modern-plagues/louisiana-travel-ban-kept-30-ebola-experts-annual-meeting>.

exceeding the guidelines likely did.⁷⁵ Nor is there publicly available data on the number of individuals who were quarantined or otherwise restricted in their movements on their return from affected countries. This in itself is troubling—states and local authorities effectively imprisoned an unknown number of people in their homes for weeks at a time, and have never been required to account for the extent of these practices or their justifications.

We sought this data from federal officials and the states. In particular, we submitted surveys to the Departments of Public Health in all 50 states with basic questions about whether they have policies that exceed CDC guidelines and how many people in their jurisdictions have been subject to quarantine or movement restriction. Only six states responded, including two, Connecticut and Missouri, which indicated they had exceeded CDC guidelines but had not previously been identified by the CDC as having done so.⁷⁶ The other states that responded did not indicate that they exceeded CDC guidelines. Connecticut reported quarantining nine people, and Missouri reported restricting the movement of 10 others, although we know of at least one additional person in Connecticut who was unofficially quarantined in a hotel room for two days.

Public health and legal experts as well as journalists have also struggled to obtain concrete data on how state laws have affected individuals. Some concerned parties, like the ACLU of New Jersey and the Yale Global Health Justice Partnership, have resorted to freedom of information requests, and even these formal appeals for transparency have been met with resistance.

Unable to obtain figures from state officials, we sought to build a picture by reviewing publicly available accounts. A review of media accounts of the impact of states' Ebola policies raises even more cause for concern. Although only a few quarantine and movement restriction cases gathered significant public attention, states actually implemented many more.

States and local authorities effectively imprisoned an unknown number of people in their homes for weeks at a time, and have never been required to account for the extent of these practices or their justifications.

75 Two states not on the CDC list disclosed to us that they had exceeded federal guidelines: Connecticut and Missouri. We also found press reports indicating that Vermont, Minnesota, and North Carolina each quarantined at least one individual, though in Minnesota's case it was hard to determine whether or not the individuals voluntarily quarantined themselves or were coerced.

Vermont: Laura Krantz, *Rutland Man Released After 21-Day Ebola Quarantine*, VTdigger.org (Nov. 17, 2014), <http://vtdigger.org/2014/11/17/rutland-man-released-21-day-ebola-quarantine/>.

Minnesota: Steve Tellier, *Minnesota Health Care Workers to Join Ebola Fight*, 5 Eyewitness News (Nov. 18, 2014), <http://kstp.com/article/stories/s3624200.shtml>.

North Carolina: Colleen Jenkins, *North Carolina Isolates U.S. Doctor for Ebola Watch After Liberia Trip*, Reuters, Nov. 10, 2014, <http://www.reuters.com/article/2014/11/10/us-health-ebola-usa-quarantine-idUSKCN0IU1UZ20141110>.

76 Specifically, they responded "Yes" to the question, "Are there or has there ever been Ebola quarantine and movement restriction policies in your state that are more restrictive than the CDC guidance?"

- According to our review, 18 states implemented at least 40 formal quarantines and 233 *de facto* quarantines, in which formal orders were not issued but individuals nonetheless went into quarantine or had their movements severely restricted due to official pressure.
- In addition, we found stories of some individuals undergoing quarantine based on community pressure, even when they traveled to an African country without an Ebola outbreak or merely lived in the same home as someone who had traveled to West Africa but was not symptomatic. While the states were not directly responsible for these, public health officials did little to alleviate the scientific misunderstandings behind community pressure for unnecessary “voluntary” quarantines.
- At least 20 children in Connecticut, Texas, and Illinois were banned from school for traveling in West Africa or having even slight exposure risk to a domestic Ebola case. The Milford, Connecticut, school system banned a 7-year-old girl from elementary school despite the fact she had only traveled to Nigeria after it had been declared Ebola-free by the WHO. She was only allowed to return after her parents sued the state.⁷⁷ Ohio closed an entire elementary school for a week while Iowa pressured a child into staying home from school for three weeks. Children in other states including New Hampshire, New York, and Delaware reported facing stigma at school from Ebola associations, real or imagined.⁷⁸
- This count of affected individuals is almost certainly an underestimate, perhaps by a very large margin. Multiple sources, whose accounts were not reported in the media, told us about additional quarantines. In general, most of our reports come from the period between September and early November 2014 when the media was focused on Ebola, and therefore may exclude many people subject to quarantine after media attention waned.

The pervasive secrecy around the quarantine policies strongly suggests that the full scope of the quarantine and movement restriction policies will never come to light. Without a complete accounting of the number of compulsory or *de facto* quarantines and movement restriction orders, it is impossible to understand the true scope of the problem or to begin to provide some measure of redress to the hundreds of individuals who were effectively imprisoned without due process or scientific basis.

West African community members were subject to considerable stigma due to fear of Ebola

West African immigrant communities have been particularly affected by the public hysteria fomented by the response of many states to Ebola. For example, in response to parents’ fears in Iowa and Connecticut, public health officials consulted by school districts allowed those school districts to exclude students from schools after trips to African countries without Ebola outbreaks, reinforcing the belief that anyone associated with

77 Ariel Kramer, *Girl, 7, Barred from a Connecticut School Over Ebola Concerns Goes Back to Class*, N.Y. Times, Oct. 31, 2014, <http://www.nytimes.com/2014/11/01/nyregion/connecticut-girl-returns-to-school-after-being-barred-amid-ebola-fears.html>.

78 KCCI Des Moines, *Iowa Student Will Self-Isolate After Trip to Africa* (Oct. 24, 2014), <http://www.kcci.com/news/iowa-student-will-selfisolate-after-trip-to-africa/29314088>; Elizabeth Hagan, “My Name is Not Ebola”: African Children Bullied at School (Oct. 27, 2014), <http://nypost.com/2014/10/27/my-name-is-not-ebola-african-children-bullied-at-school/>.

