Unprepared: Why Health Law Fails to Prepare Us for a Pandemic

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Three human influenza pandemics occurred in the 20th century, each resulting in illness in approximately 30 percent of the world population and death in 0.2 percent to 2 percent of those infected. Using this historical information and current models of disease transmission, it is projected that a modern pandemic could lead to the deaths of 200,000 to 2 million people in the United States alone.¹

Introduction

Talk of plague is in the air. The spread of the novel H5N1 strain of avian influenza from east Asia to much of the old world in 2006 and the recognition of likely cases of human-to-human transmission² have reigned fears that the world stands at the precipice of a major influenza epidemic.³ According to the United States government, we have indeed left the relatively calm “inter-pandemic period,” and have entered a period of “pandemic alert,” in which humans have contracted a novel strain of

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influenza, but no sustained human-to-human transmission has occurred. Whether the H5N1 strain will evolve to sustain extensive human-to-human transmission is not known, but the possibility has incited both fear and "preparedness" planning around the world.

Internationally, the World Health Organization has taken the lead, monitoring the spread of avian influenza around the globe and offering support to nations experiencing outbreaks of the disease among their bird or human populations. Domestically, the federal government through the Homeland Security Council has issued the National Strategy for Pandemic Influenza ("National Strategy") and a subsequent National Strategy for Pandemic Influenza Implementation Plan ("Implementation Plan"). These documents seek to "guide our preparedness" with a three-pillared approach that emphasizes preparedness and communication, surveillance and detection, and response and containment. The plans call for federal agencies, state and local governments, and private institutions to engage in their own preparedness planning.

The federal government's plans make for sober reading. For example, the Implementation Plan predicts that two million Americans may die in a worse case scenario. In addition, the Implementation Plan concedes that in the case of a pandemic, the federal government will be unable to provide support comparable to that provided to states and localities during natural disasters such as hurricanes. Moreover, the

5 Not surprisingly, the media has played upon these fears. See Alessandra Stanley, Bird Flu Comes to America, at Least in a TV Movie, N.Y. TIMES, May 9, 2006, at B1.
10 Id.
11 Id. at 2. The federal government has established grants to support preparedness planning for state and local governments. See U.S. Dep't of Health and Human Services, State and Local Government Planning and Response Activities, available at http://pandemicflu.gov/plan/tab2.html. (last visited November 25, 2006). In addition, the Dep't of Health and Human Services is conducting "planning summits" around the country. Id.
13 Given the poor federal response to Hurricane Katrina in the summer of 2005, the plan's contention that the federal government will be able to provide less support than that given
Implementation Plan acknowledges that vaccines and anti-viral medications will be in short supply, and that even if the plan is followed, the nation will have to wait until 2010 before it is able to produce within 6 months of the start of a pandemic an adequate supply of vaccine.\(^{14}\) In addition, the Implementation Plan foresees significant shortages of hospital beds and medical supplies, the latter of which are typically kept in “limited inventories.”\(^{15}\) In short, although the government does not say it in so many words, it concedes that even if we follow all of its proposed plans for preparation, we will remain unprepared.\(^{16}\)

Why is that so? While we do not know whether the H5N1 form of avian influenza will ever incite a human pandemic worthy of our fear, we have long had reason to know that another influenza pandemic could arrive.\(^{17}\) More pointedly, we long knew, or should have known, that deadly infectious epidemics frequently emerge, as did HIV in the 1980s and SARS in 2003.\(^{18}\) Moreover, old infectious diseases such as malaria and tuberculosis continue to kill millions.\(^{19}\) Hence, our public health and health care systems should have left us prepared for the advent of an infectious epidemic. That during hurricanes is truly sobering. For a discussion of the federal government’s inadequate response to Hurricane Katrina, see Senate Committee on Homeland Security & Governmental Affairs, Hurricane Katrina: A Nation Still Unprepared, May 2006, available at http://hsgac.senate.gov/_files/Katrina/Final Report.pdf. (last visited November 25, 2006).\(^{20}\)

\(^{14}\) Homeland Security Council, Implementation Plan, supra note 1, at 105.


