PREPARE FOR THE WORST: PROTECTING CIVIL LIBERTIES IN THE MODERN AGE OF BIOTERRORISM

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I. INTRODUCTION

Americans began hoarding Cipro—a drug that can be used to treat anthrax—within a month of the 9/11 attacks. As if to confirm their fears, an anthrax scare gripped the nation in a matter of weeks. The threat of a bioterrorist attack had been contemplated before, but it was brought into sharp relief during the anthrax crisis. In part as a result of the juxtaposition of 9/11 and the anthrax scare, bioterrorism response plans have become a central aspect of emergency preparedness.

This Comment will examine the practical effects of recent developments in bioterrorism response plans. I will argue that states that have not engaged in a thoughtful modernization of their bioterrorism response laws have left their citizens vulnerable to unconstitutional infringement of their civil liberties in the event of a bioterrorist attack, and that modernization is long overdue. The bioterrorism response legislation of three states (Minnesota, Mississippi, and Delaware) illuminates the varying relationship of these plans to citizens’ constitutional rights. I examine Delaware and Minnesota law because the statutes enacted in those states demonstrate different approaches to modernizing public health emergency laws; I analyze Mississippi law because it is one of the states that has not updated its laws that authorize public health emergency response. Delaware has largely enacted the Model State Emergency Health Powers Act (“MSEHPA” or “Model Act”),1 which is discussed below. Minnesota has been noted

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by one of the chief academic critics of the MSEHPA as an example of how the MSEHPA can be amended to conform with constitutional requirements for the protection of civil liberties. These three states provide a sample of the forms that such legislation can take and the impact that public health emergency legislation can have on constitutional rights. My analysis demonstrates that old public health laws that resemble those of Mississippi are insufficient to protect individuals from governmental encroachment upon their civil liberties in the event of a public health emergency. The MSEHPA is not ideal, however, and if states enact comprehensive bioterrorism response legislation, they should use the MSEHPA as a template and add provisions designed to preserve the constitutional rights of the citizenry in the event of an attack of bioterrorism.

Part II examines the MSEHPA, its implications, and the legal academic response to the Model Act. Parts III and IV examine the right to procedural due process and the right to personal autonomy in three different states in terms of the kind of protection afforded (and not afforded) by bioterrorism response plans with respect to two public health tools: quarantine and mass vaccination. The analysis of these rights sheds light on the debate regarding the balance between civil liberties and terrorism response because they are flashpoints—rights guaranteed by the Constitution that are likely to be threatened by a poorly executed response to an act of bioterrorism. The effects of quarantine on procedural due process rights and the effects of the use of mass vaccination on the right to personal autonomy are key because quarantine and vaccination are public health tools that are either currently in use or have been widely used throughout American history to prevent the spread of infectious disease. In addition, examining the rights within the context of quarantine and vaccination provides an example of the implications of each of the plans.

States that have not taken steps to modernize their laws regarding state police power with respect to such matters should recognize that the constitutional rights of their citizens are in jeopardy. While Delaware could adopt more protective measures that would still allow for effective responses to bioterrorism, the differences between the Delaware and Minnesota plans are dwarfed by the differences between the two modern plans and Mississippi’s statutory framework that provides for bioterrorism response. Mississippi lacks nearly all of

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the protective measures present in the Minnesota or the Delaware plans. Using the MSEHPA to modernize bioterrorism response law is a useful starting point, but it can be amended to provide additional protection for the rights of the citizenry. In the case of public health measures like quarantine, the likelihood is that no realistic plan is going to be particularly palatable from the perspective of preserving civil liberties, but if states do implement quarantine, modern statutes are more likely to hold officials accountable for actions that infringe upon the civil rights of individuals and to provide protection for citizens’ constitutional rights.

II. THE MODEL STATE EMERGENCY HEALTH POWERS ACT

Shortly after 9/11 and the anthrax scare that followed, the Centers for Disease Control and Prevention (“CDC”) asked a multidisciplinary team at the Center for Law and the Public’s Health at Georgetown University and Johns Hopkins University to draft a model statute to guide states seeking to update their public health emergency laws. The team that undertook the project was established before 9/11; the Turning Point Public Health Statute Modernization Collaborative and the Center for Law and the Public’s Health began working towards a legal transformation of the public health system after the Robert Wood Johnson Foundation and the W.K. Kellogg Foundation funded the establishment of the Collaborative in 2000. The initial focus of the Collaborative was to assess public health laws with regard to a range of public health issues, but after the 9/11 attacks the team turned its attention to the pressing issue of bioterrorism.

The goal of the MSEHPA was to provide a template for modernizing public health emergency legislation that was tailored to current public health threats. The authors acknowledged in the Model Act’s accompanying commentary that some limitations on civil liberties may be necessary in an emergency, but they argued that the team set out to prevent infringement on civil liberties and to set a high bar for what can be deemed a public health emergency. The resulting

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4 Id. at 3.
5 Id. at 7.
6 Id. at 9.
7 Id.
model statute has had a substantial impact on state laws.8 As of July 2006, thirty-eight states had adopted some portion of the MSEHPA.9 The Model Act has also set off a firestorm of criticism about the sweeping powers it gives to state officials in the event of a public health emergency.

George Annas, a law and public health professor at Boston University, is one of the chief academic opponents of the MSEHPA. Annas has argued that the Model Act is too broad, applying to an excessive range of public health incidents.10 In addition, Annas disputes the notion that all acts of bioterrorism should be handled by public health officials; he points out that much of the emergency response will be handled by medical professionals employed by hospitals and other private facilities, and that public health personnel should oversee the process and provide guidance to the public,11 and therefore need not be granted such sweeping powers. Annas also objects to the Act because it assumes the worst on several fronts. To begin with, he has argued that many of the eventualities contemplated by the Model Act, including mass quarantine and forced vaccination, are unnecessary (and likely to be ineffective) in the event of an actual public health emergency.12 Also, Annas notes that the Model Act assumes that medical personnel and the public will be unwilling to cooperate with the relief effort in the event of an attack; he points out that the response to 9/11 should lead us to the opposite conclusion.13 Finally, Annas argues that the MSEHPA gives the governors of individual states and health officials acting under their authority far too much power.14

Lawrence Gostin, a prominent public health law scholar based at Georgetown University, takes a different view of the matter; he and his colleagues see legal reform of public health emergency laws as an essential component of national security planning. They argue that many state public health laws are out of date, designed to respond to old public health threats that are no longer among our chief con-

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8 Even the impact of the Model Act, however, is debated. George Annas, an opponent of the MSEHPA, has argued that its impact on state legislation has been overstated. See Annas, supra note 2, at 96.
9 CT. FOR LAW AND THE PUBLIC’S HEALTH, supra note 1.
11 Id. at 51–52.
12 Id. at 46.
13 Id. at 51.
14 Id. at 49.
They contend that older public health emergency laws do not reflect either current understanding of medical science nor the recognition of individual rights that has become enshrined in law and bioethics in recent years. Gostin and his colleagues also argue that the variation among public health laws from state to state could impede a response to a multistate public health emergency. Finally, Gostin and his colleagues contend that many state statutory frameworks that govern public health emergencies are confusing and could lead to delay in the event of an attack of bioterrorism. They view the MSEHPA as a solution to these problems.