Africa represented a risk.⁷⁹ While the public health authorities did not officially back those actions, they could have done more to publicly oppose them.

Even West African immigrants who had been in America for many years faced stigma in all spheres of their day-to-day lives because of the perceived risk that they might be carrying Ebola. According to Reverend Edwin Lloyd, the leader of a Liberian church in Maryland, people exhibited fear of West Africans if they merely showed symptoms of the common cold.

“From refused handshakes to other congregations avoiding them, many in this [West African] community feel ostracized at a time when their loved ones are suffering and dying in Africa,” Rev. Lloyd said. “Being stigmatized increases the trauma that we experience as a people.”⁸⁰

Stigma was especially rife in states with large populations of West African immigrants, such as New York. Two young brothers in the Bronx, who recently emigrated from Senegal, were beaten to the point of serious injury while being called “Ebola.”⁸¹ Akinde Kodjo, a woman from Ivory Coast living in New York, told us how it felt being stigmatized for simply being African:

“On my way to the gym one day I walked past a middle school. I was talking to my husband on the phone in French, and a group of students started yelling at me: ‘Ebola! Ebola!’ Also, many of my American friends stopped calling me once all this started with Ebola in the U.S. I called one of my American friends several times, left her messages, but she never returned my calls! It seems that, because I’m African, it means Ebola.”

79 WOWN News, *Iowa Mission Family Agrees to Self-Quarantine* (Oct. 23, 2014), <http://www.wown.com/home/headlines/Iowa-Mission-Family-Agrees-to-Self-Quarantine-280254462.html>; Amanda Cuda and John Burgeson, *Milford Girl in Ebola Scare wants to Return to School*, CT Post (Oct. 30, 2014), <http://www.ctpost.com/local/article/Milford-girl-in-Ebola-scare-wants-to-return-to-5856494.php>.

80 CBS News, *Friends, Family of 1st U.S. Ebola Patient Reach Milestone* (Oct. 19, 2015), <http://www.cbsnews.com/news/ebola-outbreak-friends-family-of-1st-u-s-patient-thomas-eric-duncan-reach-milestone/>.

81 Roseanne Colletti, *African Boys Attacked at Bronx School, Called “Ebola”*, NBC N.Y. (Oct. 28, 2014), <http://www.nbcnewyork.com/news/local/Senegal-Boys-Attacked-Bullying-IS-318-Tremont-NYC-280519232.html>.

V. State-based Quarantines Hurt the Fight Against Ebola

The quarantine policies during the most recent Ebola epidemic only hindered the global effort to end the epidemic in West Africa. In October 2014, World Bank President Jim Kim made a plea for more volunteers to combat the epidemic in West Africa, warning that the shortage of local doctors and nurses risked letting the epidemic spread out of control.⁸² But the prospect of quarantine for returning health care workers was a disincentive for many to heed Dr. Kim's call. As Dr. Fauci of the NIH told ABC News, "The best way to stop this epidemic and protect America is to stop it in Africa, and you can really help stopping it in Africa if we have our people, our heroes, the health care workers, go there and help us to protect America."⁸³

Exact numbers on how many were discouraged from volunteering by the quarantines are unavailable, but we do know through direct conversations as well as data from international medical groups that the prospect of being unnecessarily quarantined dissuaded many health care workers from volunteering to go to West Africa.

- International Medical Corps saw nearly a 25% drop in recruitment from the United States after quarantine restrictions were put in place.
- International Rescue Committee officials were aware of a few cases of people choosing not to volunteer due to the risk of quarantine, and also noticed that volunteers often expressed concerns about the uncertain environment they would be returning home to.⁸⁴
- MSF had the same experience, and 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.⁸⁵
- Volunteers for Partners in Health expressed fear that, while they were away, the policies would continue to worsen such that they would lose their jobs (due to being unable to come back to work for such an extended period of time) or be kept from their children.⁸⁶

The stigma directed at returning health care workers, who were often vilified in the media, led some to "voluntarily" accept unnecessary quarantines so as to shield their families from intense public scrutiny—providing another disincentive for their peers to volunteer abroad. Furthermore, many would-be volunteers simply could not take an additional three weeks of leave from their regular employment for 21-day

⁸² Ian Talley, *World Bank Chief: Global Ebola Spread Without More Health Workers*, Wall St. J., Oct. 24, 2014, <http://www.wsj.com/articles/world-bank-chief-global-ebola-spread-without-more-health-workers-1414168750>.

⁸³ Zach Carter, *Top NIH Ebola Specialist Says Quarantines Will Jeopardize Americans*, Huff. Post. (Oct. 28, 2014), http://www.huffingtonpost.com/2014/10/26/ebola-quarantine_n_6049936.html.

⁸⁴ Interview with Trish Henwood, International Rescue Committee (IRC), telephone interview (Feb. 25, 2015).

⁸⁵ Email from Kate Mort, MSF, Sept. 3, 2015.

⁸⁶ Interview with Sara Stulac, Partners in Health (PIH), telephone (Mar. 23, 2015).

quarantines on top of the time they were taking off to serve in the fight against Ebola itself. “I knew people personally who were not able to go because of the potential impact on their family or their employers not wanting to deal with the complications of scheduling,” says Dr. Patricia Henwood, an IRC volunteer. “This was very, very common.” For instance, one expert performing biohazard assessments for MSF (important for assessing knowledge, equipment, and techniques to prevent Ebola exposure to health care workers) could not accommodate a lengthy quarantine period following a short tour in West Africa. Because of this, the biohazard assessment was delayed, potentially putting many other staff and patients in West Africa at greater risk and directly increasing the risk of new importations to the United States.⁸⁷

It was particularly ironic for dedicated health care workers, who had spent weeks or months in tents treating Ebola patients and who were among the few people in the world expert at handling the disease’s risks, to be confined by local health officials who had no experience whatsoever with Ebola. Trained Ebola responders are actually the best-placed individuals to monitor their own symptoms—doing so is part of their daily work in the field, a vital part of protecting not only themselves but their co-workers.

