Odd Bedfellows & Marriage of Necessity: Public Health and Politics in American Federalism

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Comments

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Odd Bedfellows & Marriage of Necessity:  
Public Health and Politics in American Federalism

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I. Introduction

In the wake of the coronavirus disease 2019 (COVID-19) pandemic, while the public disagrees over mask mandates, required vaccinations, and social distancing, it seems like one common sentiment exists – a distaste for the odd bedfellows of politics and public health. There are those who cry for the compartmentalization of the science of public health and the art of politics to rectify this situation. In the wake of so much confusion and chaos, it is not unjustified to demand the depoliticization of public health; however, this response is unrealistic given the modern political climate, demonstrates a narrow understanding of the complexities of both the American public health sector and the federal system of government, and is at large a disservice to the American people. While it may be an uncomfortable reality to face, public health is a political issue.

In some ways, it is unsurprising that such dissonance is seen between politics and public health within the American federalism-structure government framework, particularly as it pertains to major viral outbreaks. A truth that must be conceded is this: the essence of viruses is antithetical to the essence of federalism. While the virus thrives on mechanisms allowing for its unruly and unrestrained proliferation, division, and change, the integrity of federalism is contingent on the integrity of its system of checks and balances that closely regulates changes within the system. It is not inconceivable therefore that federalism should struggle when faced with a large-scale disease outbreak, particularly those driven by RNA viral pathogens, those perhaps the most adept of all viral subtypes to evade biological systems of checks and balances. In this way, it must then be considered how governments under federalism can best respond to what perhaps may be their most equal adversary of the natural world. A biological agent that exists somewhere between living and non-living and thrives on chaos, dysregulation, and
unrestricted evolution embodies some of the most paramount fears that federalism in its adoption and execution within the United States seeks to avoid. When the Founding Fathers developed this intricate tiered government structure with such an emphasis on checks and balances, it is unlikely that they foresaw viruses undermining their careful design as masterfully as they have. This is not to say that federalism is incapable of responding to epidemic and pandemic situations – there are plenty of examples to suggest otherwise – however, the unique challenges posed by biological agents severely test the resiliency of federalism.

The tides of politics at all levels of federalism have long been influencing the ability of public health agencies to address public health concerns. The muddy relationship between public health professionals and politicians is not unique to the COVID-19 response, but a reality that permeates American history. Here, we reflect on how the political nuances of American society during the influenza A virus (H1N1) and COVID-19 (SARS-CoV-2) pandemic influenced public health response, how the inability of the public health sector to play the game of politics hindered its ability to achieve its objectives, and how the hesitancy of politicians to provide a seat at the table for public health scientists augmented already dire situations. Public health experts and politicians alike must reconcile the persisting relationship between both fields of expertise and make strides toward realistic collaborative efforts within the confines of the highly partisan, highly publicized modern American federalism culture.

**II. Points of Similarity between IVA and SARS-CoV-2**

*Biological Similarity*

Establishing a basis of biological similarity between the two viruses at the microscopic level is necessary to demonstrate a basis for subsequent comparisons on the macroscopic level. Broadly speaking, there are three key biological similarities between IVA and SARS-CoV-19
which allow them comparable case studies: genomic material, surface proteins, and viral lifecycle. By appreciating the similarities of these distinct viruses, it becomes evident that while humans may create societies to shield themselves from the state of nature, viruses are uniquely adapted to compromise societal protections.

Both IVA and SARS-CoV-2 are single-stranded RNA viruses. Single-stranded RNA viruses are particularly ill-equipped to proofread their genomic material meaning that mutations proliferate essentially unchecked by internal viral machinery (Duffy, 2018). In the human body, such unregulated hypermutation of the genome would be cancerous; however, for the virus, the unrestrained ability to alter its genome comes with several advantages (Duffy, 2018). Low viral replication fidelity allows these viruses to undermine vaccination efforts, circumvent resistance in a community, and, arguably most relevant in the discussion of disaster politics and policy, emerge from the environment to infect novel hosts (Duffy, 2018).