State laws adopted in recent years to respond to bioterrorist threats will have a huge impact on the lives of ordinary citizens in the event of an attack. The bioterrorism bill passed in 2002 by the federal government—the Public Health Security and Bioterrorism Preparedness and Response Act—relies a great deal on the response of states because much of the authority to respond to public health emergencies lies within the purview of state police power. The federal government also has considerable public health emergency power, however, as I will discuss below. As a result, the variations in state public health emergency legislation could mean that citizens' constitutional rights could be vitiated in State A, where the legislature has enacted one statutory framework, and could remain much more protected in State B, where the statutory framework balances the tension between preservation of public health and civil liberties differently.

III. QUARANTINE

One of the key responses to public health emergencies envisioned by laypeople is quarantine. Quarantine has been discussed extensively in popular discourse; leper colonies make an appearance in at least one classic film about the ancient world, and anyone who has

16 Id. at 623–24.
17 Id. at 624.
18 Id.
20 See supra note 40 and accompanying text.
21 See, e.g., BEN-HUR (Metro-Goldwyn-Mayer 1959) (providing an example of the cinematic treatment of an ancient leper colony).
ever visited the museum at Ellis Island knows that people coming into the United States were often quarantined to ensure that they were not carrying infectious diseases before they were allowed to enter the country. More recently, the use of quarantine and isolation as public health tools made the national news when Andrew Speaker—the so-called “traveling tuberculosis patient”—was isolated at the National Jewish Medical and Research Center in Denver for eight weeks while he received treatment.

Quarantine has been used to control disease for centuries. Ailing individuals are isolated from their communities in the Bible, and individuals infected (or possibly infected) with the bubonic plague were isolated in Europe during the Middle Ages. Quarantine is distinct from isolation; quarantine is the separation of well persons presumed to be exposed to an infectious agent from the general population, whereas isolation is the separation of persons already ill with an infectious disease from those around them. Quarantine powers were established in the United States as early as 1796, when, in response to a yellow fever epidemic, Congress passed a statute that allowed the federal government to assist states in establishing quarantine. Massachusetts passed the nation’s first comprehensive public health powers statute shortly thereafter, in 1797, and that statute established the first state quarantine powers in the new nation.

Quarantine was implemented at various times during the first one hundred and thirty years of American history. A substantial facility for detaining yellow fever victims was constructed outside of Phila-


23 Speaker was diagnosed with tuberculosis in January 2007, and doctors asked him not to travel after they discovered that his tuberculosis was resistant to a number of drugs often used to treat the infection. See Denise Grady, Fed up, TB traveler hits back at his critics, INT’L HERALD TRIB., June 11, 2007, at 7; Miranda Hitti, Andrew Speaker Released from Hospital, WEBMD HEALTH NEWS, July 26, 2007, http://www.medicinenet.com/script/main/art.asp?articlekey=82856.

24 See Leviticus 13:46 (stating that infected persons must live in isolation).


27 Daubert, supra note 25, at 1303–04.

28 Id.
delphia in 1799 following a yellow fever epidemic.\(^{29}\) Quarantines were often established to protect the American population from diseases that could be brought in by ships arriving from foreign countries. In 1808, for example, the Boston Board of Health began requiring that ships from the Mediterranean, the Caribbean, and other tropical ports be quarantined for three days or not dock until a full twenty-five days had passed since they left the last port, whichever was longer.\(^{30}\) Nonetheless, large-scale quarantine has not been imposed in the United States since the Spanish influenza epidemic of 1918.\(^{31}\)

Under current law, both states and the federal government have the power to impose quarantine.\(^{32}\) The federal government’s power to establish quarantine rests in several statutes: Title 42 of the United States Code,\(^ {33}\) the Stafford Act,\(^ {34}\) and the Public Health Security and Bioterrorism Preparedness and Response Act of 2002.\(^ {35}\) Title 42 confers power on the Secretary of Health and Human Services, the Surgeon General, and the CDC to limit movement of individuals (both into and within the United States) to prevent the spread of disease.\(^ {36}\) Quarantine is authorized to prevent the spread of a limited number of communicable diseases; those diseases must be identified by Executive Order.\(^ {37}\) The most recent such Executive Order, issued by President Bush in April 2003 and amended in 2005, contains an extensive list of “quarantinable” communicable diseases, including cholera, diphtheria, infectious tuberculosis, plague, smallpox, yellow fever, viral hemorrhagic fevers, SARS, and a variety of influenzas.\(^ {38}\)


\(^{30}\) Id.


\(^{32}\) Daubert, *supra* note 25, at 1304–08.


The Stafford Act provides a second avenue through which the federal government can establish quarantine. Following a declaration of emergency, the Federal Emergency Management Agency (“FEMA”) and a number of other agencies (including the Centers for Disease Control) are authorized to implement health and safety measures, which the Center for Law and the Public’s Health has interpreted as including quarantine. The Public Health Security and Bioterrorism Preparedness and Response Act of 2002 authorizes the Department of Health and Human Services to provide assistance to states in the event of a bioterrorist attack, which arguably extends to assisting states in the establishment of quarantine.

State police power was extended to imposition of quarantine in Gibbons v. Ogden. The degree to which states articulate their power to impose quarantine, however, varies greatly. For the most part, state laws dealing with quarantine power discuss three major categories of concerns: sexually transmitted diseases; “traditional” illnesses, such as smallpox; and “re-emerging” infections, such as tuberculosis, which, after a number of years of dormancy, appear to be resurfacing. In addition, a number of states have amended their old statutory frameworks or passed new laws to respond to specific concerns that arose after 9/11.