\(^{16}\) The President has requested 7.2 billion dollars for influenza preparation, most of which was to be used for increasing vaccine capacity and purchasing antiviral medications. As of May, 2006, Congress had appropriated only $3.8 billion of that funding. See id.

\(^{17}\) The twentieth century saw three major influenza pandemics. The worst, the 1918 epidemic, killed more people than were killed in World War I. Homeland Security Council, National Strategy, at 1. For a further discussion of the 1918 pandemic, as well as other influenza pandemics in the 20th century, see Edwin D. Kilbourne, Influenza Pandemics of the 20th Century, 12 Emerging Infectious Diseases 9 (Center for Disease Control Jan. 2006), available at www.cdc.gov/eid. (last visited November 25, 2006).

\(^{18}\) The problem of so-called emerging infections was highlighted in the 1990s, Insts. of Med., Comm. on Emerging Microbial Threats to Health, Emerging Infections: Microbial Threats to Health in the United States (1992) [hereinafter Emerging Infections]. The problem also received popular attention through Laurie Garrett, The Coming Plague: Newly Emerging Diseases in a World Out of Balance (Farrar, Straus and Giroux 1994).

\(^{19}\) Inst. of Med., Comm. on Microbial Threats to Health: Emergence, Detection and Response 25 (2003) [hereinafter Microbial Threat].
they did not, simply means that we are not only more vulnerable to pandemic influenza, but we are also more vulnerable than we need be to whatever still-unknown microbe Mother Nature may thrust upon us.

The reasons for this failure are complex and many. In this Article I will highlight just one—but very important—reason: health law's failure to appreciate and respond to the ubiquity of infection. Rather than basing our health laws on the recognition that infectious diseases are a major fact of life and that, as a result, no individual can, acting alone, protect him or herself from them, contemporary health law has tended to assume that disease is primarily an individual harm to be dealt with by individual patients and their clinicians. Moreover, to the extent that our health laws have recognized a social dimension to health care, they have focused primarily on the economic externalities of treatment, not on the social harm of disease. As a result, health law has helped to fashion a health care system that lacks the redundancy and resiliency that will be critical in a pandemic.

I begin in Part I by briefly explaining what I mean by the ubiquity of infection and what conclusions follow from that premise. I then turn in Part II to the field of health law and discuss its early development as well as the predominant perspectives or paradigms that influence it. In Part III, I offer a brief discussion of some of the key doctrines and policies that reflect the leading health law paradigms, demonstrating how they neglect infection and ignore the social cost of disease, thereby helping to craft a health care system that is poorly suited to the prevention and treatment of epidemics. Finally, in Part IV, I take up a possible counter-example: AIDS law. Although HIV left a major mark on health law, I contend that health law as a whole has not learned the critical lesson of ubiquity of infection from its experience with HIV. I conclude by warning against repeating that mistake and treating the threat posed by pandemic influenza as sui generis, a possible emergency to be dealt with via special emergency laws. While the type of preparedness planning advocated by the National Strategy may be useful and even imperative, it cannot by itself prepare us for either pandemic influenza or the next, still-unforseen emerging epidemic. To be prepared, we need a health law that recognizes that infection is pervasive and that health care itself is a public health issue.

\[20\] See infra notes 24-53 and accompanying text.
\[21\] See infra notes 54-109 and accompanying text.
\[22\] See infra notes 110-98 and accompanying text.
\[23\] See infra notes 199-227 and accompanying text.
I: The Ubiquity of Infection

A. The Microbial Threat

The existence and problem of infectious disease has long been central to public health's agenda. Indeed, the field of public health developed in the nineteenth century in response to the horrific epidemics of infectious disease such as cholera and yellow fever that then ravaged the globe. For example, it was John Snow's demonstration of the linkage between cholera and the Broad Street water pump that helped to give rise to the modern field of epidemiology. Likewise, in the United States, the sanitary movement developed in response to cholera epidemics. Interestingly, this happened before scientists understood that the epidemics at issue were caused by infectious microbial agents.

In the middle of the twentieth century, as the developed world entered into the "epidemiological transition" and infectious diseases played a reduced role in human mortality, the field of public health expanded its horizons and began to pay increasing attention to other sources of human illness. Nevertheless, infectious diseases did not go away, rather, they remained a common and critical problem for humanity. Even in the United States, the death rate due to infectious diseases rose more than 50% between 1980 and 1992. Globally, the statistics have been far bleaker. In fact, developing countries report that infectious diseases cause one half of all deaths and "are the leading cause of death for children and young adults."