Trained Ebola responders are actually the best-placed individuals to monitor their own symptoms.

It is well-known within the public health profession that punitive approaches to stopping the spread of communicable disease also threaten to spark evasive and counterproductive behavior within populations. Though we are unaware of anyone in the recent epidemic who engaged in such behavior, the prospect of being imprisoned for weeks in their homes or elsewhere may tempt some to lie about or minimize their exposures, fail to make themselves known to health authorities who can monitor their health status, and generally discourage

cooperation that might help the authorities to fight a disease. Fortunately, most travelers with significant exposure to Ebola in this outbreak were health care workers who had seen the terrible nature of the disease firsthand and who had support networks and professional ethics that led them to accurately report their risks. In other epidemics that affect a larger number of people or occur in countries with more travel to the United States, this may not necessarily be the case, and overly draconian measures that lack legitimacy like unwarranted quarantines could easily backfire and create more risk to public health.

The quarantines also undermined faith in public health institutions and their authority during public health crises. “Mandatory quarantines unnecessarily affect public health credibility,” said Dr. Alfred DeMaria, Jr., the Massachusetts State Epidemiologist. “What actually happened obviously wasn’t being driven by science and put public health in a difficult position.” Local, state, and federal public health officials must ensure coordinated responses to and messaging around a disease—especially diseases that invoke intense fear such as Ebola. And politicians must permit them to do so. Many states did rely on the CDC for guidance, but the ones that did not fragmented the national response, particularly since pressure from politicians in those states partially drove the CDC to modify their guidelines beyond what the science supported.

87 Interview with Marina Novack, Medecins Sans Frontieres (MSF), telephone (Mar. 9, 2015).

While only a few cases of Ebola were identified in the United States, the precedent set by the rejection of federal expertise and drastic departures from federal guidance on disease management and control, could harm future responses to far greater public health threats.

The quarantine was an enormous source of stress, and not because I was worried about giving anyone Ebola,” says Dr. Noah Rosenberg, a professor of emergency medicine at the Alpert Medical School of Brown University in Providence, Rhode Island.

The Ebola quarantines were on Dr. Rosenberg’s mind well before he left for West Africa. Rhode Island adopted the revised CDC guidelines in fall 2014, meaning that state officials could put movement restrictions on people returning to the United States from West Africa. “One of my main concerns was how I was going to re-enter the U.S.,” says Dr. Rosenberg. “I spent a lot of time thinking about it.”

Dr. Rosenberg spent two months treating Ebola patients in Liberia and Sierra Leone. In the midst of working in an Ebola Treatment Unit and developing infection control measures, Dr. Rosenberg worried about how his family

would be treated when he got back home. Children of health professionals returning from work on Ebola were asked not to go to school, and children of West African descent faced stigma and bullying from classmates. Dr. Rosenberg was well aware of the potential fallout. “I have a 4-year-old daughter,” he says. “What worried me in particular, even if I quarantined myself at home, was what the reaction would be for my daughter going

to preschool. Or for my wife living with me and going to her job. There’re a lot of horror stories out there.”

Like many of his colleagues, Dr. Rosenberg decided to wait out part of the 21-day quarantine period in Europe. “I spent the first 10 days in Brussels, really just killing time,” says Dr. Rosenberg. “That was in order to return during a week when my daughter was out of school. I could spend the last week of my quarantine at home with her and I wouldn’t have to risk fallout from her going back to her school and other parents’ reactions.”

In Europe, Dr. Rosenberg was struck by the matter-of-fact response many Europeans had when he told them about his work in West Africa. “I did not tell people upfront where I’d been, but I didn’t try to hide it,” he says. “The official word there was you could come back and do whatever and it was safe. People didn’t seem overly concerned about it.”

Back home in Rhode Island, it was difficult for Dr. Rosenberg to navigate the irrational fears of Ebola, especially when official government policy validated those fears. “There’s no one I care about not infecting with Ebola more than my daughter, and I’m 100% comfortable being in close contact with her,” says Dr. Rosenberg. “But you don’t want to test that with friends. The fact that you’re under quarantine with the Department of Health, that you’re not allowed to go to the grocery store, it’s difficult to tell them, ‘No, it’s ok.’ That was probably the most difficult part.”

Though he knew he could challenge his quarantine in court, Dr. Rosenberg decided to wait out the rest of his 21 days at home. “I didn’t feel like I had a free choice,” he says. “I felt like the consequences of trying to rebel against the system were far greater than the costs of just following along. I felt fairly trapped.”

Testimonial

Dr. Noah Rosenberg

VI. Ebola Quarantines Violated the Constitution

In addition to all the other problems with the quarantines imposed in response to the panic surrounding the 2014 Ebola outbreak, they violated the U.S. Constitution. States derive the legal authority to ensure the public health from their general “police powers.”⁸⁸ Like all exercises of state authority, these powers are subject to constitutional constraints.⁸⁹ Although there is little recent precedent on the constraints applicable to quarantines, courts will likely permit states to impose quarantines and other restrictions on movement, in combatting the spread of a disease, only if:

1. The state has a compelling interest in doing so.
2. The restrictions are the least restrictive measures available to prevent the spread of disease.
3. The state affords affected individuals due process of law, including a timely hearing before a neutral decisionmaker, appointed counsel if the individual cannot afford one, and adequate notice explaining the basis for the restriction and the process for challenging it.
4. The state confines the individuals, if at all, in humane conditions.