Quarantine, while arguably a useful public health tool, poses a threat to civil liberties, including the right to due process. The Fifth and Fourteenth Amendments to the Constitution state that persons cannot be deprived of life, liberty, or property without due process of law. Due process jurisprudence has developed into two categories: substantive and procedural. Substantive due process jurisprudence is a vast area of constitutional law that has encompassed everything from the right of women to use contraception to the right of parents

List of Quarantinable Diseases, (2006) http://www.cdc.gov/ncidod/dq/qa_influenza_amendment_to_eo_13295.htm#diseasesadded (noting that SARS was added to the list in 2003 and the other diseases have been on the list since 1983); Tomianovic, supra note 26.

40 SAPSIN, supra note 34, at 4.
41 Id.
42 22 U.S. (9 Wheat.) 1, 203 (1824); Daubert, supra note 25, at 1304.
43 SAPSIN, supra note 34, at 5.
44 Id.; see also Paula Mindes, A Tuberculosis Quarantine: A Review of Legal Issues in Ohio and Other States, 10 J.L. & HEALTH 403, 405–06 (1995) (discussing the re-emergence of tuberculosis since the 1980s).
45 SAPSIN, supra note 34, at 5.
to direct the education of their children. This Part of the paper examines only the procedural due process implications of the various state bioterrorism response plans. Certain aspects of substantive due process implicated by bioterrorism response are discussed in the portion of the paper that analyzes the threats to civil liberties associated with mass vaccination.

Quarantine requires collective action; quarantine is most effective when ninety percent of the affected population is compliant with the quarantine order. So any effective quarantine would have to apply to almost all individuals, including those opposed to it. One of George Annas’s objections to the MSEHPA is its contemplation of quarantine, despite the fact that mass quarantine has not been implemented for the better part of a hundred years (as noted above). One obvious interest implicated by the prospect of quarantine is the liberty interest; because quarantine would limit the right of individuals to move around, the most basic understanding of liberty would be compromised by quarantine. As held in Foucha v. Louisiana, “freedom from bodily restraint has always been at the core of the liberty protected by the Due Process Clause from arbitrary governmental action.” In O’Connor v. Donaldson, Chief Justice Burger stated that involuntary commitment of any kind constitutes “a deprivation of liberty which the State cannot accomplish without due process of law.” Quarantine and isolation implicate “the most elemental of liberty interests—the interest in being free from physical detention by one’s own government.” Nonetheless, freedom from bodily restraint is not absolute; even outside the criminal context, examples of such governmental restraint exist, particularly in the context of mental illness treatment. Arguably, quarantine serves a similar function. The deprivation of liberty has the potential to benefit the individual (by increasing the chances that she will get appropriate treatment) as well as the population as a whole (by detaining people

49 Annas, supra note 10, at 35.
53 See, e.g., Parham v. J.R., 442 U.S. 584, 605–06 (1979) (holding that children can be committed to mental institutions by their parents or guardians without an adversarial hearing).
who may be dangerous to others), thus mirroring the dual purposes of mental illness treatment.

Procedural due process rights reflect the context in which they are applied. The Supreme Court has held that the interests of the individual must be balanced with the interests of the state, while keeping in mind what benefits might arise from additional process.\(^54\) Within the mental health context, for example, the Supreme Court limited the rights of minors to procedural due process in part because states do not have the resources to second-guess (via an adversarial hearing) every medical decision made by parents on behalf of their children.\(^55\) The Supreme Court cited a number of reasons for holding that an adversarial hearing was unnecessary to protect the rights of children being committed to mental institutions despite their objections.\(^56\) Likewise, courts have held that states need not be held to the due process standards of less urgent proceedings, such as criminal trials, when establishing quarantine.\(^57\)

The Fourteenth Amendment requires that states afford individuals specific due process protections before depriving them of life, liberty, or property. Basic procedural requirements often include notice, a hearing, access to counsel, and a final decision that is accompanied by an opportunity to seek review of that decision.\(^58\) Confinement for medical reasons has been deemed an infringement on liberty interests in other contexts. In 1979, the Supreme Court held that civil commitment for psychiatric purposes constitutes a deprivation of liberty and cannot be imposed without sufficient process.\(^59\) The Supreme Court has limited the right of the state to commit mentally ill persons who were not a threat to themselves or those around them to psychiatric facilities.\(^60\) The Court has also held that the loss of liberty through one set of constitutionally sufficient procedures is insufficient to justify the loss of liberty in another context.\(^61\) Courts have held that quarantines are subject to many of the same

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\(^{55}\) \textit{Parham}, 442 U.S. at 605–06.

\(^{56}\) \textit{Id.} at 605–08.

\(^{57}\) \textit{See, e.g.,} Morales v. Turman, 562 F.2d 993, 998 (5th Cir. 1977) (citing Jacobson v. Massachusetts, 197 U.S. 11, 29–30 (1905)).


\(^{59}\) Addington v. Texas, 441 U.S. 418, 432–33 (1979); \textit{see Mindes,} \textit{supra} note 44, at 413–15.


\(^{61}\) \textit{See Vitek v. Jones,} 445 U.S. 480, 491–92 (1980) (holding that a prison could not transfer an inmate to a mental hospital without a hearing despite the fact that he had already been adjudicated in the criminal justice system).
due process requirements as civil commitments for mental illness,\textsuperscript{62} and many state laws, including those discussed below, reflect that development. Because quarantine serves a similar purpose as civil commitment for mental illness treatment, similar procedures may be required in the event of a modern quarantine, and updated public health laws, such as those of Minnesota and Delaware, provide for a number of due process protections in the event of quarantine (discussed below).

\textit{Mathews v. Eldridge}, as noted above, established that courts should employ a balancing test to determine what kind of process is due, taking into consideration the benefit of additional process to the individual and the cost to the state of requiring additional procedures.\textsuperscript{63} The establishment of the \textit{Mathews} test suggests that statutes that balance the benefits of preserving civil liberties and the burdens of providing additional process are more likely to withstand judicial scrutiny. Therefore, the value of state bioterrorism response plans should be measured by the degree to which the plans stress the preservation of individual liberty as a goal separate from that of protecting the populace from the danger of a biological agent. The following Part examines the three state plans with that question in mind and concludes that however flawed modern bioterrorism response laws may be, they provide concrete protections for constitutional rights that some old public health emergency laws lack.

