Application of state law in the public health emergency response to COVID-19: an example from Delaware in the United States

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Abstract
The unprecedented COVID-19 pandemic of 2019–2020 generated an equally unprecedented response from government institutions to control contagion. These legal responses included shelter in place orders, closure of non-essential businesses, limiting public gatherings, and mandatory mask wearing, among others. The State of Delaware in the United States experienced an outbreak later than most states but a particularly intense one that required a rapid and effective public health response. We describe the ways that Delaware responded through the interplay of public health, law, and government action, contrasting the state to others. We discuss how evolution of this state’s public health legal response to the pandemic can inform future disease outbreak policies.

Keywords SARS-CoV-2 · COVID-19 · Health law · Emergency response · Pandemic · State law

By 20 March 2020, all states in the United States (U.S.) reported at least one diagnosed case of COVID-19, the disease caused by the novel SARS-CoV-2 viral infection [1]. In coordination with local or state public health departments and the federal Centers for Disease Control and Prevention (CDC), these states grappled with difficult public health responses to the pandemic in the face of great uncertainty. Legal guidance for public health, for which the states have primary responsibility, has been integral in this response. All impacted states issued some form of public declaration of emergency [2]. Also, the federal government (the U.S. Department of Health and Human Services) issued a ‘public health emergency’ declaration on 31 January 2020
 Authorities typically make these declarations to allow for allocation of emergency funding and to simplify processes that would burden a public health response in time of emergency. The policy intent behind these declarations is not to close borders, restrict due process, or broadly revoke civil liberties. Even “shelter in place” orders—first enacted at a state level in the U.S. by California on 19 March 2020 [5] then quickly followed by other states—ensured that residents would maintain access to essential goods and services, and could leave their homes to gather goods or use services. Restricting movement in congregant settings can spread disease, as observed aboard cruise ships [6], and potentially violate fundamental humans right such as the freedom of movement [7].

We focus on Delaware during the pandemic of winter and spring 2020 for several reasons. Compared to other states, Delaware experienced a rapid increase in the number of cases over a short period of time, necessitating a quick and robust public health response to control the outbreak. As of 30 June 2020, Delaware reported 11,474 cases of laboratory-confirmed COVID-19 (1200 cases per 100,000 people) since diagnosis of the first case on 11 March 2020 [8], a likely underestimation [9]. Compared to other state rates at that time, Delaware placed in the top 15% (7th overall) for known cases per capita; for mortality, Delaware ranked 11th with 52 deaths per 100,000 people [10]. These comparatively high per capita rates occurred despite Delaware being tied for 34th place among states to report a confirmed case and the last state in the Mid-Atlantic region of the U.S. (which includes the nearby major metropolitan areas of Washington, D.C., Philadelphia, and New York City) [11]. On 12 March 2020, Delaware’s governor declared a state of emergency as a means to coordinate state agency responses to the outbreak. The governor called on the Delaware National Guard to assist, advised against public gatherings in excess of 100 people, and prohibited excessive price increase of goods or services [12]. Since then, Delaware modified the terms of the state of emergency twenty three times through 30 June 2020 to close public schools, prohibit in-person dining at restaurants, close select non-essential businesses and public beaches, require wearing of face masks, require health screening for anyone entering a high-risk essential business, and limit public gatherings in excess of 10 people, among other actions [13]. On 23 March 2020, the state also declared a public health emergency to bring in out-of-state and activate ‘inactive’ health care providers (often those who had retired) and loosen requirements to permit new sites for delivery of health care [14].

Another reason to examine Delaware is the nature of its population, which includes many of the COVID-19 risk groups seen across the U.S. The state has densely populated urban areas, rural farmland with migrant worker populations, and a seasonal tourism industry with popular beach resorts. Delaware’s poultry processing plants in two southern counties became sources of several outbreaks, an industry particularly hard hit across the U.S. These plants made Sussex County, Delaware a ‘hotspot’ [15]. Also, Delaware has an older population vulnerable to COVID-19, many in long-term care facilities.
Historic precedent for emergency legal responses to disease outbreaks predates COVID-19 [16]. Coordination between public health and law typically occurs through state agencies requesting legal advice from state legal authorities—for general guidance about the scope of legal authority and responses to questions. Engagement with the law may also occur proactively and from the outset, if authorities foresee potential need for legal orders, such as quarantine, isolation, government closures of schools and businesses, seizure of property, or any combination. As COVID-19 progressed from mainland China, throughout Asia, Europe, and North America, the World Health Organization (WHO) and CDC assured the world learned of the spreading epidemic before confirmation of the first case in Delaware. These communications alerted public health and legal authorities to many potential legal implications of responding to COVID-19 in advance. Delaware’s early legal response included updating and sharing draft orders among key state agencies, laying the groundwork for subsequent action. Thus, Delaware officials, and their legal counsel, acted quickly to review the extent of government emergency powers and how best to use them in response to a pandemic.