IVA and SARS-CoV-2 are both distinguished from other viral subtypes by their surface proteins. IVA is composed of eight RNA segments that are capable of encoding 18 proteins that perform various viral functions which differentiates IVA from its fellow influenza viruses (Khorramdelazad, 2021). Specifically, IVA is characterized by its surface hemagglutinin and its envelope neuraminidase glycoproteins (Khorramdelazad, 2021). Hemagglutinin contains host-recognized antigenic sites, host-protease cleavage sites, target cell binding sites, and peptides to mediate membrane fusion (Sriwilaijaroen, 2012). Exposure to IVA, via natural infection or vaccination, leads to the induction of neutralizing antibodies against the associated viral strains, most of which target hemagglutinin and neuraminidase (McAuley, 2019). Neuraminidase is associated with the final stage of infection, removing sialic acids on nascent virions to ensure the effective release of progeny into the surrounding cellular environment (McAuley, 2019). When
mutations to hemagglutinin and neuraminidase occur, these neutralizing antibodies can be rendered essentially useless in disease prevention (McAuley, 2019). Similarly, SARS-CoV-19 belongs to the α type coronavirus family and can be differentiated from other closely related viruses by its surface proteins. For all members of the coronavirus family, the spike protein is the prominent surface protein, playing a key role in viral target recognition, viral entry into the host, and overall viral infectivity (Magazine, 2022). Fitness evolutionary selection of spike protein mutations has led to the proliferation of emerging SARS-CoV-2 variants (Magazine, 2022). SARS-CoV-2 spike protein mutations compromise natural and vaccine-induced viral neutralization efforts (Magazine, 2022). In both IVA and SARS-CoV-2, structural surface proteins are key viral components that are particularly susceptible to neutralization-undermining mutations.

For IVA to infect a target cell, M1 protein facilitates the fusion of viral hemagglutinin to the host cell membrane and M2 activation mediates viral entry into the host cell’s nucleus (Khorramdelazad, 2021). In humans, IVA preferentially infects epithelial cells of the upper respiratory tract and alveolar type II cells (Khorramdelazad, 2021). Once the virus has entered a host cell, it exploits host cell machinery to replicate its genome and then uses a budding mechanism to release nascent virions into the surrounding cellular environment to establish infection in new cells (Khorramdelazad, 2021). Despite being a more novel pathogen, the SARS-CoV-2 lifecycle has been studied at length and some consensus has been reached within the scientific community regarding the exact mechanisms of SARS-CoV-19 invasion, replication, and release. Based on what is known at this time, there is substantial evidence to suggest that the viral spike protein interacts with host cell angiotensin-converting enzyme 2 (ACE2) receptor to mediate cellular invasion (V’kovski). Similar to IVA, SARS-CoV-2 utilizes host cell machinery
to replicate its genome and produce necessary proteins to produce nascent virions that are then released into the surrounding environment via budding to infect new cells and repeat the process (Khorramdelazad, 2021)

*Epidemiological Trend Similarity*

Neither influenza nor coronaviruses are novel threats to human health.

What scientists suspect as the origin for what is now understood to be avian influenza was first identified in 1878 in the northern regions of Italy where it was coined “fowl plague” (CDC, 2022). Avian influenza did not gain near global notoriety however until the ‘Spanish’ influenza pandemic caused by an IVA known as H1N1 in 1918 (CDC, 2022). This highly deadly virus has come to be known as the “Mother of All Pandemics” and “America’s Forgotten Pandemic”. After this initial pandemic, several other outbreaks of various scale over the course of the 20th century indicated the hyper-mutability of the virus which mutated freely in the environment spanning a wide geographical range. In February 1957, one such mutant strain capable of infection humans emerged – H2N2, a new IVA – in East Asia (CDC, 2022). This new strain coined “Asian Flu” triggered a pandemic which boasted a death count of more than 1 million lives worldwide, about 80,000 of which were in the United States (Honigsbaum, 2020).

Just a decade later, another viral mutation in 1968 led to another pandemic – this time the causative agent was H3N2, another IVA mutant (CDC, 2022). Even when pandemic/epidemic conditions don’t arise, IVA is constantly mutating – silence does not mean safety.

The late 20th century saw a lull in influenza A virus pandemics, which may have inspired optimism in some; however, scientists warned that any hibernation of the virus was just temporary (Mittal, 2007). To the scientific community, the emergence of a novel IVA strain was rather to be expected, nonetheless, a shock rippled through American society in the spring of
2009 when a new influenza A H1N1-type virus emerged in humans. In an fascinating – and particularly frightening – twist, this novel H1N1 virus was a demonic concoction of swine, avian, and human influenza genes that had never before been seen in the scientific community (CDC, 2022). While this 21st century influenza was less fatal than its predecessors, it teaches a valuable lesson – one can never assume a highly mutagenic virus is gone just because it hasn’t caused major chaos in recent years.