\textbf{A. Minnesota}

Minnesota statutory law requires that any quarantine be instituted by the “least restrictive means necessary.”\textsuperscript{64} It contains substantial requirements to protect the due process rights of quarantined and isolated individuals. (For the sake of clarity, the due process protection provisions for all of the plans are summarized at the end of the state-specific discussion.) The Minnesota legislature appears to have contemplated what shape a quarantine might take and attempted to provide for the kind of quarantine that would be least frightening to the Minnesota citizenry; the statute anticipates establishing quarantine of individuals in their own homes (though it does not limit the power of

\begin{footnotes}
\item[62] See Mindes, supra note 44, at 417 (noting that courts sometimes apply the procedural due process protections required for civil commitment in quarantine cases).
\item[64] MINN. STAT. ANN. § 144.419, subdiv. 2(b) (West 2005 & Supp. 2009).
\end{footnotes}
Another component of the Minnesota quarantine powers statute that must be the result of careful assessment of the risks of quarantine is the requirement that quarantined and isolated individuals be given a “reliable means” to communicate with health officials (presumably these would often be the same officials responsible for placing them in quarantine in the first place) twenty-four hours a day. The express purpose of this provision is to ensure that health emergencies do not go unattended. It also helps to ensure, however, that the requirements of another provision, stating that individuals be immediately released if they do not pose a known risk to the others, will be adequately met. Functionally speaking, this means that at any time of day a quarantined individual who suspects she is no longer contagious can seek out a health official and ask her to confirm the legitimacy of her continued quarantine.

In addition to the requirement that quarantined and isolated individuals be able to communicate with health professionals, there is a statutory requirement that family members of persons who are isolated or quarantined be able to enter the area to which individuals are restricted. This requirement lessens the possibility that large numbers of the population would end up quarantined for an indefinite amount of time without access to friends and family who could advocate for their speedy release. Finally, Minnesota law requires that isolation or quarantine must automatically terminate when the court order that instituted it expires or at the point at which health officials deem the persons involved no longer a risk to others, whichever occurs first.

B. Delaware

Delaware’s quarantine powers track those of Minnesota to a certain degree. It lays out similar requirements to protect the due process rights of quarantined individuals. Delaware too requires that the state must use the “least restrictive means necessary” to prevent the spread of disease in the event of a public health emergency. But in

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65 Id. § 144.419, subdiv. 2(b).
66 Id. § 144.419, subdiv. 2(d).
67 Id. § 144.419, subdiv. 2(f).
68 Id. § 144.419, subdiv. 5(b).
69 Id. § 144.419, subdiv. 3.
70 DEL. CODE ANN. tit. 20, § 3136(1)(c) (2005).
comparing the Delaware and Minnesota emergency health powers, the devil is in the details.

The Delaware plan does not require, for example, that quarantined and isolated individuals have access to health officials twenty-four hours a day, which heightens the risk that individuals will be quarantined or isolated and then ignored, particularly since it is coupled with the fact that the Delaware quarantine powers do not require immediate release of a person who poses no risk to the public and do not require that the risk be “known,” as the Minnesota plan requires. Delaware law requires that a quarantine be terminated when the person no longer poses an ongoing risk, but it leaves more power in the hands of the health official, which, as noted above, the individual seeking to be released may or may not be able to contact.\footnote{Id. § 3136(2)(b).}

It does not require that family members be able to enter the quarantine/isolation area, thereby excluding those most likely to serve as advocates for those who have been detained, and also may pose additional constitutional concerns beyond the range of the present discussion. For example, the constitutional requirement that parents should be able to oversee the care of their children might be placed in jeopardy under such circumstances.\footnote{In 1923, the Supreme Court held that there were limits to the degree the state could interfere with a parent’s right to control the education of his children. Meyer v. Nebraska, 262 U.S. 390 (1923).}

On the other hand, the Delaware quarantine powers contain certain aspects that Minnesotans might want to add to their statutory provisions for quarantine and isolation, the most significant of which is the standard of proof needed to institute quarantine. Delaware law requires “clear and convincing evidence” that individuals pose a risk to others before quarantine or isolation can be imposed.\footnote{Del. Code Ann. tit. 20, § 3136(2)(a).} In addition, the Delaware plan requires that a person must pose “a significant risk of transmitting a disease to others with serious consequences” in order to justify quarantine.\footnote{Id. § 3136(2)(a).} While one might argue that no state would go through the trouble of instituting a quarantine without the prospect of “serious consequences,” one of the objections to the MSEHPA was that it was too broad and contemplated government action in terms that were overly expansive.\footnote{Id.; Annas, supra note 2, at 51–52.} Given that due process is a continual balancing act, as evidenced by the test laid out

\footnote{Id. § 3136(2)(b).}

\footnote{In 1923, the Supreme Court held that there were limits to the degree the state could interfere with a parent’s right to control the education of his children. Meyer v. Nebraska, 262 U.S. 390 (1923).}

\footnote{Del. Code Ann. tit. 20, § 3136(2)(a).}

\footnote{Id. § 3136(2)(a).}

\footnote{Id.; Annas, supra note 2, at 51–52.}
in *Mathews*, the addition of clear standards and a reminder of the circumstances in which quarantine and isolation can be legitimately imposed provides additional protection for the constitutional rights of the citizenry.\(^{76}\)

**C. Mississippi**

Mississippi provides yet another perspective on post-9/11 health emergency response. While Mississippi law provides for the establishment of quarantine, the statutes that do so are quite old—one of them was passed in 1950.\(^{77}\) The quarantine laws in Mississippi do not designate what kind of court proceedings are required to establish quarantine; they do not indicate a system for appeal once quarantine is established. They do not state what kind of evidence is required to quarantine an individual or under what circumstances the quarantine will come to an end. They do not establish who can visit people in quarantine or who will treat them, and they lack the requirement, present in both the Delaware and Minnesota statutes, that the space in which individuals are quarantined be managed appropriately so as to maintain a hygienic environment.\(^{78}\) In sum, Mississippi quarantine laws lack the requirements (as explained below) that both Delaware and Minnesota included to protect the due process rights of individuals quarantined or isolated by the state.