The quarantines imposed in 2014 violated these constitutional restrictions. (Remember that, by definition, quarantine is the confinement of individuals *without* any symptoms of disease; nobody disputes that those who are actually sick with Ebola need to be isolated.) Since, as explained above, quarantines of individuals not presenting symptoms of Ebola are scientifically unjustified, the states that imposed such quarantines violated individual rights. They acted not out of public health necessity, but largely in response to political pressure based on unfounded public fear.

States acted largely in response to political pressure based on unfounded public fear.

In the future, there may be outbreaks of disease that raise difficult questions about the balance between

88 See, e.g., *Jacobson v. Massachusetts*, 197 U.S. 11, 25 (1905) (“According to settled principles, 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.”).

89 See, e.g., *Mugler v. Kansas*, 123 U.S. 623, 661 (1887) (“There are, of necessity, limits beyond which legislation cannot rightfully go If, therefore, a statute purporting to have been enacted to protect the public health, the public morals, or the public safety, has no real or substantial relation to those objects, or is a palpable invasion of rights secured by the fundamental law, it is the duty of the courts to so adjudge, and thereby give effect to the constitution.”).

individual liberty and collective risk. This Ebola epidemic was not one of them. All of the scientific evidence points in the same direction: Ebola quarantine policies for asymptomatic individuals are not justified because quarantines of such individuals are not scientifically necessary except in extraordinary circumstances.

Particularly where politics and fear overwhelm rational decisionmaking, it is essential that courts serve their traditional role as a check on abuse of power. In the 2014 Ebola outbreak, only one court had the opportunity to evaluate the legality of an Ebola quarantine, and it found that it was clearly beyond the power of the state to impose.⁹⁰ The court concluded that “people are acting out of fear and . . . this fear is not entirely rational.”⁹¹

States violated individuals’ constitutional rights by imposing quarantines and movement restrictions that were scientifically unjustified when less restrictive alternatives were available

The Fourteenth Amendment to the U.S. Constitution provides that no state may “deprive any person of life, liberty, or property without due process of law; nor deny to any person . . . the equal protection of the laws.”⁹² It is this provision that protects individuals against arbitrary or unreasonable state deprivations of liberty. When a state deprives an individual of certain fundamental rights, the state must satisfy the highest constitutional standard to justify its action. Under this standard, known as strict scrutiny, a state must show that its action is narrowly tailored to serve a compelling governmental interest.

In response to Ebola, states interfered with constitutionally protected liberties by subjecting individuals to quarantines or restrictions upon their movement. Those measures implicated at least three fundamental rights: the right to be free from restraint,⁹³ the right to travel,⁹⁴ and the right to freely associate with other individuals.⁹⁵ Moreover, some states indirectly imposed those same restrictions through coercion, by, for example, threatening individuals with quarantine orders if they did not simply consent to limit their movements.

Because state-imposed quarantines and restrictions on movement implicate fundamental rights, states must show that they serve a compelling governmental interest and that they are narrowly tailored to that interest. There is little question that preventing the spread of Ebola is a compelling governmental interest.⁹⁶ However, quarantines and other restrictions on the movements of asymptomatic individuals are not narrowly

90 *Hickox*, No. 2014–36 at 2 (Me. Dist. Ct. Oct. 31, 2014).

91 *Id.* at 3.

92 U.S. Const. amend. XIV.

93 *See, e.g., Jacobson*, 197 U.S. at 26 (recognizing a liberty interest in being free from restraint while acknowledging limits on that liberty in the name of public health).

94 *See, e.g., Shapiro v. Thompson*, 394 U.S. 618, 629 (1969) (“This Court long ago recognized that the nature of our Federal Union and our constitutional concepts of personal liberty unite to require that all citizens be free to travel throughout the length and breadth of our land uninhibited by statutes, rules, or regulations which unreasonably burden or restrict this movement.”).

95 U.S. Const. amend. I; *see also Roberts v. U.S. Jaycees*, 468 U.S. 609, 617–18 (1984) (“Our decisions have referred to constitutionally protected ‘freedom of association’ in two distinct senses. In one line of decisions, the Court has concluded that choices to enter into and maintain certain intimate human relationships must be secured against undue intrusion by the State because of the role of such relationships in safeguarding the individual freedom that is central to our constitutional scheme. . . . In another set of decisions, the Court has recognized a right to associate for the purpose of engaging in those activities protected by the First Amendment—speech, assembly, petition for the redress of grievances, and the exercise of religion.”).

96 *See, e.g., Jacobson*, 197 U.S. at 25 (noting that the Court “has distinctly recognized the authority of a state to enact quarantine laws and health laws of every description.”) (internal quotation marks omitted).

tailored to that interest, because there are a number of alternatives to quarantine that are equally effective at preventing the spread of Ebola, but that do not involve as severe a deprivation of individual liberty.⁹⁷ In other words, states may not fight Ebola “by means that broadly stifle fundamental personal liberties when the end can be more narrowly achieved.”⁹⁸

Courts do give some deference to public health authorities when the authorities ground their actions in scientific evidence.⁹⁹ But such deference is not absolute: courts will strike down a public health policy that implicates fundamental rights where the “real or substantial relation” between the means and the ends is absent.¹⁰⁰ Under that doctrine, courts have struck down scientifically unjustified public health measures, including quarantines. For example, one court invalidated a quarantine of an entire district in San Francisco, finding it “unreasonable, unjust, and oppressive.”¹⁰¹ The court relied on the affidavit of a medical professional who testified that the quarantine was “unscientific.”¹⁰² The court recognized that the quarantine was, for that reason, “not a reasonable regulation to accomplish the purposes sought.”¹⁰³

The Ebola quarantines and restrictions on movement similarly contravened sound scientific evidence. Many alternatives to quarantine would not have involved as severe a deprivation of liberty, and yet would have been equally effective in combatting the spread of the disease. These alternatives included self-monitoring, active monitoring, direct monitoring, and perhaps certain narrow and specific movement restrictions.¹⁰⁴ Because asymptomatic individuals cannot transmit Ebola, any or all of these less-restrictive alternatives would have prevented the spread of Ebola.