SARS-CoV-19 follows an eerily similar epidemiological trend. Coronaviruses were first identified in animal populations in the late 1930s (Hao, 2022). While these coronaviruses have various hosts, bats are a notorious reservoir of coronaviruses – sampling of bats in China alone identified approximately 400 novel coronavirus strains existing within the population (Hao, 2022). The first coronavirus strain able to mutate to effectively infect and establish disease in the human host was documented in late 2002 in the Guangdong province of China (Hao, 2022). An early precursor to SARS-CoV-19, the original SARS-CoV spread across 28 countries and is associated with over 8,000 confirmed cases and nearly 800 deaths (Hao, 2022). Just 10 years later, another coronavirus crosses the species barrier, this time in Saudi Arabia – MERS-CoV. Less contagious, but more virulent than its predecessor, MERS-CoV spread across 27 countries with nearly 2,500 confirmed cases and more than 850 fatalities (Hao, 2022). Interestingly, serological studies of camels in the region suggest that a MERS-CoV-like virus had existed in the camel population since 1983 – acting as a reservoir for the virus to mutate and adapt to eventually effectively cross into the human population (Hao, 2022).

Just like influenza, coronaviruses emerge in human populations quite frequently and are associated with mostly mild seasonal respiratory infections – every time a coronavirus emerges, a pandemic does not arise (V’kovski, 2020). However, whenever a virus is known to be highly
susceptible to mutations and lacking mechanisms to regulate it’s mutagenesis, there is an underlying threat of a particularly aggressive mutation which poses a more severe, global threat to human health. SARS-CoV-2, which was first documented in Wuhan, China in late 2019 – a decade after the 2009 HINI epidemic – is the most successful human coronavirus thus far (Hao, 2022). With high infectivity and pathogenicity, what was once thought to be a contained outbreak, unable to transmit person-to-person, became a global pandemic (Hao, 2022). Between November 2019 and July 2022, 551 million cases of SARS-CoV-19 had been documented across more than 194 countries, resulting in more than 6 million deaths (Hao, 2022).

A smart virus doesn’t kill its host, it utilizes it. Living a pseudo-parasitic lifestyle, the life of the virus is contingent on the life of its host. Viruses, therefore, establish a reservoir within a population that allows them to persist and mutate without drawing attention or causing concern in the public. The scientists tasked with monitoring these viruses and identifying reservoirs are highly aware of the epidemic/pandemic potential of these viruses and often publish their findings which support this. To summarize the massive arsenal of influenza and coronavirus research as simply as possible – mutations happen, and often. Epidemics and pandemics are not freak acts of nature or God. Viruses, though highly mutable and dynamic, are not unpredictable. Epidemic and pandemic conditions are not a matter of if, but when. Epidemic and pandemic preparation is contingent on whether policymakers choose to heed the warnings of the scientific community and whether the scientific community can adequately communicate their findings.

*Policy and Political Outcome Similarity*

All public health crises exist within a particular political moment which subsequently shapes the public and governmental response efficiency and effectiveness. A common theme that persists not only between IVA and CoV outbreaks, but across the public health field at large is a
particularly useful and exploitative practice of name-shaming. In essence, name-shaming occurs when a disease is named after a specific region and this association, intentionally or not, is used to justify hateful activity on the legislative or personal level (Robbins, 2021). There is a long history to support that disease naming has long been a politicized issue, a mechanism by which a scapegoat is identified to be the recipient of public frustration and fear (Tworek, 2021). Disease-naming, although not always political in origin – many scientists name diseases after where they are first identified, a prominent outbreak occurred, or the suspected place of disease origin without intending to demonize a geopolitical region, but merely identify the origin of discovery – is easily perverted by those with a political agenda to create further divides in society (Robbins, 2021).

Stigmatization is one of the greatest barriers in public health and name-shaming is just one manifestation of this phenomenon. When disease breeds shame and guilt, societies look for ways to transfer these unpleasant feelings, and often the anger associated, to others. One early example of name-shaming can be traced back to the 1495 syphilis epidemic. During the Italian Wars, the French soldiers began contracting a disease previously unknown to mankind which physically manifested in particularly abhorrent ways – characterized by painful sores, abscesses, and ulcers (Frith, 2012). This disease, often treated with mercury which was both ineffective and painful, scavaged Europe (Frith, 2012). Interestingly, the earliest names of this disease depended upon whose borders the disease was being discussed within (Tworek, 2021). In Europe, the disease was known as either French, Neapolitan, German, Polish, or Spanish disease, depending on which external entity was most greatly disdained in a sovereign land (Tworek, 2021). If one crossed into Ottoman territory, the name of the bacterial sexually transmitted disease became known as the Christian disease (Tworek, 2021). While there was no difference at the biological
level between the disease contracted by the French, Italians, or Ottomans, which entity was blamed for the ungodly symptoms varied greatly depending on the political climate.