Shyrock, supra note 24, at 647-48.

Indeed, there was a vociferous debate during the early and mid-nineteenth centuries as to whether epidemics were caused by contagion or miasma emanating from sanitary conditions. See T. Kue Young, Population Health: Concepts and Methods 10 (Oxford Univ. Press 1998).

Ruth Berkelman and Phyllis Freeman, Emerging Infectious and the CDC Response, in Emerging Illness and Society: Negotiating the Public Health Agenda 352-53 (Randall M. Packard et al. eds., 2004).

Id.

Microbial Threats, supra note 19, at 23. Although this paper focuses on the capacity of the domestic health care system to respond to a pandemic, the problem is international in scope. The heavy toll that infectious diseases take in the less-developed world and the ability of diseases
A few infectious diseases are particularly responsible for the carnage. AIDS, tuberculosis and malaria together cause over 500 million illnesses a year and kill at least 6 million people. Indeed, HIV alone has taken over 20 million lives in the past quarter century and it has left more than 14 million children, most of them in Africa, without one or both parents.

HIV, however, was not the only disease to “emerge” or be discovered in recent decades. In fact, a succession of new infectious diseases has been recognized, including, to name just a few: Lyme disease, e-coli 0157:h7, and more recently SARS. In addition, old diseases that were once thought to have been under control have “reemerged” as killers, whether due to the evolution of antibiotic resistance or to social and environmental changes that have increased their danger to humans.

According to the Institute of Medicine:

The emergence and spread of microbial threats are driven by a complex set of factors, the convergence of which can lead to consequences of disease much greater than any single factor might suggest. Genetic and biological factors allow microbes to adapt and change, and can make humans more or less susceptible to infections. Changes in the physical environment can impact on the ecology of vectors and animal today to travel rapidly around the world compels us to recognize that prevention of infectious diseases must necessarily be global. See Laurie Garrett, BETRAYAL OF TRUST: THE COLLAPSE OF GLOBAL PUBLIC HEALTH 545-85 (2000) (discussing how globalization has increased the global public health threat and arguing that only by reinvesting in public health and working on a global scale can threats be prevented). With respect to influenza, prevention of a pandemic requires both surveillance and the provision of resources by the wealthier nations to poorer nations facing outbreaks of avian influenza. See, Davis, supra note 3, at 151-63 (arguing that indifference by the West to disease in the less developed world does not auger well for the world’s ability to prevent an influenza pandemic).

31 Microbial Threats, supra note 19, at 25.
32 Id. at 26.
34 Emerging Infections, supra note 18, at 27.
35 Berkelman and Freeman, supra note 28, at 353.
37 Microbial Threats, supra note 19, at 4. In addition, some diseases that were previously believed not to be infectious have turned out to be so. See EMERGING INFECTIONS, supra note 18, at 28-29 (noting that peptic ulcers, previously believed not to be caused by an infectious agent are now believed to be caused by the H. pylori bacterium).
reservoirs, the transmissibility of microbes, and the activities of humans that expose them to certain threats. Human behavior, both individual and collective is perhaps the most complex factor in the emergence of disease. Emergence is especially complicated by social, political, and economic factors—including the development of megacities, the disruption of global ecosystems, the expansion of international travel and commerce, and poverty—which ensure that infectious diseases will continue to plague us.\(^{38}\)

In other words, human actions help to ensure that germs will continue to threaten us. The germs are here to stay.

**B. The Lessons of Infectiousness**

The recognition of the ubiquity of infection supports the adoption of a population perspective.\(^{39}\) This perspective, central to the field of public health,\(^{40}\) seeks to understand a disease and reduce its incidence in communities or groups of people.\(^{41}\) In this, the perspective differs from that of clinical medicine which typically focuses on treating individual patients.\(^{42}\)

A focus on infection points to a population perspective because infectious diseases, by their very nature, are not solely individual harms. Infection is a social harm; it can spread, either directly from person to person, or indirectly, via an animal vector or the food or water supply. This means, as Leslie Francis and colleagues have written, “a patient may be both victim and vector... Infectious disease thus reminds us of our vulnerability to assaults from outside the person. And it places us in the position of putting others at risk, whether or not we want to be in this position.”\(^{43}\)

Infectious diseases thus underscore the interdependency of human health.\(^{44}\)

\(^{38}\) *Microbial Threats*, supra note 19, at 2; *GARRETT*, supra note 30, at 545-85.