Mississippi law also provides for specific power to quarantine individuals with sexually transmitted infections (“STIs”),\(^{79}\) which makes little scientific sense. A recent CDC report suggests that quarantine is usually imposed to prevent the spread of diseases that are passed easily from person to person, often through airborne transmission, such as Severe Acute Respiratory Syndrome (“SARS”), as opposed to STIs like AIDS, which is not on the “quarantinable” diseases list found in the most recent Executive Order on the matter.\(^{80}\) The timing of the passage of the law is telling; it was made effective in 1983, in the early

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\(^{77}\) MISS. CODE ANN. § 21-19-3 (2007); id. § 41-23-5.

\(^{78}\) DEL. CODE ANN. tit. 20, § 3136(3)(a); MINN. STAT. ANN. § 144.419, subdiv. 2(h) (West 2005); MISS. CODE ANN. § 41-23-5.

\(^{79}\) MISS. CODE ANN. § 41-23-27.

years of the AIDS crisis. We now know that quarantine is unnecessary to prevent the spread of STIs, and this law is an example of the kind of antiquated law that does not respond to current concerns described by Lawrence Gostin and his colleagues.\(^81\) Indeed, in the course of a search for recent small-scale quarantines in Delaware, Minnesota, and Mississippi, I discovered only two such examples: both in Mississippi, and both involving men with HIV, one who was gay and one who was a male prostitute.\(^82\) One would hope that in the course of a modernization of public health emergency legislation, Mississippi would eliminate laws that unnecessarily stigmatize those affected by sexually transmitted diseases.

\textit{D. Due Process Requirements}

The Minnesota and Delaware quarantine powers statutes have similar procedural requirements. Both require a court order to initiate non-emergency quarantine or isolation.\(^83\) Both provide for temporary quarantine without a court order and require that the public health authority request an order after initiating the quarantine or isolation.\(^84\) Both require that quarantined or isolated individuals have access to counsel in the event of a hearing and require that people who cannot afford counsel be provided with representation at state expense.\(^85\)

In many cases Minnesota law is more protective than Delaware law. Minnesota, for example, requires notice of quarantine or isolation; Delaware provides an out, allowing officials to provide reasons that notice is impractical.\(^86\) One substantial difference is that Minnesota allows the state to detain individuals without a hearing for up to twenty-one days; Delaware does not place an outside limit on how long the state can detain an individual under quarantine, though the statute does require that a hearing be held within seventy-two hours if one is requested by the detained individual.\(^87\) Delaware, however (as

\(^{81}\) Gostin et. al., supra note 15, at 623.

\(^{82}\) See Carter v. State, 803 So. 2d 1191 (Miss. Ct. App. 1999); Male Prostitute in Mississippi Put Under Quarantine Order, N.Y. TIMES, Feb. 12, 1987, at B17. In Carter v. State, the defendant was sentenced to five years in prison for violating a quarantine order that required him to inform his sexual partners of his HIV status and “refrain from any activity whereby his blood would be commingled with others’ blood.” 803 So. 2d at 1193.

\(^{83}\) DEL. CODE ANN. tit. 20, § 3136(5)(c); MINN. STAT. § 144.4195, subdiv. 1(a).

\(^{84}\) DEL. CODE ANN. tit. 20, § 3136(5)(d); MINN. STAT. § 144.4195, subdiv. 2(a).

\(^{85}\) DEL. CODE ANN. tit. 20, § 3136(7)(b); MINN. STAT. § 144.4195, subdiv. (2)(a).

\(^{86}\) DEL. CODE ANN. tit. 20, § 3136(5)(b)(7); MINN. STAT. § 144.4195, subdiv. 1(e).

\(^{87}\) DEL. CODE ANN. tit. 20, § 3136(5)(c); MINN. STAT. § 144.4195, subdiv. 1(e).
noted above), requires a standard of clear and convincing evidence to initiate quarantine; under Minnesota law, ex parte orders for quarantine can be granted if “probable cause exists to believe isolation or quarantine is warranted to protect the public health.” As noted above, the Mississippi laws governing quarantine lack all of these procedural protections, demonstrating that the most important distinction is not between the different modern statutes but between the modern statutes and the old statutes; the newer statutes provide much more comprehensive protection of civil liberties.

IV. VACCINATION

In the event of an attack of bioterrorism, one of the primary public health tools that might be implemented to prevent the spread of an infectious agent is mass vaccination. For example, the spread of smallpox, one of the oldest tools of bioterrorism, might be best prevented by vaccinating everyone in the affected area. The smallpox vaccine has not been widely distributed in the United States since 1972 when the disease was eradicated from the United States, but the CDC currently holds enough vaccine to immunize everyone in the United States in the event of an emergency.

The MSEHPA contemplates mass vaccinations, and it contains a provision that states should quarantine or isolate members of the population who refuse to be vaccinated. Some health law scholarship has argued that any vaccination program responding to a major health emergency should be mandatory, as the benefit to many outweighs the potential harm to a few. Indeed, Gostin argued in publications predating the MSEHPA that public health as a discipline re-

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88 DEL. CODE ANN. tit. 20, § 3136(2)(a); MINN. STAT. § 144.4195, subdiv. (1)(a).
89 During the French and Indian War (1754–63), the British gave blankets carrying the smallpox virus to Native Americans allied with the French. Huge numbers of Native Americans died from the disease as a result; they had never been exposed to the disease and had no opportunity to build up immunity. Colette Flight, Silent Weapon: Smallpox and Biological Warfare, http://www.bbc.co.uk/history/worldwars/coldwar/pox_weapon_01.shtml (last visited Mar. 26, 2009).
quires collective action; individuals cannot provide for minimum standards of health acting alone.  

Immunizations, however, are controversial for a number of reasons. Some Americans object to vaccines on spiritual grounds; most states allow parents to forego vaccinations for children for religious reasons. In West Virginia, one of the two states that does not allow such religious exemptions, an anti-mandatory vaccine group is currently advocating for exemptions, indicating that objection to vaccines in that state is a live issue. In addition, a health-related anti-vaccine movement has recently emerged. Of particular concern to parents in recent years has been the speculated link between vaccines containing thimerosal and the increasing prevalence of autism spectrum disorders, which by some estimates affect one in every 150 American children. Though the CDC and the Institute of Medicine state that available evidence does not support the supposed link between vaccines and autism, many parents remain wary. Recent news coverage indicates that some parents seek religious exemptions for their children’s vaccinations despite the fact that they do not belong to a religion that objects to immunizations because they are concerned about the health ramifications. Finally, a firestorm of controversy arose surrounding the introduction of the human papillomavirus (HPV) vaccine, which is recommended for eleven to twelve-year-old girls and can be given to girls as young as nine years old. Some social conservatives initially objected to vaccinating