Since 1889, there have been four major influenza epidemics that have carried geographically associated names (Tworek, 2021). Three of these occurrences received names associated with Asian viral origin, the Asiatic flu of 1889-1990, the Asiatic flu of 1957-1958, and the Hong Kong flu of 1968-1969 (Tworek, 2021). The fourth epidemic, the Spanish flu of 1918-1920 also carries a moniker with geographic association (Tworek, 2021). Interestingly, by 2009 when the next major novel IVA emerged, there was significant advocacy from the World Health Organization and Pan American Health Organization to ensure that the viral strain would not bear the name of a specific town, state, or nation or be associated with any peoples (Tworek, 2021). This was seen as a preventative measure against stigmatization and politicization within the public health field in the increasingly interconnected world.

The International Committee on Taxonomy of Viruses was responsible for naming the SARS-CoV-19 and landed upon this name solely based on the novel virus’s genetic similarity to SARS (responsible for the 2002 epidemic) and the year of its discovery (Robbins, 2021). The committee was careful not to select a name with geographic associations – it is standard practice now to avoid this to not alienate any region or community due to a public health occurrence (Robbins, 2021). This did not stop politicians; however, from choosing their own nicknames for the virus with strong racial undertones and clear geographic association. When President Donald Trump referred to SARS-CoV-19 with pejorative names such as “the Chinese virus”, “Kung Flu” and other such names, on national television the tradition of name-shaming in the public health sector to push a political agenda is continued (Tworek, 2021).
Generally speaking, the scientific community has become more sensitive to the deleterious impact of naming a disease after a specific location and has made conscious efforts to discontinue this practice. While selecting a geographically specific name for a disease may seem practical, it oftentimes results in a misnomer that perpetuates an unrefined or wholly inaccurate view of a specific disease or pathogen (Robbins, 2021). One example is the Marburg virus which is named after Marburg, Germany was initially identified in 1967 from African green monkeys imported from Uganda (Brauburger, 2012; Robbins, 2021).

The political implications of disease naming are real – tarnishing cultures and communities, perpetuating stereotypes about perceived cleanliness and goodness, and in extreme cases encouraging hate crimes (Robbins, 2021). The anti-Asian hate that erupted in the United States after the SARS-CoV-2 name-shaming is a bit of an anomaly (Robbins, 2021). While various minority groups have been used as scapegoats in disease outbreaks, such as Jewish people being blamed for carrying the Black Plague, the “Kong Flu” is the most prominent link between name-shaming and physical manifestations of hate and prejudice (Robbins, 2021).

Three IVA epidemics of the 20th century were given geographical monikers associating them with Asian origin and there is little evidence to suggest that these names resulted in significant anti-Asian or xenophobic outbursts. The SARS-CoV-19 pandemic, inappropriately nicknamed by high-profile American politicians, most notably President Trump, results in more than 10,000 documented hate crimes against Asian American and Pacific Islander people between March 2020 and September 2021 and a surge of anti-Asian hate crimes by approximately 145% across major U.S. cities in 2020 (Lantz, 2022). Perhaps unsurprisingly, research suggests that those who report higher levels of fear of SARS-CoV-19 and support for Trump were positively correlated with higher xenophobic biases (Lantz, 2022). Furthermore,
greater exposure to scientifically accurate SARS-CoV-2 information was negatively correlated with prejudice biases (Lantz, 2022). In the climate of divisive modern politics, even pathogens can be politicized. Information consumption of partisan media has a powerful ability to shape an individual’s perceived reality and attitudes towards certain groups, especially when the charge is headed by a president who has consistently shown his willingness to generalize and ostracize specific groups to push a xenophobic agenda (Lantz, 2022). In the hyper-polarized landscape of American politics, politicians are well-situated to utilize name-shaming and media attention to elicit certain biases and even provide justifications for acts of violence.

III. The Nuances of Federalism

The State of Modern Federalism

Modern federalism is complicated by several factors that undermine key cultural, social, and political American norms on a harsh binary scale. In understanding the post-Dobbs political landscape some Americans rejoice in the return to traditional Christian values, while others fear this overturning of autonomy poses a threat to independence across the nation. A growing partisan divide on the validity of climate change-related threats yields no consensus as those with liberal and conservative leanings perceive themselves to exist in different climate realities – 78% of those with liberal leanings view climate change as a major threat compared to just 23% of those who lean conservative (Tyson, 2023). Many unanswered questions shroud the American people such as: was the COVID-19 pandemic a hoax, was the election stolen, and should the former president deserve federal indictment? With seemingly such little agreement between what is fact and what is fallacy, the system of federalism that structures the nation is called into question.
It is hard to say if party polarization is the origin of dissonance in American political fiber or a symptom of a much deeper and darker systemic infection, but regardless, it is undeniable that allegiance to one’s party identity fuels the differences in perception across American society. Prominent cultural issues exacerbate divides within political society due to differing party allegiance and capitalize on the demonization of the other side of the aisle. The basis of the federalism system, characterized by the division of power and a system of checks and balances to avoid tyranny, can only be effective in governing when there is a shared collection of accepted facts. Cultural and partisan divides that plague the 21st century create barriers against effective governing at all levels of government and threaten to degrade community integrity and cohesiveness – an integral component of disaster preparedness and response (Bromley-Trujillo and Nolette, 2023). Appropriate disaster management often hinges on cohesiveness and so the disintegration of government trust and community cohesiveness are apparent threats to disaster mitigation, response, and recovery.