\(^{41}\) *Id.*

\(^{42}\) *Id.*

\(^{43}\) Leslie P. Francis *et al.*, *How Infectious Diseases Got Left Out – And What This Omission Might Have Meant for Bioethics* 19 *BIOETHICS* 307, 311 (2005).

\(^{44}\) Of course, infectious diseases are not the only health hazards about which human beings are
They demonstrate that an individual’s disease or lack thereof affects the risk that others have of becoming ill. Thus an individual case of a highly contagious disease such as influenza or measles creates an externality or a public harm that can rapidly spread and threaten a community. Likewise, the prevention or treatment of an infection in any individual creates a public good. As such, risk cannot be minimized solely by individual decision making, or even a system of private laws. Rather, individually rational decisions may actually increase the risk of harm to a community. Thus, a person who is mildly ill with influenza may have little incentive to refrain from going to work, but that decision may increase the spread of the disease and lead ultimately to higher risks to others, including others who are immuno-compromised and hence especially vulnerable to the disease. Conversely, the parent of a child with a mild ear infection may have little reason to refrain from giving the child an antibiotic, even if the medication would not be effective for the infection, despite the fact that excessive use of antibiotics may lead to antibiotic resistance and thereby more untreated disease in the community. As a result, in the case of infectious disease private harms and public harms are not congruent and some collective decision making may be necessary.

The recognition of the ubiquity of infection also suggests two additional and related lessons. First, as evident from the above quote by the Institute of Medicine, the incidence of infection depends upon a complex web of social factors, most of which are outside the control of any one individual. Thus, while the risk of any one individual contracting a disease such as measles or even HIV may depend in part on actions that the individual may take (choosing vaccination or refraining from unprotected sex), it also depends on the pre-existing incidence of the disease in the individual’s community which, in turn, is the result of a behavioral, cultural, social and ecological factors, many of which are global in their scope. Hence, risk is determined at multiple levels and must interdependent. Interdependency is, however, more obvious and notable in the case of infectious diseases than with other health threats.

45 See Richard A. Epstein, Let the Shoemaker Stick to His Last: A Defense of the “Old” Public Health, 46 PERS. IN BIt. & MED. (2003), S 138, S 142-143 (noting that infectious diseases are public harms).

46 Public goods are generally considered goods that exhibit the characteristics of non-excludability and non-rivalry. See David Woodward and Richard D. Smith, Global Public Goods and Health: Concepts and Issues, in Richard Smith, et al, GLOBAL PUBLIC GOODS FOR HEALTH: HEALTH ECONOMIC AND PUBLIC HEALTH PERSPECTIVES 4 (Smith et. al. eds., 2003). For the claim that prevention of infectious disease constitutes a public good, see id. at 10-13.

47 See text accompanying notes 126-128, infra.

48 See text accompanying notes 37-38, supra.
be addressed on a population-level basis.  

Finally, the recognition of the ubiquity of infection, and more particularly the commonness of emerging infections, should remind us of the potential for epidemics. The defining characteristic of an epidemic is that it affects an atypically large number of people, in other words, the incidence of the disease is more than is to be expected. Infectious diseases need not be epidemic and non-infectious diseases can be epidemic. Nevertheless, because of their capacity to spread, infectious diseases have a particular capacity to become epidemics, especially when they are new or novel to a population and the population lacks immunity, such as would be the case with a new strain of influenza. This means that new infectious diseases can be expected to inflict illness at a greater rate than is typical. Or, to put it another way, emerging infections can easily become epidemics. Hence, public health protection requires the capacity to respond to unanticipated (because they are anticipated) increases in the incidence of illness.