94 See West Virginians for Vaccination Exemption, http://www.wvve.info (last visited Mar. 26, 2009) (urging legislation in West Virginia to provide the exemptions already available in most states). In Mississippi, one of the few states that lacks a religious exemption for immunizations, a law that allowed religious exemptions was held unconstitutional under the Fourteenth Amendment. Brown v. Stone, 378 So. 2d. 218 (Miss. 1979), cert. denied, 449 U.S. 887 (1980). See also Donya Khalili & Arthur Caplan, Off the Grid: Vaccinations Among Homeschooled Children, 35 J.L. MED. & ETHICS 471, 473 & n.43 (2007).
96 Ctrs. for Disease Control and Prevention, Mercury and Vaccines (Thimerosal), http://www.cdc.gov/vaccinesafety/concerns/thimerosal.htm (last visited March 26, 2009).
97 Id.
young girls, arguing that eliminating the risk of HPV would encourage sexual activity among teenagers.\footnote{David Brown, \textit{HPV Vaccine Advised for Girls}, WASH. POST, June 30, 2006, at A5.}

In the event of a major public health emergency, the efficacy of vaccination as a tool to prevent the spread of disease will only be as extensive as the vaccination program is comprehensive. Every person who remains unvaccinated in such a situation arguably becomes a risk to the people living around her, and so the question arises of how to respond to an individual’s refusal to be vaccinated. Modern case law indicates that the right to refuse medical treatment is enshrined in constitutional law.\footnote{Cruzan v. Mo. Dept. of Health, 497 U.S. 261, 269–70 (1990).} The analysis of Minnesota, Delaware, and Mississippi statutes highlights the different ways that states balance the use of vaccination as a public health tool with the preservation of individual civil liberties.

A. Privacy, Personal Autonomy, and Bodily Integrity

Unlike the right to due process, there is no express constitutional provision providing for an individual’s right to privacy or personal autonomy, and the existence of that right has been hotly debated. This debate received substantial attention in 1987 when Robert Bork’s refusal to recognize such a right may have led many to oppose his nomination to the Supreme Court.\footnote{Erwin Chemerinsky, \textit{Seeing the Emperor’s Clothes: Recognizing the Reality of Constitutional Decision Making}, 86 B.U. L. REV. 1069, 1076 (2006).} Nonetheless, case law regarding a number of aspects of American life has coalesced into what we now understand as the right to bodily integrity and personal autonomy.

Modern case law regarding bodily integrity and personal autonomy provides a stark contrast with the key Supreme Court case on mass vaccinations. In \textit{Jacobson v. Massachusetts} the Court held that mandatory vaccinations were constitutional.\footnote{197 U.S. 11 (1905).} Despite its considerable age (it was handed down in 1905), \textit{Jacobson} is a crucial case in the public health legal framework, and scholars still regularly cite it.\footnote{See, e.g., Daniel D. Stier et al., \textit{The Courts, Public Health, and Legal Preparedness}, 97 AM. J. PUB. HEALTH S69 (2007) (citing the Jacobson decision authorizing mandatory smallpox vaccination).} In \textit{Jacobson}, the Court clearly stated that the liberty interest at stake is not absolute.\footnote{Jacobson, 197 U.S. at 26.} As Justice Harlan stated, “[t]here are manifold restraints
to which every person is necessarily subject for the common good.”\textsuperscript{107} Jacobson, however, was decided before the modern individual rights doctrine was developed. While the Supreme Court has not had to address the issue of mass vaccination recently and therefore has not had to reconcile recent decisions with the precedent laid out in Jacobson, modern requirements for personal autonomy in a medical setting call that precedent into question.

Beginning in 1965, the Supreme Court handed down a series of decisions that emphasized the importance of “zones of privacy” for individuals.\textsuperscript{108} The cases from the mid-1960s that led up to the various abortion decisions established a right to privacy that is now understood more as a right to bodily integrity and personal autonomy.\textsuperscript{109} In 1965, the Court struck down a Connecticut law that banned the use of contraception by married couples.\textsuperscript{110} Justice Douglas found the right to privacy in penumbras emanating from the First, Third, Fourth, and Fifth Amendments.\textsuperscript{111} Justice Harlan argued that the right to marital privacy was “implicit in the concept of ordered liberty” provided for by the Fourteenth Amendment.\textsuperscript{112} Justices Goldberg, Warren, and Brennan found the right to privacy in the Ninth Amendment, which protects rights not specifically enumerated by the other nine amendments of the Bill of Rights.\textsuperscript{113} The Court emphasized that the doctrine of marital privacy was established long before the Bill of Rights.\textsuperscript{114} Griswold reaffirmed that the Court was disinclined to allow the state to interfere with aspects of private individuals’ lives that traditionally had been free of state scrutiny.

In \textit{Eisenstadt v. Baird}, the Court extended the holding of Griswold to include the right of unmarried persons to use contraception.\textsuperscript{115} In that opinion, Justice Brennan argued that the right of marital privacy was dependent on the right of the individuals in that marriage to privacy: “If the right of privacy means anything, it is the right of the

\begin{footnotes}
\item[107] Id.
\item[110] Griswold, 381 U.S. at 479.
\item[111] Id. at 484.
\item[112] Id. at 500 (Harlan, J., concurring) (quoting Palko v. Connecticut, 302 U.S. 319, 325 (1937)).
\item[113] Id. at 487 (Goldberg, J., concurring); see also U.S. CONST. amend. IX.
\item[114] Griswold, 381 U.S. at 486 (majority opinion).
\end{footnotes}
dividual, married or single, to be free from unwarranted governmental intrusion into matters so fundamentally affecting a person as the decision whether to bear or beget a child.\textsuperscript{116} Though the holding in \textit{Eisenstadt} rests largely on the Equal Protection Clause of the Fourteenth Amendment (holding that treating similarly situated persons differently on the basis of marital status violates the Equal Protection Clause), \textit{Eisenstadt} also served to expand the privacy protection in \textit{Griswold} that rests on the doctrine of marital privacy into a broader notion that there should be a sphere of life relatively free from government intervention.\textsuperscript{117}