The one court to consider the legality of an Ebola quarantine of an asymptomatic individual did so under a

97 See, e.g. *id.* at 28 (“[A]n acknowledged power of a local community to protect itself against an epidemic threatening the safety of all might be exercised in particular circumstances and in reference to particular persons in such an arbitrary, unreasonable manner, or might go so far beyond what was reasonably required for the safety of the public, as to authorize or compel the courts to interfere for the protection of such persons.”).

98 *Shelton v. Tucker*, 364 U.S. 479, 488 (1960); see also *Covington v. Harris*, 419 F.2d 617, 623 (D.C. Cir. 1969) (“A statute sanctioning such a drastic curtailment of the rights of citizens must be narrowly, even grudgingly, construed in order to avoid deprivations of liberty without due process of law.”) (internal quotation marks omitted).

99 See, e.g., *Jacobson*, 197 U.S. 11, 28 (1905) (noting that “the court would usurp the functions of another branch of government if it adjudged, as matter of law, that the [smallpox vaccination] adopted under the sanction of the state, to protect the people at large was arbitrary, and not justified by the necessities of the case.”).

100 See *id.* at 31 (“[I]f a statute purporting to have been enacted to protect the public health, the public morals, or the public safety, has no real or substantial relation to those objects, or is, beyond all question, a plain, palpable invasion of rights secured by the fundamental law, it is the duty of the courts to so adjudge, and thereby give effect to the Constitution.”).

101 *Jew Ho v. Williamson*, 103 F. 10, 26 (C.C.N.D. Cal. 1900).

102 *Id.* at 21 (“[D]efendants have proceeded from erroneous theories to still more erroneous and unscientific practices and methods of dealing with the same; for, instead of quarantining the supposedly infected rooms or houses in which said deceased persons lived and died, and the persons who had been brought in contact with and been directly exposed to said disease, said defendants have quarantined, and are now maintaining a quarantine over, a large area of territory, and indiscriminately confining therein between ten and twenty thousand people, thereby exposing, and they are now exposing, to the infection of the said disease said large number of persons.”) (Quoting affidavit of Dr. J. I. Stephen).

103 *Id.* at 23 (“The court cannot but see the practical question that is presented to it as to the ineffectiveness of this method of quarantine against such a disease as this. So, upon that ground, the court must hold that this quarantine is not a reasonable regulation to accomplish the purposes sought.”). Although there are few recent cases squarely addressing these issues, recent lower-court cases arising in different legal contexts have found that segregation of asymptomatic individuals for tuberculosis does not meet a requirement of employing the least restrictive means. See, e.g., *Jihad v. Wright*, 929 F. Supp. 325, 330–32 (N.D. Ind. 1996) (holding that prison officials should not have removed an inmate at risk of developing active tuberculosis to a medical isolation unit because a less restrictive alternative would have been periodic testing to determine if the inmate became capable of infecting others); *Jolly v. Coughlin*, 76 F.3d 468, 479–80 (2d Cir. 1996) (finding that prisoner’s confinement was not least restrictive means of protecting inmates from tuberculosis where prisoner was not contagious and could be monitored for the development of active tuberculosis).

104 See CDC, *Interim U.S. Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure* (Dec. 24, 2014), <http://www.cdc.gov/vhf/ebola/exposure/monitoring-and-movement-of-persons-with-exposure.html>.

statute requiring the state to show by clear and convincing evidence that the quarantine was “necessary.”¹⁰⁵ The court came to the same conclusion as the public health consensus—and it did so at the height of the national panic over Ebola. When Kaci Hickox, an asymptomatic health care worker in Maine, challenged her quarantine order in court, that court held that the state had failed to prove that quarantine was necessary.¹⁰⁶ The court noted that it was “fully aware of the misconceptions, misinformation, bad science and bad information being spread from shore to shore in our country with respect to Ebola.”¹⁰⁷ Instead of ordering a

quarantine as requested by the state, the court found that Hickox need only comply with direct active monitoring, a less-restrictive measure that would accomplish the state’s public health goals.¹⁰⁸

Some have argued that quarantines are justified by the possibility that returning health care workers will not comply with public health measures even after they begin to manifest symptoms of Ebola.¹⁰⁹ However, states may not quarantine individuals on unsubstantiated speculation that those individuals will be non-compliant. In prior cases involving the isolation of individuals with tuberculosis—which, unlike Ebola, is airborne and thus highly contagious through casual contact—courts required that the state make a particularized showing

specific to the individual in question that there was a “substantial likelihood” of non-compliance.¹¹⁰ The injustice of a generalized presumption of non-compliance is especially apparent in the context of the Ebola quarantines, given that the quarantine orders were directed primarily at returning health care workers who had demonstrated dedication to fighting this disease, had seen its terrible effects first-hand, and were well acquainted, as few others are, with the precautionary measures necessary to prevent its spread. Many of those health care workers had also previously volunteered in West Africa and so had already demonstrated their willingness to comply with public health authorities’ orders.

States that quarantined asymptomatic individuals ignored the science of Ebola and imposed measures that deprived individuals of their fundamental liberties. As a result, the Ebola quarantines, like those at issue in the San Francisco case, were “unreasonable, unjust, and oppressive”¹¹¹ and, therefore, violated the

Returning health care workers were well acquainted with the precautionary measures necessary to prevent the spread of Ebola.