To summarize, an appreciation of the ubiquity of infection points to several lessons: the interdependency of human health, the social cost of an individual's disease, the social and ecological causes of disease, and the likelihood of epidemics. Unfortunately, these lessons are largely absent in modern American health law.

II: Health Law and the Neglect of Infection

A. The Rise of Health Law

Contemporary health law was born in the optimism spawned by the epidemiological transition. Like bioethics, a field that Leslie Francis and colleagues charge with neglecting the problem of infectious disease, contemporary health law

50 Geoffrey Rose has stressed the importance of broad population-level factors in determining the risk of non-infectious diseases. See GEOFFREY ROSE, THE STRATEGY OF PREVENTATIVE MEDICINE (Oxford Medical Publications 1992).
53 See Richard M. Krause, Introduction to Emerging Infectious Diseases; Stemming the Tide, in EMERGING INFECTIONS 7 (Richard M. Krause ed., 1998).
54 For a further discussion of the epidemiological transition, see ROBERT BEAGLEHOLE AND RUTH BONITA, PUBLIC HEALTH AT THE CROSSROADS: ACHIEVEMENTS AND PROSPECTS (2d ed. 2004).
55 Clark Havighurst dates the field's emergence to the late 1960s when the Department of Health,
came of age in the 1960s through the 1980s, an era in which the Surgeon General reportedly declared that it was the “time to close the book on infectious disease.” The infectious killers of old, such as smallpox, TB, yellow fever, cholera, and diphtheria had been conquered (at least in the developed world). Modern medicine, it was assumed, could focus its energies on new challenges, especially non-infectious killers such as coronary artery disease and cancer.

As medicine turned to these new problems, it did so with new technology and new prowess. The 1960s and 70s saw several dramatic advances in medical science, including the first heart transplant and later the development of in vitro fertilization. These “breakthroughs” drew not only attention, but calls for new scrutiny. For example, writing in the New York Law School Law Review in 1977, Cyril H. Wecht warned: “Prometheus Beware!” With the power to perform so many new feats, “we must be careful not to elevate science from its position as servant of humanity to master of humanity.” This was a warning that seemed particularly apt following the 1976 case of Karen Ann Quinlan, a case that focused debate on the question of whether and to what


56 Garrett, supra note 18, at 33.

57 Of course, these diseases, with the exception of smallpox, were never conquered in the developing world where they continue to take a terrible toll. See Microbial Threats, supra note 19, at 23-51. The ability of diseases to travel from one part of the world to another with great rapidity, of course, means that the presence of an infectious disease anywhere creates a risk everywhere. Hence, many of the lessons of infectiousness that this article discusses in the domestic context can, and should, be applied more broadly. See id. at 97-103.


63 Id.
degree medicine's ability to keep someone alive should necessarily be used against the wishes of that individual and her family.\textsuperscript{64}

Wecht’s cry for human mastery over biomedicine was essentially a call for legal oversight of the medical profession. In effect, it was a challenge to the assumption of professional authority. Such a challenge resonated not only because of the remarkable and contentious developments in the clinic and laboratory at the time but also because of its compatibility with many social movements (including the civil rights and women's rights movements) active in the 1960s and 1970s, many if not most of which questioned established authority.\textsuperscript{65} Indeed, the women's health movement, which grew out of the women's movement, focused its questioning in particular on medical authority.\textsuperscript{66} As David J. Rothman has written, “[a]ll [such] movements subscribed to a fierce anti-paternalism, a dogged rejection of the principles of beneficence, a persistent determination to let constituents speak for themselves and define their own interests.”\textsuperscript{67} In addition, Rothman notes, these movements granted law a prominent role.\textsuperscript{68} Hence it is not surprising that the 1970s saw the development of a new, anti-professional, anti-paternalistic patients’ rights movement that looked to law and sought the protection of the legal rights of patients.

Critically, many courts at the time were sympathetic to this new “patients’ rights” perspective. In cases as diverse as Darling \textit{v.} Charleston Community Memorial Hospital,\textsuperscript{69} Roe \textit{v.} Wade,\textsuperscript{70} Cobbs \textit{v.} Grant,\textsuperscript{71} as well as the Quinlan\textsuperscript{72} case itself, courts seemed to restrain professional prerogative and validate the rights of patients. Of course, once courts did so, the development of a new field of legal inquiry that would focus, to a large degree, on these cases was almost inevitable.