\textit{Roe v. Wade} was a logical extension of the right to privacy, since the decision directly affected the right of women to control whether they were to “bear or beget a child.”\textsuperscript{118} The fundamental right of a pregnant woman to seek an abortion as identified in \textit{Roe} is based on the liberty interest identified in the Due Process Clause. \textit{Roe} proved a divisive addition to the right to privacy doctrine, and contentious discussion of the right to privacy has often served as a proxy for an ongoing debate about the validity of \textit{Roe}. Despite the controversy, \textit{Roe} has survived a number of changes to the Court, though it has been limited by subsequent cases, particularly \textit{Planned Parenthood of Southeastern Pennsylvania v. Casey}\textsuperscript{119} and \textit{Gonzales v. Carhart}.\textsuperscript{120}

The plurality opinion in \textit{Casey} focuses on a right to “bodily integrity”—a right that is never explicitly mentioned in \textit{Roe}, but which the Court in \textit{Casey} stated was established when \textit{Roe} was decided.\textsuperscript{121} The authoring Justices found that the principle of bodily integrity became enshrined in constitutional law in part through a range of cases decided between \textit{Roe} and \textit{Casey}, one of which was \textit{Cruzan v. Director, Missouri Department of Health} (discussed further below).\textsuperscript{122} As Professor Seth Kreimer noted in a recent article, however, the notion of bodily integrity arose in the medical context before \textit{Cruzan}; in \textit{Mills v. Rogers}, the Court found that involuntary administration of antipsychotic

\textsuperscript{116} Id. at 453 (emphasis in original).
\textsuperscript{117} Id. at 454.
\textsuperscript{119} 505 U.S. 833, 899 (1992) (holding that states can require parental consent for abortions for minors, provided there is a judicial bypass).
\textsuperscript{120} 550 U.S. 124 (2007) (upholding a law that banned intact dilation and evacuation, a form of late-term abortion also known as partial-birth abortion).
\textsuperscript{121} Casey, 505 U.S. at 849.
\textsuperscript{122} Id. at 857; Cruzan v. Dir., Mo. Dept’ of Health, 497 U.S. 261 (1990).
\textsuperscript{123} Kreimer, \textit{supra} note 109, at 438–40.
medication might violate the Due Process Clause, and that principle was confirmed in Washington v. Harper. Kreimer argues that the right to bodily integrity has become more entrenched in recent years as the Court has continued to hear the claims of plaintiffs seeking to protect themselves from physical intrusion sanctioned by the state. Though Kreimer focuses on cases arising from incarceration, those cases have important implications for the rights of individuals in the context of a public health emergency, when individuals are more likely than usual to be under the physical control of government officials.

Particularly important within the context of public health is the significance that medical decision-making holds within this doctrine. Griswold, Eisenstadt, and Roe all involved laws that limited the right of individuals to take advice offered by medical personnel or to undergo procedures that physicians would have been otherwise willing to perform had the law not intervened. In each case, the Court limited the right of the state to intervene in decisions made by individuals at the recommendation or with the consent of their medical providers. In Cruzan, a case involving a dispute about whether to terminate artificial hydration and nutrition being given to a woman in a persistent vegetative state, the Court clarified and extended this arc of jurisprudence. In that case, the Court noted the ancient principle, enshrined in tort law, that unwanted medical treatment constitutes a battery.

Cruzan limited that right in certain circumstances, holding that states can require “clear and convincing evidence” of an individual’s wish to die if a patient’s representatives seek to terminate life-sustaining treatment. The Supreme Court has left much of the regulation surrounding the “right to die” up to the states, as evidenced by both Cruzan and Gonzales v. Oregon, in which the Supreme Court struck down the Justice Department’s attempts to interfere with Oregon’s Death with Dignity Act. The Act provides for physician-assisted suicide for terminally ill patients under highly regul-

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125 494 U.S. 210, 221–22 (1990) (holding that the patient had a “liberty interest in avoiding the unwanted administration of antipsychotic drugs”).
126 Kreimer, supra note 109, at 439–40.
127 497 U.S. 261.
128 Id. at 269–70.
129 Id. at 280.
lated and monitored circumstances.\textsuperscript{131} As a result, there is a space in which state regulation of end-of-life treatment remains effectively unregulated by constitutional jurisprudence. According to \textit{Cruzan}, states may limit the right to refuse life-saving medical treatment,\textsuperscript{132} but states may also provide for the right to physician-assisted suicide if the legislature chooses to do so.\textsuperscript{133} The right-to-die cases have important implications for individual rights in a public health emergency. \textit{Cruzan} stands for the understanding that individuals have a basic right to direct their medical care but also allows for the right of states to limit that right when important government interests are implicated.\textsuperscript{134} The arc of cases including \textit{Roe}, \textit{Casey}, and \textit{Cruzan} has created new expectations regarding individual privacy that have wide-ranging implications for the development of bioethics policy. The precedent set by \textit{Jacobson}, if challenged in the current context, will have to be reconciled with the more modern understanding that individuals have a right to refuse medical care and to prevent government intrusion upon their persons.

\textbf{B. Minnesota}

The Minnesota and Delaware statutes differ markedly as to how they treat vaccination in the event of a public health emergency. Minnesota law states that individuals under isolation or quarantine have “a fundamental right to refuse medical treatment, testing, physical or mental examination, [and] vaccination.”\textsuperscript{135} The statute goes on to state that if a quarantined person refuses to be vaccinated or otherwise treated as indicated above, the person may have to remain in quarantine, but the statute is clearly designed to remind health officials and governing authorities that individuals do not lose their right to medical privacy in the context of isolation and quarantine.\textsuperscript{136} Furthermore, because “the right to refuse all interventions continues in isolation and quarantine,”\textsuperscript{137} the threat of quarantine is less coercive.

\begin{thebibliography}{999}
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\bibitem{132} \textit{Cruzan}, 497 U.S. at 280 (holding that a state can require "clear and convincing evidence" of the wishes of an incompetent patient to refuse life-saving treatment).
\bibitem{133} \textit{Gonzales}, 546 U.S. at 269–70.
\bibitem{134} \textit{Cruzan}, 497 U.S. at 280.
\bibitem{135} MINN. STAT. ANN. § 144.419, subdiv. 4 (West 2005 & Supp. 2009).
\bibitem{136} \textit{Id}.
\bibitem{137} Annas, \textit{supra} note 2, at 96.
\end{thebibliography}
The point is confirmed in the statutory provision that governs general emergency powers: the provision states that “[n]otwithstanding laws, rules, or orders made or promulgated in response to a national security emergency, individuals have a fundamental right to refuse medical treatment . . . .” Furthermore, the provision requires that any health official administering treatment must inform the individual of her right to refuse treatment while noting the consequences, including the possibility of isolation and quarantine. Given that constitutional rights have little power if people do not invoke them, this requirement may be the most important aspect of Minnesota’s statutory provisions governing vaccination in times of emergency.