105 Several other states’ laws require that the government prove the need for a quarantine by “clear and convincing evidence.” See Alaska, AS 18.15.385 (2014); Illinois, 20 Ill. Comp. Stat. § 2305/2 (2015); Minnesota, Minn. Stat. § 144.4195 (2014).

106 *Hickox*, No. 2014–36 at 2.

107 *Id.* at 3.

108 *Id.* at 2.

109 See, e.g., Robert J. Vickers, *Ebola Aid Workers Can’t Be Trusted*, Seattle Times, Oct. 31, 2014, <http://blogs.seattletimes.com/opinionnw/2014/10/31/ebola-aid-workers-cant-be-trusted/>.

110 *City of New York v. Antoinette R.*, 630 N.Y.S.2d 1008, 1015 (N.Y. Sup. Ct. 1995) (holding, in the context of a quarantine of a TB patient for allegedly not complying with treatment, “The prerequisite for an order is that there is a substantial likelihood, based on the person’s past or present behavior, that the individual cannot be relied upon to participate in or complete an appropriate prescribed course of medication or, if necessary, follow required contagion precautions for tuberculosis.”).

111 *Jew Ho*, 103 F. at 26.

Constitution.¹¹²

Some states failed to safeguard individuals' right to due process

When a state deprives an individual of a fundamental liberty interest, it has an affirmative duty under the Due Process Clause of the Fourteenth Amendment to initiate a hearing before a neutral decision-maker at which it justifies the deprivation.¹¹³ That hearing must ordinarily take place before the deprivation occurs,¹¹⁴ or, at the very least, *promptly* afterward.¹¹⁵

Under the Maine public health emergency statute, for example, the state must initiate a hearing within 48 hours after quarantine begins.¹¹⁶ This statute was at issue in Kaci Hickox's case, during which the state sought an order permitting quarantine to continue and Ms. Hickox obtained her ruling that she need only comply with direct active monitoring.¹¹⁷ This provision of the Maine statute was the means by which Maine sought to afford Ms. Hickox her right to due process, and to ensure that the public health restrictions imposed upon her were scientifically justified.

No other state that instituted a quarantine appears to have complied with this requirement of due process. The other states imposed quarantines without hearings, and placed the burden on individuals to challenge their own quarantines.¹¹⁸ Due process generally requires the opposite—that, at a minimum, the state initiate a hearing before a neutral decisionmaker who is

States imposed quarantines without hearings, and placed the burden on individuals to challenge their own quarantines.

112 This result would hold no matter the evidentiary standard that a court applied, because the scientific consensus against blanket quarantines or movement restrictions for asymptomatic individuals is overwhelming. Nevertheless, the Constitution would require states to meet a demanding evidentiary standard—the “clear and convincing evidence” standard, which is the highest in the civil context—to justify such serious deprivations of liberty. Although no court has addressed this question in the context of Ebola restrictions, the Supreme Court has addressed it in the closely analogous context of civil commitment. See *Addington v. Texas*, 441 U.S. 418, 425 (1979) (holding that states must meet the intermediate burden of proof, “clear and convincing evidence,” when civilly committing an individual with mental illness). The same standard would apply before states could effectively imprison asymptomatic individuals in their homes.

113 See, e.g., *Mathews v. Eldridge*, 429 U.S. 319, 333 (1976) (“The ‘right to be heard before being condemned to suffer grievous loss of any kind, even though it may not involve the stigma and hardships of a criminal conviction, is a principle basic to our society.’” (quoting *Joint Anti-Fascist Comm. v. McGrath*, 341 U.S. 123, 168 (1951) (Frankfurter, J., concurring))).

114 See, e.g., *Goldberg v. Kelly*, 397 U.S. 254, 264 (1970) (holding that the state must provide a pre-termination evidentiary hearing when it terminates a welfare recipient's benefits because termination “may deprive an eligible recipient of the very means by which to live while he waits.”).

115 See, e.g., *Mathews*, 429 U.S. at 349 (“All that is necessary is that the procedures be tailored, in light of the decision to be made, to ‘the capacities and circumstances of those who are to be heard,’ to insure that they are given a meaningful opportunity to present their case.” (quoting *Goldberg v. Kelly*, 397 U.S. 254, 268–269 (1970))); *Nat'l Council of Resistance of Iran v. Dep't of State (NCRI)*, 251 F.3d 192, 205 (D.C. Cir. 2001) (“[B]efore the government can constitutionally deprive a person of the protected liberty or property interest, it must afford him notice and hearing.”).

116 Me. Rev. Stat. tit. 22 § 820 (2005) (“A hearing must be held before a judge of the District Court, a justice of the Superior Court or a justice of the Supreme Judicial Court as soon as reasonably possible but not later than 48 hours after the person is subject to prescribed care to determine whether the person must remain subject to prescribed care.”).

117 *Hickox*, No. 2014-36 at 3.

118 See, e.g., CT Gen Stat § 19a-131b (2013).

independent of the agency that is seeking to impose the quarantine.

The constitutional requirement that a state initiate a quarantine hearing has the salutary effect of increasing transparency. In Maine, there is now a publicly available record of the state's asserted justifications for quarantine. Moreover, even if the record of Ms. Hickox's hearing had been sealed, the very fact that the sealed record existed would still aid the public in determining the number of people who were quarantined by the state, which is currently impossible to determine. In all states other than Maine, by contrast, there is no publicly available record of the number of people quarantined, let alone of the states' alleged justifications for quarantine.