In disaster management, federalism can get trapped in a disaster-reaction cycle in which disaster strikes and receives media and public attention for a breath of time – which acts as the window of opportunity for lawmakers to introduce a new policy, procedure, agency, or standard – and then poor funding streams yields few substantive changes (Jones, 2016). An emergency by definition is only characterized as an emergency if a system or level of government’s capacity is overwhelmed and exhausted (McNabb and Swenson, 2023). Cultural and political divides undermine the integrity and quality of American federalism, which consequently undermines the capacity of various entities to effectively manage disasters. In an ever-contentious, highly partisan political climate, executing federal reaction to a disaster is odious, and proactive
implementation of comprehensive and culturally competent federal disaster prevention strategies is nearly impossible.

**Federalism in the Context of Epidemic/Pandemic Management**

Epidemics happen all the time and very rarely do they garner tremendous media attention or public outcry. In fact, in November 2023, there were four epidemics investigated by the CDC in the United States – a *Salmonella* outbreak in cantaloupes across 38 states, a *Listeria* outbreak in rockfruits across 7 states, a *Salmonella* outbreak in dog food across 7 states, and a *Salmonella* outbreak in onions across 23 states (CDC: Current Outbreak List, 2023). Most of these concerns are adequately handled by states public health agencies which coordinate with each other and share data with the CDC for national surveilance. In the case of a global pandemic, however, more robust leadership is demanded of the federal government. While the federal government “cannot ‘command’ states to discharge their public health responsibilities … they do possess a significant degree of statutory grants of power for responding to a major health emergency” (Cigler, 2021). When faced with a global health crisis, the federal government and particularly the president have a significant responsibility to respond.

The president plays a key role in managing large-scale disaster management due to the executive power of declaring a state of emergency/disaster. What does and does not get designated a state of emergency/disaster is highly politicized strategic tool; however, it is essential for the activation and mobilization of the top-teir of federalism – the federal government (Sylves, 2020). The president’s decision to declare a state of emergency/disaster or not is arguably the greatest show of politics, money, and responsibility in disaster response under federalism as it opens the valve to allow for greater funding and assistance than would otherwise be available.
Federalism is capable of rising to the challenge of pandemic response, but not without clear and competent leadership. While no one expects their president to be a public health expert, they do expect their president to be a leader and when given the opportunity to lead, Trump declined. Trump’s inaction and decision to evade his leadership duties was to the detriment of the American people – one may argue that Trump had no clear legal obligation to lead the nation through the pandemic; however, given that it is the primary function of government to protect it’s people from the state of nature, this is a poorly founded argument (Cigler, 2021).

The relationship between federalism and pandemic response is best summarize by the following, “federalism is not the issue; instead it’s taking bold, decisive national action” (Cigler, 2021). While federalism certainly created some boundaries in what response was possible at each level of government, America’s poor response to COVID-19 is not a reflection of federalism, but rather of Trump’s leadership. Trump’s approach to COVID-19 was one of self-interest – he prioritized pushing a narrative that resonated with his support base and bolster his re-election aspirations over national health interest (Birkland, 2021). Lacking an expert understanding of COVID-19, he nonetheless made scientific assertions which were both unfounded and detrimental to public health efforts (Cigler, 2021). It is evident; therefore, that the fatal flaw to America’s COVID-19 response was not federalism inherently, but rather the manipulation of federalism to push the burden of pandemic response onto state and local governments.

RNA Viruses as the Antithesis of Federalism

It is the natural fate of all viruses to evolve, but none do it quite as well as the RNA virus. On a cellular level, this phenomenon is explained by the RNA virus’s relatively primitive genome integrity which lacks the checkpoints which regulate genome replication and repair errors to insure replication fidelity (Smith, 2017). The pressures applied and opportunities
presented to viruses in their environment influence viral mutation rates; however, it is important to note that these viruses are not masterminds, carefully patchworking their genome to evolve to their highest form, but rather at the mercy of mostly random mutations (Smith, 2017).