\textsuperscript{66} Steven Epstein, \textit{Democracy, Expertise, and Activism for AIDS Treatment}, in Packard et al., supra note 28, at 102,106.
\textsuperscript{68} Id. at 92.
\textsuperscript{69} See Darling \textit{v.} Charleston Community Memorial Hosp., 211 N.E. 2d 253, 257 (III. 1965) (finding a hospital has duties of care to patients).
\textsuperscript{70} See Roe \textit{v.} Wade, 410 U.S. 112, 153-54 (1973) (finding that the Constitution protects a woman's right to have an abortion).
\textsuperscript{71} See Cobbs \textit{v.} Grant, 502 P.2d 1, 10 (Cal. 1972) (finding that physicians have an obligation to inform patients of treatment options).
\textsuperscript{72} See Quinlan, 355 A.2d at 647.
The development of a patients' rights perspective and judicial recognition of new rights for patients, however, were not the only factors spurring the development of the field that was to become known as health law. Health law also developed during this period because of the substantial growth in the size and complexity of the health care system. In 1965 Congress created both the Medicare and Medicaid programs. This monumental piece of legislation brought health insurance to millions who previously had only limited access to care. It also led to the influx of billions of dollars into the health care system, thereby attracting numerous financial interests (for-profit providers, commercial insurers, pharmacy managers, cost controllers, and others) and triggering innumerable attempts by the government to regulate those interests and control costs (consider CONs, DRGs, and anti-kickback laws), even as the private interests sought to exploit or evade that regulation. Thus began what Barry Furrow has called, the “cat and mouse game... a classic lawyer’s playground.” And where lawyers play, scholars and a legal field follow.

Largely missing among all of those formative influences on health law was infectious disease. To some extent, its absence was ironic. After all, it was humanity’s ability to control infectious diseases (particularly in the operating theater) that garnered medicine the prestige and influence that health law and the patient’s right movement

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73 The field of health law developed from the earlier fields of forensic medicine, law, and medicine. It was not until the 1980s that a case book was actually published that used the new term “health law.” That book was BARRY R. FURROW, ET AL., HEALTH LAW: CASES, MATERIALS AND PROBLEMS (1987). For a discussion of the development of the field and its representation in casebooks, see Mark Hall, The History and Future of Health Care Law: An Essentialist View, 41 WAKE FOREST L. REV. 347, 349-53 (2006).


76 Since 1970, health care costs in the United States have grown an average of 9% per year. In 1965, health care spending was just 7.2% of GDP; in 2005, it was over 16% of GDP. See Kaiser Family Foundation, Comparing Projected Growth in Health Care Expenditures and the Economy (2006), http://www.kff.org/insurance/snapshot/chcm050206oth2.cfm. (last visited November 25, 2006).

77 For a discussion of the growing costs and regulation of health care following the enactment of Medicare, see PAUL STARR, THE SOCIAL TRANSFORMATION OF AMERICAN MEDICINE 379-419 (1982).

sought to counterbalance. Thus, health law as a field would not have existed but for infectious diseases and medicine's ability to check them. Unfortunately, the reliance on the "myth" of the defeat of infectious disease may have led health law to ignore infectiousness, even in the face of its ubiquity.

Curiously the one major public policy issue of the 1970s that focused national attention on a traditional infectious disease, the so-called swine flu "fiasco," may well have reinforced the view that law and policy should not focus on infectious diseases. In 1976, the same year that the New Jersey Supreme Court issued its decision in In re Quinlan propelling the question of a "right to die" onto the national agenda, a young private at Fort Dix died of what the Centers for Disease Control identified as a swine flu virus. Fearful that the virus might be closely related to the virus responsible for the horrific 1918 pandemic, health officials alerted the government. To shorten a long story, government officials eventually recommended a mass immunization campaign against the virus. Vaccine manufacturers balked, fearing liability. In response, Congress enacted the Swine Flu Immunization Act that transferred liability (other than for negligence) from the manufacturers to the federal government.