The Due Process Clause also requires that states afford individuals *notice* of the basis for the deprivation of their liberty.¹¹⁹ This bedrock requirement ensures that individuals can meaningfully challenge the state's actions.¹²⁰ But a number of states failed to provide constitutionally adequate notice in their implementation of Ebola quarantines. For example, after returning from West Africa, one asymptomatic individual, Laura Skrip, a doctoral student in epidemiology at Yale, was told over the phone that she was under a quarantine order and could not leave her home. After she reported to public health authorities that she had never received official notice informing her of her due process rights, they finally delivered notice to her home a full five days after the start of her quarantine. As a result, Skrip remained without written notice of the basis for her quarantine (and any potential procedures to challenge it) for one-fourth of her time in quarantine.¹²¹

Our interviews with other individuals who were quarantined suggest that this example is representative of a larger trend in which states provided individuals with no adequate notice and no opportunity to be heard before a neutral decisionmaker when instituting Ebola quarantines.

Additionally, some states appear to have deliberately circumvented due process requirements by coercing individuals into signing "voluntary" quarantine agreements.

Lastly, states have not provided—but should consider providing—the assistance of counsel for those who are indigent to challenge the validity of a quarantine. Although courts have not ruled on whether the right to counsel is constitutionally required when a person is quarantined for public health reasons, the nature of

119 See, e.g., *Addington v. Texas*, 441 U.S. 418, 425 (1979), ("[C]ivil commitment for any purpose constitutes a significant deprivation of liberty that requires due process protection."); *O'Connor v. Donaldson*, 422 U.S. 563, 580 (1975) (Burger, concurring) ("There can be no doubt that involuntary commitment to a mental hospital, like involuntary confinement of an individual for any reason, is a deprivation of liberty which the State cannot accomplish without due process of law.").

120 *Vitek v. Jones*, 445 U.S. 480, 495–96 (1980); see also *id.* at 492 ("Were an ordinary citizen to be subjected involuntarily to these consequences, it is undeniable that protected liberty interests would be unconstitutionally infringed absent compliance with the procedures required by the Due Process Clause."); *Addington*, 441 U.S. 418; *O'Connor*, 422 U.S. 563.

121 Notice that is constitutionally adequate is that which "ensure[s] that the opportunity for a hearing is meaningful." See *City of West Covina v. Perkins*, 525 U.S. 234, 240 (1999). Thus, while a state is not required to provide notice of procedures that are publicly delineated in statutes and case law, it must give adequate notice of the availability of administrative procedures that are not publicly known, as well as any factual information necessary to invoke those procedures. See *Perkins*, 525 U.S. at 242–44; see also *Memphis Light, Gas & Water Div. v. Craft*, 436 U.S. 1, 13–14 (1978). The contents of the notice required will thus vary state to state.

the liberty interest at stake suggests that providing counsel is required to ensure fairness and due process.¹²²

Some states quarantined individuals under inhumane conditions that violated constitutional standards

When the state civilly confines an individual, it takes on an affirmative duty to provide basic services and care because the restriction on liberty renders the individual incapable of providing for him or herself.¹²³ How this constitutional obligation applies in the context of home quarantines is, at best, a complicated question. But at a minimum, when the state quarantines individuals in their homes, it must ensure that they have access to the necessities of life, including food, medical care, and conditions of “reasonable safety.”¹²⁴

When the state quarantines individuals in their homes, it must ensure that they have access to the necessities of life.

There is reason to believe that a number of states imposed quarantines without ensuring access to basic services and care. For example, the State of Texas quarantined the partner and family members of Ebola patient Thomas Eric Duncan in apparently unsafe conditions.¹²⁵ After Duncan was taken to the hospital, the state for several days confined Duncan’s partner Louise Troh, her thirteen-year-old son, and two nephews in the Texas apartment that Duncan had inhabited during his illness, including during a period when he had GI symptoms and may have been infectious.¹²⁶ Duncan’s sweat-stained

sheets remained in the apartment because authorities would not allow Troh to dispose of them.¹²⁷ When a biohazard cleaning service arrived to help decontaminate the apartment, authorities turned the service away

122 In determining whether appointed counsel is required in civil proceedings, the Supreme Court has considered “the nature of the private interest that will be affected,” “the comparative risk of an erroneous deprivation of that interest with and without additional or substitute procedural safeguards,” and any “asymmetry of representation.” *Turner v. Rogers*, 131 S. Ct. 2507, 2510–2518 (2011) (internal quotation marks omitted). In the context of Ebola quarantines, those factors all favor the provision of counsel to individuals who cannot afford counsel on their own. Indeed, many states already recognize a right to state-appointed counsel in the context of civil commitment, and should extend that recognition to the quarantine context. See e.g., Treatise on Health Care Law § 20.04 (containing information on many states’ civil commitment counsel requirements. See, for example, its description of South Carolina’s law: “Before the hearing, two court-appointed examiners must determine whether involuntary treatment is required and if so, the court must appoint counsel for that respondent and hold a full hearing within 15 days of the respondent’s initial admission.”); see also Christy E. Ferris, *The Search for Due Process in Civil Commitment Hearings: How Procedural Realities Have Altered Substantive Standards*, 61 Vand. L. Rev. 959, 961–68 (2008) (“[A]lmost all states mandate assistance of counsel as a basic due process requirement of civil commitment hearings Most states also grant the right to counsel, who will be appointed if the respondent is indigent.”).

123 See, e.g., *DeShaney v. Winnebago Cnty. Dep’t of Soc. Servs.*, 489 U.S. 189, 199–200 (1989) (“[W]hen the State takes a person into its custody and holds him there against his will, the Constitution imposes upon it a corresponding duty to assume some responsibility for his safety and general well-being.”); *Youngberg v. Romeo*, 457 U.S. 307, 317 (1982) (“When a person is institutionalized—and wholly dependent on the State . . . a duty to provide certain services and care does exist.”)

124 *Youngberg*, *supra*, at 324 (“[T]he State concedes a duty to provide adequate food, shelter, clothing, and medical care. These are the essentials of the care that the State must provide. The State also has the unquestioned duty to provide reasonable safety for all residents and personnel within the institution.”).