The Division of Public Health is the sole public health agency in Delaware with statewide jurisdiction. This can be contrasted with majority of other states that have both state and local jurisdictions or district offices (only the state of Rhode Island is similar to Delaware in this regard). The benefit of this structure was ensuring consistency and efficiency of the pandemic response. For example, public health measures such as masking mandates might be discrepant between jurisdictions leading to confusion among citizens. Delaware largely avoided such confusion [17–20]. A single statewide agency, however, has the burden of coordinating and implementing the public health response for the entire state, including guidance, testing, and provision of supplies.

Transitioning from epidemic to pandemic

The transition of the World Health Organization (WHO) from identifying COVID-19 as multiple local epidemics to a pandemic on 11 March 2020 [21] may not have directly impacted responses in the U.S. However, this shift in awareness as to the widespread severity of COVID-19 coincided with many local declarations of emergencies in the U.S. The declarations of ‘public health’ and ‘national emergencies’ released federal funding to agencies responding to the outbreak. In the U.S., it is not the federal government but the States that hold primary responsibility for managing disease outbreaks and any federal funding directed to states. Technical assistance from the CDC also played an important role.

Delaware declared its own state of emergency [12] concurrent with declarations of the national emergencies and WHO’s pandemic designation. From a practical perspective, Delaware’s Declaration achieved several goals:
It enabled the state’s Department of Health and Social Services and the state’s Department of Safety and Homeland Security to procure goods and services more readily, such as testing supplies and personal protective equipment.

- It suspended the requirement to conduct government public meetings in person, as large group gatherings may lead to viral transmission.
- It activated a coordinated emergency response.

Contrasted with a state-level ‘public health emergency’, a ‘state of emergency’ is broader. Even so, a state public health emergency, declared on 23 March 2020 [13], enabled additional measures beyond the scope of the initial state of emergency.

The transition also brought about a change in the goals of public health. Early in the outbreak, Delaware focused on surveillance and planning. As the outbreak widened and became more difficult to contain, the state shifted focus to harm reduction through social distancing. This was evident in several modifications to the state of emergency [13], to limit socialization and crowding, and, subsequently, an order to ‘shelter in place’ (see Discussion).

This type of response does not occur spontaneously or in a vacuum. Previous outbreaks and emergencies served as models for COVID-19 across the nation [16]. Delaware’s Division of Public Health adopted and adapted surveillance systems used during the H1N1 influenza pandemic of 2009 and the Ebola outbreak in 2014 in order to monitor COVID-19. There were also similarities in the COVID-19 outbreak with the State’s opioid epidemic and this experience informed the state’s response. Delaware again quickly initiated mitigation and harm reduction to prevent morbidity and mortality from COVID-19. Legal procedures for response to a reported case of active tuberculosis provided a model for quarantine and isolation orders. And weather-related emergencies (such as blizzards) served as models for the shelter in place order. A shelter in place order to contain a disease outbreak, however, was unprecedented.

The state’s police powers: isolation, quarantine, and shelter in place

The classic example of a state’s police power to protect the health of a population is use of ‘isolation’ and ‘quarantine’ for active tuberculosis. The state employs isolation when an individual exhibits symptoms, or is clinically diagnosed with, a contagious disease that may threaten others. Delaware’s administrative code (regulations) defines isolation as, “the physical separation and confinement of an individual or group of individuals who are infected or reasonably believed to be infected with a contagious or possibly contagious disease from non-isolated individuals to prevent or limit the transmission of the disease” [22]. States may impose quarantine when a person has a known exposure but has not (yet) demonstrated clinical illness. Delaware’s administrative code defines quarantine as, “the physical separation and confinement of an individual or group of individuals who are or may have been exposed to a contagious or possibly contagious disease but who do not yet show signs or symptoms of the contagious disease from non-quarantined individuals to prevent or limit the transmission of the disease” [22].
States impose either or both orders to prevent spread of disease to susceptible populations who are not infected nor immune to the disease. Delaware may invoke isolation and quarantine in several ways. Outside of an emergency declaration, the Division of Public Health may initiate an emergency isolation or quarantine procedure if a medical provider determines a person to be an imminent threat to others. The Division may also petition the courts for a quarantine or isolation order even without ‘imminence’. Delaware’s state of emergency declaration reinforced the existing statutory authority for the Division of Public Health or the Delaware Emergency Management Agency to isolate or quarantine an individual on an emergency basis or following a court hearing. The process for either isolation or quarantine is complex. Many parties may participate, including those in public health, health care, the judiciary, and law enforcement (Fig. 1).