In the fall of 1976, immunizations began. From the beginning, the campaign was beset by problems. In December, 1976 the Centers for Disease Control announced that 94 cases of Guillain-Barre syndrome were associated with the immunizations, leading to a "litigation nightmare" for the federal government which had assumed liability under the Swine Flu Act. As it turned out, this nightmare was

79 STARR, supra note 77, at 156-57.
80 The problem of emerging infections did rear its head in the 1970s with the outbreak of Legionnaire's disease. Although this outbreak afflicting an American Legion convention gained considerable national attention, that attention was short-lived and if anything suggested that infections could be easily contained. See Berkelman and Freeman, supra note 28, at 353.
83 KOLATA, supra note 81, at 158.
85 Id. at 957.
86 Id. at 958.
87 KOLATA, supra note 81, at 151-185. See also Davis, supra note 3, at 40-44 (arguing that the federal government learned the "wrong lessons" from the swine flu fiasco and wrongly cut support for influenza immunization programs).
unnecessary. No pandemic ever developed. For policymakers, the lesson learned was to be cautious and not “jump the gun” and assume that a pandemic will emerge. For the newly emerging field of health law, the impact of the swine flu affair is difficult to discern, but the lesson may have been that pandemics were indeed a problem of the past. Of course, just a few years later, a new pandemic, HIV, would emerge. That pandemic would not disappear so easily; but with the fundamental premises of health law in place, it might have been too late for HIV to alter the nature of health law.

B. The Paradigms of Health Law

Health law today presents an untidy “hodgepodge;” a messy array of diverse, if not unrelated, concerns. Issues as different as end-of-life care, white-collar crime, mergers and acquisition, and federal preemption of state insurance regulation comprise just some of the topics that one is likely to encounter in the study or practice of health law. Given this breadth of issues, and the complexity and apparent disconnect between the various statutes, regulations, and cases that constitute the “law” in health law, it is tempting to proclaim that health law lacks any unifying concepts or themes, in essence that there is no such thing as health law.

Despite that temptation, scholars working in the field have attempted to identify its central focus. Recently, Mark A. Hall has offered an “essentialist” definition of health law, arguing that health law is a field because “it is deeply embedded in the particular attributes of medicine and treatment relationships.” Although this definition excludes many issues that may rightfully be viewed as a part of health law, including most notably public health law, it captures the central role that the clinical

88 Id. at 185. See also Davis, supra note 3, at 40-44 (describing how the lack of federal funding to combat influenza could lead to catastrophic outcomes).
89 See Emerging Infections, supra note 18, at 55-57.
90 For a further discussion on how health law responded to HIV, see text accompanying notes, infra notes 199-217.
91 Hall, supra note 73, at 350.
92 For a discussion of the question of whether or not health law can be understood as a field, see id. Einer R. Elhauge, Can Health Law Become a Coherent Field of Law?, 41 WAKE FOREST L. REV. 365, 365-380 (2006) (developing a functional argument for treating health law as a coherent field).
93 For the purposes of this article, I take no position as to whether the field of health law demonstrates significant enough coherence to constitute a true field. As a practical matter, lawyers and scholars treat the field as such and its influence can be seen in the laws that regulate the organization, financing and delivery of health care.
94 Hall, supra note 73, at 360.
95 For a definition of public health law, see LAWRENCE O. GOSTIN, PUBLIC HEALTH LAW:
relationship has played in the field.\textsuperscript{96}

If health law has focused, for the most part, on the treatment relationship, it has done so in ways that reflect and are reflected in different paradigms or perspectives whose influence has waxed and waned over time. One of the most prominent perspectives in health law has emphasized individual autonomy and the rights of patients.\textsuperscript{97} This perspective, influential in the development of contemporary health law,\textsuperscript{98} is also largely ascendant, although increasingly under critique, in academic bioethics.\textsuperscript{99} In addition, the perspective's emphasis on patient autonomy remains highly influential in American medicine.\textsuperscript{100}