C. Delaware

Delaware takes a less protective approach. It, too, addresses the issue of vaccination in its quarantine provisions, but the Delaware quarantine statute views vaccination differently. A refusal to accept emergency vaccination under Delaware law constitutes “prima facie evidence that said person should be quarantined or isolated”; in short, a refusal to be vaccinated creates a presumption in favor of quarantine or isolation that then shifts the burden to rebut to the individual—a presumption that might be difficult to overcome in the context of an emergency situation.

In addition, the Delaware provision does not state that vaccination should be administered only to those individuals who consent, an important component of the Minnesota law. Delaware law does not make clear whether individuals maintain their right to refuse medical treatment even in emergency situations, while Minnesota law is explicit on this point; notwithstanding a public health emergency, individuals have the right to refuse medical intervention. As a result, Delaware’s law also has no provision requiring health officials to inform individuals of their right to refuse medical treatment. So even if—and the law is vague on this point—affecte individual do have the right to refuse medical treatment in an emergency situation governed by these statutes, many of them will not know about it. The necessity of informed consent is one of the central principles of

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139 Id. subdiv. 2.
141 MINN. STAT. ANN. § 12.39, subdiv. 1.
modern bioethics, and medical professionals overseeing the response to a public health emergency should be required by law to inform individuals of their rights.

D. Mississippi

Mississippi’s statute governing the spread of contagious disease is vague on vaccinations. The provision that presumably would govern most emergency health powers in Mississippi does not mention vaccination at all; it simply states that “governing authorities of municipalities shall have the power to make regulations to prevent the introduction and spread of contagious or infectious diseases.”[^142] Another provision, actually designed to address the question of immunizations for schoolchildren, contains the following: “[T]he state health officer shall specify such immunization practices as may be considered best for the control of vaccine preventable diseases.”[^143] Those two statements contain essentially all the emergency vaccination power authorized in the state of Mississippi, and, in large part because of their vagueness, the police power found within is largely unlimited. They contain no acknowledgement of the fundamental right to refuse medical treatment (perhaps not surprisingly, since both the statutes predate *Cruzan*); the provisions fail to notify both the public and health officials of the rights of individuals that should be preserved in the event of a public health emergency. The provisions do not indicate what kind of emergency warrants mass vaccination. They do not indicate what the consequences of refusal entail. In short, Mississippi law threatens the right of individuals to refuse medical treatment because they do not contain guidelines for public health emergencies. Mississippi law indicates that modernization of public health emergency laws can clarify the rights of individuals in a public health crisis. States should update their public health emergency laws, and they should take the approach that is the most protective of individual rights and, by extension, the approach that is most likely to withstand judicial scrutiny.

V. CONCLUSION

In conclusion, old laws may not be enough, and new laws need to be drafted with care. Delaware’s law is by no means perfect; the atti-

[^143]: Id. § 41-23-37.
tude taken towards mass vaccination under Delaware law appears to disregard the fundamental right of individuals to refuse unwanted medical treatment. In addition, the fact that Minnesota takes a different—and more protective approach—indicates that reasonable minds could conclude that efforts to preserve that right can co-exist with comprehensive efforts to protect the public in the event of a health emergency. Minnesota’s emergency health powers plan requires that health officials be mindful of the medical privacy rights of individuals in the midst of potential chaos, and it requires that individuals themselves be continually reminded of those rights. A few small changes to the Delaware plan would provide for additional protections of civil liberties in the event of an attack of bioterrorism. Either plan, however, provides more extensive protection than Mississippi’s outdated laws, which provide vague and extensive power to vaccinate the public that is largely unlimited by recent developments in our understanding of constitutional rights.

Quarantine is trickier. Because quarantine and isolation involve a basic liberty interest—the right to go where we please when we please and not to be confined to one location by the state—any quarantine policy can seem draconian. Anna’s concern that the contemplation of mass quarantine is more likely to elicit panic than protect public health is a valid one. Delaware, and other states that have enacted much of the MSEHPA, would do well to consider amending certain provisions—putting an outside limit on the amount of time an individual can be detained for public health reasons without a hearing, for example. But Minnesota’s law, which Anna noted as an example of a more enlightened bioterrorism response plan, has provisions similar to those found in the corresponding Delaware statute, and both statutes track the MSEHPA to a considerable degree. It is difficult to envision a quarantine plan that does not limit individual liberties to a significant degree. Some states may choose not to have such a plan for that reason; they may decide that to envision quarantine is to promote the use of it, and as a result they may wish to avoid the topic altogether.144

The fact remains, however, that quarantine is an ancient public health tool, and many states may reach the conclusion that in order to prepare for an attack of bioterrorism, responsible quarantine pro-

144 Along similar lines, Anna has argued that “planning for mass vaccination . . . [is] more likely to foster public panic and distrust than to be effective in a real emergency.” Anna, supra note 10, at 46.
cedures need to be on the books. Current scholarship suggests that many public health professionals consider the possibility of quarantine a live question in our current circumstances.\textsuperscript{145} If quarantine is implemented, a response plan drafted in advance that established the rights of citizens under quarantine might better preserve civil liberties than an ad hoc response created in the charged political climate that developed following an attack of bioterrorism. If states want to provide public health officials with quarantine authority, either the Minnesota or Delaware plan would provide greater protection for individual liberty than Mississippi’s current statutory framework. Both plans have extensive requirements designed specifically to protect civil liberties, while Mississippi’s law lacks any such provisions. My analysis of the Mississippi laws indicates that they leave the citizenry of Mississippi open to chaos in the event of a bioterrorist attack and provide no guidelines about how to preserve civil liberties in the event of an emergency. Carefully drafted modernized response plans provide one option for states seeking simultaneously to prepare for a bioterrorist attack and to preserve the civil rights of their citizens.

\textsuperscript{145} See Cécile M. Bensimon & Ross E.G. Upshur, \textit{Evidence and Effectiveness in Decisionmaking for Quarantine}, 97 AM. J. PUB. HEALTH S44, S44 (noting the renewed discussion of quarantine among policymakers, ethicists, and medical professionals); Rothstein, \textit{supra} note 48, at S49 (noting the value of quarantine as a public health tool despite its restrictive nature).