Nonetheless, RNA viruses thrive off the chaos and change of an ever changing, poorly regulated genome – based on the laws of survival of the fittest, those mutants with the most success establishing infection and subsequently spreading will be able to produce the most viral progeny (Smith, 2017).

It is the fate of all governments under federalism to be stalled, but none experience this quite as much as a government fiercely divided by party polarization. On a philosophical level, this inefficiency is explained not as a failure of the system, but rather as the purpose. The integrity of a government under federalism is only as strong as the integrity of its checks and balances on power and so stagnant government response is essentially a safety mechanism of the federalism framework to prevent the usurpation of power or rash, unilateral decisions.

Federalism does allow for policies to essentially adapt to their environment. Local and state government leadership are empowered to enact policies that best serve their direct constituents – tailored to the unique culture, economy, and interests of a specific cohort, which is in many ways a strength of federalism (Bennouna, 2021). Powersharing between federal, state, and local government, further dispersed across various branches, agencies, and organizations at each government level; however, make coordinated quick pivots nearly impossible. In disaster management, time is of the essence. When federalism goes head-to-head with an RNA viruses spreading rapidly across the globe, it is handicapped by the change-limiting, power-checking mechanisms embedded in its framework. In this way, the unbridled freedom and fluidity of
SARS-CoV-19, and likely whatever RNA virus emerges to spur the next pandemic, act as a severe test to checks and balances federalism.

**IV. Lessons Learned**

*Politics, Money, and Responsibilities: Federalism and Epidemic/Pandemic Management*

For better or for worse, politics, money, and responsibilities are integral parts of disaster management and understanding how each of these components intersects with viable and efficient government action is essential for understanding government action and inaction at various levels of federalism. Who is responsible for addressing a natural disaster and to what extent is greatly influenced by the framing of the disaster itself and reflection on the lessons learned from the COVID-19 pandemic, it is evident that pandemic response deserves special consideration. American federalism dictates the hierarchical and interweaving sharing of powers vertically through local, state, and national entities and horizontally through various branches, agencies, and organizations. In order to withstand the rising threat of pandemics in a hyper interconnected world, American federalism must be willing to bend its allocations of money and responsibilities as to not break under the pressure of an eminent global health crisis. Under American federalism, the sharing of powers and responsibilities in natural disaster response has the potential to have tremendous social, political, and economic implications, which set precedents for subsequent disaster responses and shape the trajectory of recovering communities.

A trend that began in the 1980s that persists today is that as trust in government effectiveness to handle the problems citizens are facing declines, there is a greater push to entrust various services to the care and management to the private sector (Erikson, 2021). This trend correlates with significant budget cuts in monetary allocation to the Centers for Disease Control and Prevention (CDC), greatly stifling their ability to investigate outbreaks, gather and analyze
data, and prepare to respond to pandemic conditions (Cigler, 2020). In *Pandemics show us what government is for*, Erikson is a scathing criticism of this trend of downregualting government capacity makes an astute observation on the state of government capacity in an age of apathy and illpreparedness:

There needs to be a worldwide reckoning with what governments are for. Governments cut to the bone cannot respond easily or quickly… Governments cannot exist solely as payers-of-last-resort. They too need to be valued and nurtured back to health, so that they can sustain us when our needs hit pandemic proportions. (Erikson, 2021)

When government institutions are unable to bear the financial burden of disaster management, they are unable to rise to the political leadership expected of them and muster the capacity to take responsibility for addressing an issue as globally sweeping as a pandemic. The traditional bottom-up model that has dictated disaster management response essentially since the nation’s inception and that was formally systemetized in 2003 through ‘A National Response Framework’ (NRF) falls short in the context of a pandemic (Erikson, 2021). In non-pandemic natural disasters, local community leaders are offered a window of opportunity to leverage the disaster to carve the way to a better future for their constituents (Flowers, 2018). Expecting a small, local government entity; however, to take responsibility in leading pandemic coordination and bear the financial obligations associated is wholly unreasonable.

To balance politics, money, and responsibilities of pandemic response under federalism, local community and state leaders must be willing to relinquish some of their traditional rights and responsibilities in disaster management response and the federal government must have the resources necessary to be held accountable for pandemic response coordination. The typical argument to justify the bottom-up model of disaster management is that while all disasters are
not nationwide or statewide, “all disasters are local” (Becker, 2009). It is more important to note; however, that in the infrequent but exceedingly dangerous circumstances in which a disaster is global, the federal government is the only entity with any hope of mounting an appropriate disaster response.