125 Gregg Botelhi and Michael Martinez, *Frustrated Women Quarantined With Sheets, Towels Soiled by Ebola Patient*, CNN (Oct. 3, 2014, 4:40 AM), <http://www.cnn.com/2014/10/02/us/texas-woman-quarantine-ebola-thomas-duncan/>.

126 *Id.*

127 *Id.*

because it lacked the necessary permit to transport hazardous waste on Texas highways.¹²⁸ Because Ebola can be transmitted through contact with surfaces that were exposed to an infected individual's bodily fluids, Troh and her family members were needlessly placed at risk. In subjecting Troh and her family members to that risk, the State of Texas appears to have violated its obligation to ensure "reasonable care and safety."¹²⁹

A related question is whether states must provide job protection when imposing Ebola quarantines or movement restrictions on individuals. Although there is no clear legal precedent requiring states to protect individuals against adverse employment action, the imposition of a quarantine in the name of public health imposes a civic obligation similar to jury duty. To the extent that returning health care workers might face job loss or other adverse consequences from being subject to an Ebola quarantine, states should enact policies to protect against such consequences and to protect public health by lowering incentives not to comply. To accomplish the same end, some states, such as New York, have said that they would compensate workers for lost wages.¹³⁰

128 *Id.*

129 *Youngberg*, 457 U.S. at 324.

130 Matt Flegenheimer, Michael D. Shear and Michael Barbaro, *Under Pressure, Cuomo Says Ebola Quarantines Can Be Spent at Home*, N.Y. Times, Oct. 26, 2014, <http://www.nytimes.com/2014/10/27/nyregion/ebola-quarantine.html>.

VIII. Recommendations

Government authorities at all levels must ensure that the public health policies they implement to address infectious diseases are based on scientific evidence and public health necessity, rather than political expediency. Any other approach is likely to be ineffective in protecting the public and to violate constitutional rights. These recommendations aim to ensure that any restrictions on individuals in the name of combating infectious diseases comport with scientific evidence, comply with constitutional requirements, and protect civil liberties, while also ensuring that government authorities can effectively address public-health concerns.

The domestic response, particularly at the state level, to the Ebola epidemic in West Africa provides a good lesson in how not to manage a public health crisis, real or perceived. We therefore recommend that, at a minimum, the following principles be followed in any future infectious disease outbreaks, actual or threatened:

1. Do not quarantine or restrict the movement of asymptomatic individuals who present no real risk of transmission.

Such quarantines are unnecessary, unwise, and unlawful. Ebola provides a case in point. Public health experts overwhelmingly agree that quarantines of asymptomatic individuals are scientifically unjustified and counter-productive, in that they hinder efforts to control Ebola transmission. Furthermore, given the important liberty interests at stake—including an individual’s ability to work, travel, and carry out daily activities—unjustified quarantines and movement restrictions are unconstitutional. The CDC should update its guidelines on Ebola to make clear that quarantines of, or movement restrictions on, asymptomatic individuals are unjustified.

2. Employ the least restrictive alternatives available to stem transmission of infection.

Public health authorities have a wide array of tools available to control disease transmission short of quarantine. In the case of Ebola, these tools include self-monitoring, active monitoring, and direct active monitoring. In any individual person’s case, public health authorities should implement interventions that are scientifically justified for the level of risk posed by that individual and least restrictive of their liberty. In the case of asymptomatic, compliant individuals who fall into the CDC’s Some Risk category for Ebola, for example, it is sufficient to require active or direct active monitoring for the 21-day period following potential Ebola exposure.

3. Provide robust procedural protections.

Given the serious liberty interests at stake whenever a government authority imposes movement restrictions or quarantine, it must provide robust procedural protections to enable individuals to contest those restrictions. Public health authorities must ensure that (1) each individual has timely and adequate notice of the restrictions the state seeks to impose; (2) each individual is given a hearing before a neutral decisionmaker, at which he or she can present evidence against the restrictions, with the assistance of counsel; (3) any such hearing take place before the restrictions are imposed, or, if time does not permit, as soon as possible after the restrictions are imposed; and 4) each individual be informed of, and permitted, a right to appeal the decision to a judicial body if the initial hearing was not before a court.

4. Increase Transparency.

Public health authorities must be transparent about the policies and procedures they have for determining when to implement movement restrictions or quarantines in the name of controlling the transmission of disease. Public health authorities should make these policies explicit and public, and should include both the substantive criteria and the procedures they will follow in determining individual restrictions. It is also essential to ensure that public health officials do in fact apply the written policies, and that each individual subject to a movement restriction or quarantine is given a written decision explaining the reasons for it, with reference to those policies. Finally, there should be a public record of the implementation of quarantine or other interventions used to control the spread of a disease. The fact that there is no public information on the number of people subject to quarantine or other movement restrictions in the United States during the Ebola scare is unacceptable.

5. Ensure humane conditions of confinement.

In those cases where a quarantine is scientifically and constitutionally justified, public health authorities must ensure that individuals are provided with adequate conditions of confinement, which include ensuring access to food, medical care, mental health support, and other necessities of life.

6. Protect privacy.

Public health authorities should avoid unnecessarily infringing on the privacy of individuals who have potentially been exposed to transmissible diseases, especially given the potential for stigmatization in communities and workplaces. For example, states should not affirmatively post signs or notices outside the homes of individuals who have been subject to public health-related restrictions. Officials should be trained in appropriate ways to protect privacy.

7. Provide income and job protections.

A quarantine is not a punishment, but a burden placed on behalf of society on people who, through no fault of their own, are potential disease victims. States should ensure that their laws prohibit adverse action by employers against employees unable to perform their ordinary job duties due to a quarantine or to restrictions on movement, and should provide reasonable compensation to the individual for lost income or other damages caused by the restriction.

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