Isolation and quarantine orders are usually imposed as measures of last resort. That is, before the state limits an individual’s civil liberties, it must demonstrate that the order is the least restrictive means possible and does not infringe upon an individual’s liberties more than absolutely necessary. In Delaware, from the start of the outbreak through 30 June 2020, all individuals isolated and quarantined voluntarily. Had any persons failed to comply with voluntary isolation or quarantine, the State would have sought a court order requiring isolation or quarantine; failure to comply with the court order could result in action by law enforcement.

On 24 March 2020 Delaware enacted a statewide shelter in place (also known as a stay-at-home) order—one of the first states to do so [23]. As of 30 June 2020, 43 other states had enacted statewide orders (excluding Arkansas, Iowa, Nebraska, North and South Dakota, Oklahoma, and Utah) [23]. The 44 state orders varied

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**Fig. 1** Flow chart depicting the general procedures for quarantine and isolation

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widely in duration (as short as 25 days in Mississippi; as long as 76 days in New Jersey). Some orders did not reach across the entire state but directed restrictions to specific high-risk groups or locales (as in Oklahoma, South Dakota, and Iowa). Delaware’s order expired on 1 June 2020 (in effect for 69 days, 5th longest state in the country), and had not been reactivated by 30 June 2020.

Shelter in place orders require citizens to stay in their homes or places of residence unless they need to go out for specific goods or services—for food and groceries, health care, utilities and infrastructure, and government services (see Ref. [24] for a full listing of what is ‘essential’ in Delaware [24]). Individuals may leave their residences for other prosaic reasons, to exercise, walk pets, and commute to jobs considered ‘essential’. Exempted from Delaware’s order were individuals experiencing homelessness, or who felt unsafe in their homes (for example, due to domestic violence) although authorities requested all people to maintain social distancing.

A shelter in place order approaches the constitutional limits of government-sanctioned control of an outbreak, but authorities can employ other disease mitigation measures during an outbreak. Examples include driving restrictions and requiring individuals to be tested for infection. Delaware used neither as of 30 June 2020 in response to COVID-19. (Delaware implemented an oral screening questionnaire for any person entering a high-risk business, such as a healthcare or institutional setting [25].)

Maintaining transparency

Public health has broad statutory authority in the time of an outbreak, especially when confronted with a novel contagious disease such as COVID-19. Even so citizens maintain certain rights under the state and federal constitutions. Government may not act arbitrarily or capriciously, nor can governments discriminate against any class of people protected by the state or national Constitutions (for example, on the basis of race). In Delaware, citizens have the right to information on government actions during and after the COVID-19 outbreak; they collect the information by making a request under the Freedom of Information Act [26]. In cases of orders to isolate or quarantine, individuals have the right to an attorney, a hearing, and to bring forth witnesses or evidence. They may also appeal an order or request a modification to their order (see Fig. 1).

Lessons from the response

Reflection on the Delaware response yields several useful lessons. First, legal responses to the pandemic should involve the entire government, and not rely upon a single branch. Delaware relied exclusively on orders from the executive branch (the Governor) to direct the State’s response rather than joint executive and legislative action because the legislature did not hold sessions during the pandemic to avoid adding to disease transmission [27]. Other state legislatures similarly postponed sessions and some employed remote sessions or strict social distancing measures; Delaware reconvened
virtually on 26 May 2020 [28, 29]. Although executive orders proved effective in Delaware, their use may be problematic because state constitutions and laws often limit executive authority in time and scope. Legislatures can craft long-term solutions to problems that arise during a pandemic, such as immunity for medical providers (from legal action by patients or their families who believe they have been harmed) or reimbursement for telemedicine visits.

Second, policy responses to the outbreak must reflect the population’s needs, especially locally. While statewide shelter in place and social distancing orders are effective for people who have the ability to adhere to them, for others this was not possible. In Sussex County, Delaware, multiple outbreaks of COVID-19 occurred among workers in the poultry industry, many of whom resided in group homes or larger family settings [30]. Delaware’s large migrant worker population may be similarly affected as farms hire seasonal workers who have no place to shelter away from others. Thus, policymakers need to tailor responses to reflect these real-world variations.

Finally, states and localities should establish a core team or point person to manage inter-agency communication. Successful pandemic response depends on cooperation between public health, emergency management, fiscal, and executive leadership. Legal guidance should be fully enmeshed in decision making to ensure agency goals can be executed quickly and without major repercussions.

Conclusion

Application of state law in the time of public health emergencies has historic precedent in the United States and will continue to evolve as does COVID-19. Early measures taken by other locales, as examples of effective action, aided Delaware’s early response. So too did guidance from the WHO and the CDC. Post-outbreak, time to reflect upon decisions made will clarify what enabled or impinged upon the State’s response and its responsibility to keep its citizens healthy and free from disease. Further, the legislative process can be used to revise law that impeded response. Future research could usefully examine whether policies implemented by the state at a given point in the pandemic were supported by scientific evidence of prevention of COVID-19 at that time. This exercise could inform responses to subsequent public health emergencies.

Compliance with ethical standards

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

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