While the policies that dictate the everyday lives of the American people may be adequately implemented and executed by their local governments, the scope and impact of natural disasters – and especially pandemics – warrant a multilateral response under federalism. The serpentine beauty of federalism is in it’s ability to balance and check power, so to completely neglect federalism in times of disaster would be short-sighted and rash. It is necessary; however, to position the federal government to lead – not dictate – the nation’s response to a pandemic. Utilizing a flexible interpretation and application of the Tenth Amendment, it is possible to design and implement systems in America’s public health framework that possess the federal government to lead “cooperative relations” and in which a strong leader can “coordinate between shareholders” in the allocation of shared power and responsibility (Erikson, 2021). In an increasingly polarized political landscape; however, the federal government falls short of an institutional image of national unity and collaboration, instead at times resembling a circus of competing interests, corruption, and conflict.

Accountability in politics has become a bit of an oxymoron. Disaster politics – and especially pandemic politics it seems – is rought with political maneuvering and evasive media tactics to push responsibility on to some other entity or conspiracy. At baseline there is a rather unclear allocation of responsibilities and complex contingencies associated with resource allocation under federalism. It is; therefore, unsurprising that in a fiercely individualistic nation built upon federalism and enumerated liberties like freedom of the press and freedom of speech,
falsehood and fingerpointing proliferate news and media in times of disaster. Strong federal leadership providing state, local, and tribal governments with frameworks and guidance to address a global disaster like a pandemic and coordinating between the numerous actors involved can provide the structure necessary to bring stability and structure in times of fear and uncertainty.

*The Complexity of Cascades: Climate Change, Public Health, and Federalism*

Adequately addressing disaster management in the 21st century is exceedingly more convoluted than centuries prior due to the complexity of climate change and its cascading effects. This is of course coupled with a plague of science-denial which has metastasized throughout American culture – its exceptionally challenging to address the causes and consequences of climate change when climate change itself is a disputed notion. Nonetheless, the interconnected relationship between society and the natural world must be thoroughly investigated to understand how to best slow humanity’s propulsion towards the consequences of climate disaster – resource scarcity, human migration, and conflict (Hauser, 2022). Urbanization, wildlife habitat encroachment, and globalization serve as examples of society-nature interactions which contribute to the cascading effects driving climate change and creating opportunities for pandemics to arise.

While there is no objective beginning to the climate change cascade, urbanization is a reasonable place to start. At baseline, urbanization is a public health nightmare. Traditionally, urbanization is used as a metric to gauge the development and success of a nation, a hallmark of industrialization and modernization (Zhang, 2022). Urban public health outcomes globally are bleak – urban citizens are typically exposed to higher levels of pollutants in their water and air, they are more likely to develop chronic illnesses and mental health concerns, and they are more
likely to have habits noncondusive to a healthy life, like sedentary and poor diet (Zhang, 2022). No one or thing is better suited for an urban lifestyle than a pathogen. With so many people densely packed into such a geographically constrained area often with poor hygienic capacity – sewage, garbage disposal, etc. – pathogens have bountiful human hosts to infect and numerous opportunities to do so (Reyes, 2012). As population density has been shown to highly contribute to the severity of an epidemic, it is essential to account for urbanization as a driver of pandemics in the ever interconnected global community (Reyes, 2012).

Zoonoses are infectious agents that are capable of moving between human and non-human animal populations naturally (Slingenbergh, 2004). RNA viruses are perhaps the best-suited to emerge from the environment and mutate to be able to cross the species barrier due to their short-generation time and low replication-fidelity which allows for small, but proliferative genome mutations that alter host-specificity (Slingenbergh, 2004). When society encroaches upon the sovereign land of Mother Nature, conflict arises in the form of zonoses. The RNA viruses, silently mutating in the ecosystems unadulterated by human presence, have tremendous capacity to cross the species barrier when presented with a new potential host – mankind. Gone are the days when pandemics are random, unexpected events, human disruption of ecosystems for food, resources, and financial benefit drive “unknown animal-human disease chains” (Erikson, 2020).

Another trend which accelerates humanity toward pandemics is globalization. While increasing global connectivity has numerous advantages – such as promoting cultural exchange and insentivising greater global cooperation – it is also allows for especially efficient spread of infectious disease causing agents over an unprecedented geographical scope. The threat infectious disease pose during the age of globalization is in essence a national sovereignty issue,
as pathogens are indiscriminating and unbothered by superficial socially-constructed border. In other words, they “recognize no national boundaries” and demand global cooperation as “no state, no matter how powerful, can, on its own, make itself invulnerable to them” (Frenk, 2011).

Due to globalization it is as easy for scientists from Tokyo, Delhi, Shanghai, and New York City to board planes and attend a conference in Paris as it is for a virus to travel just as far and just as quickly.

Human behavior propels not only climate change, but also the incidence of human interaction with novel pathogens and the opportunities for viruses to be passed from human to human; thereby, propelling pandemics. The relationship between climate change and pandemics is convoluted, but climate change is in essence both the result and the impetus of a number of cascading complexities and disasters, all of which create circumstances that encourage pandemics to arise. Climate scientists have long been aware of the looming threat of pandemics, accelerated by the careless and unsustainable practices of societies, governments, and corporations. Reflecting on the hypotheses of Slingenberg, it is easy to see his clear foreshadowing of the COVID-19 pandemic more than a decade before the virus emerged:

It is likely that new pandemics will occur in the future [and] that RNA viruses in animal reservoirs will be implicated … Disease ecology shows us that disease spread and the emergence of zoonotics … are largely the product of human activity. Hence, the solution to these problems is also a matter of human choice. (Slingenberg, 2004)

This is a fate humanity is likely to repeat without some significant overhauling of common modern practices and trends. Here, is where government has an opportunity for pandemic mitigation. To protect communities, policymakers must battle disinformation and conspiracy theories which seek to deligitimize the impact of climate change on human health.
Past pandemics, such as the IVA pandemic of 1918, are no longer reliable predictors of future pandemic outcomes due to the expansion and advancement of humanity and its numerous cascading effects. The interactions between humans and the natural world – urbanization, wildlife habitat encroachment, and globalization are ever-evolving and will likely only become more complex if mankind continues on its current trajectory.

Marriage of Necessity: Collaboration between Public Health and Politics

After discussing all the ugliness caused by the politicization of public health, it is reasonable to assume that the panacea is to divorce public health and politics entirely; however, there is the potential for collaboration and partnership between public health and politics for the betterment of mankind. For this collaboration to be successful under the framework of federalism, both parties must leverage a mutual understanding of “federalism and intergovernmental relations, but also that of public law, public health, and emergency management” – in other words, they must not be ignorant of each other, but rather take steps towards cooperation (Cigler, 2021). Only when public health officials and politicians begin to meet each other with enthusiasm and respect rather than hostility, disinterest, or disgust, will leadership be able to efficiently and effectively respond to pandemics.

Collaboration in the context of pandemic response relies on the understanding that politicians and public health officials each have unique skillsets which can be leveraged to support more successful outcomes. When both sectors utilize their strengths to work towards a common effort to protect lives in a mutually-respectful partnership, the public good benefits. The greatest challenges to there life-saving partnerships is hyper party polarization, poor communication, and the personal incentive of both groups to demonize the other.
Overcoming these hurdles towards collaboration must begin with establishing trust between the scientific and political communities. Anti-professionalism is not a 21st century problem alone, but distrust and dissatisfaction with career politicians and scientific experts has certainly been a growing trend (Rittel and Webber, 1973). According to a study published by Pew Research Center, American’s distrust in scientists increased by more than 10% between April 2020 and December 2021 (Kennedy, 2022). Similarly, the study found that American’s distrust in elected officials increased nearly 15% over the same time span (Kennedy, 2022). This shared source of frustration could be seen as a point of solidarity between public health officials and politicians, but instead it seems to erode their relationship rather with each side feeling distrustful of the other.

The clearest example of conflict between public health officials and politicians during the COVID-19 pandemic can be seen through President Trump’s disregard of public health expert advice throughout the pandemic (Cigler, 2021). Despite the clear warnings of public health leaders, Trump, “promoted unproven remedies and pressured state and local governments to reopen their economies quickly, and against medical advice” which fueled distrust and delegitimization of the public health sector (Cigler, 2021). Most egregiously, perhaps, was Trump’s repeated disregard of the mounting public health crisis, downplaying official reports of COVID-19 within U.S. borders, and giving credence to COVID-19 origin conspiracies (Bennouna, 2021).

While it is far more simple to accept that public health and politics are too vastly different entities, doomed to work disconjointedly and ineffectively, public health and politics have far more in common than one might think. Birkland summarizes eloquently summarizes their shared mission, explaining that:
Public health is grounded in the most basic function of government: to promote public health, safety, and welfare. Disease preparedness and response is an inherently intergovernmental activity. (Birkland, 2021)

Bearing this in mind, it is essential that both sectors come to understand that public health and politics are not at odds with each other, but rather underutilized partners striving towards the same objective – public welfare. As human behavior drives climate change and creates more opportunities for pandemics to emerge, public health and politics must reconcile their 21st century marriage of necessity.

V. Bibliography


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