In the last twenty-five years, another so-called market perspective has gained support and influence in the field. The market paradigm arose with the increasing salience of health care costs in the late 1970s and 1980s as well as the rising dominance of market-based, anti-regulatory arguments in American law and politics during the Reagan era.\textsuperscript{101} This perspective places a high premium on efficiency and contends that efficiency can be maximized by promoting the choices of individual patients, providers, and payors under the pressure of financial constraint.\textsuperscript{102} As a result, proponents of the perspective, such as Clark Havighurst, view the function of law as "maintaining an open, fraud-free market in which even intractable, value-laden choices can be made, as reliably as reasonably possible, by the people most affected, acting either as individuals or in groups or through selected agents."\textsuperscript{103}

Although the patients' rights and market perspectives differ in both the topics

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\item \textsuperscript{97} Mark A. Hall and Carl E. Schneider, \textit{Where is the "There" In Health Law? Can it Become a Coherent Field?}, 14 Health Matrix 101, 102 (2004).
\item \textsuperscript{98} See supra text accompanying notes 65-72.
\item \textsuperscript{99} Patricia Illingworth and Wendy E. Parmet, \textit{What and Why Autonomy} in ILLINGWORTH AND PARMET, supra note 67, at 74-78.
\item \textsuperscript{100} Mark Rothstein, \textit{Are Traditional Public Health Strategies Consistent with Contemporary American Values?}, 77 Temple L. Rev. 175, 188 (2004).
\item \textsuperscript{101} Havighurst, supra note 55, at 114.
\item \textsuperscript{103} Havighurst, supra note 55, at 110.
\end{itemize}
they focus upon and the specific prescriptions they offer, they do share some important attributes. First, they both continue to place the clinical relationship at the forefront. Second, they each place a high value on individual patient autonomy. Third, both paradigms “temper the tendency of medicine to exalt its guild interests and have helped put the patient at the center of the law’s concerns.” As a result, both paradigms conflict with an older, but still influential paradigm of professionalism which places the professional qua professional (usually the physician) at the center of the stage and emphasizes both the duties and privileges that the law should bestow upon the professional in order to further the interests of the patient.

In addition to the paradigms discussed above, Rand E. Rosenblatt has identified an additional, often overlooked paradigm that was especially influential from around 1960 to 1980. According to Rosenblatt, the law during this period reflected a belief in a “modestly egalitarian social contract” that presupposed that society had some obligation to provide relatively equal access to health care. At first blush, this paradigm, which I will call the “safety-net” paradigm, appears to prioritize a relatively broad public role in the provision of health care. However, the emphasis in this paradigm has not generally been on the social cost of disease itself (or on minimizing the incidence of disease) but rather on society’s obligation to help individuals who would otherwise be denied access to care. Hence, the safety net paradigm reflects concerns for distributive justice rather than concerns for population health. Indeed, while Rosenblatt suggests the possibility of a new perspective based on public health that would seek to reduce disease within populations, he laments that “the influence of the public health model was effectively marginalized by the medical profession (and other powerful economic and political actors) for most of the twentieth century, because it threatened to drain resources from profitable, fee-for-service treatment of individual patients and, more broadly, to criticize social inequality.” Thus, the dominant paradigms that influence health law today continue to emphasize the relationship between patients and

104 Scholars who write from the patients’ rights perspective tend to devote much of their attention to questions of bioethics and the rights of patients in relationship to their providers. Scholars and policymakers who share the market perspective are far more apt to devote energy to questions of anti-trust law and tax policy. See Havighurst supra note 55, at 111-16.
105 Hall and Schnieder, supra note 97, at 102.
106 Furrow, supra note 78, at 69; Rosenblatt, supra note 102, at 155.
107 Rosenblatt, supra note 102, at 155.
108 Id.
109 Id. at 158-59 (citing STARR, supra note 77, at 180-197). Barry Furrow makes a similar point, suggesting that public health has been deemphasized in part because there are few government jobs. Furrow, supra note 78, at 88. Understandably, legal fields follow the interest of lawyers and most lawyers work for the private sector and are concerned with that sector’s interests.
providers and to cast disease primarily as a personal matter in a way that can only be true if infectiousness is ignored.

III: Health Law and the Neglect of Infections

Health law's leading paradigms all place the clinical relationship in the center of the agenda. They also share two major premises that are made possible only if one ignores the ubiquity of infection: that illness is an individual harm and that its treatment is for the most part a matter of individual concern. These assumptions are evident throughout the vast and untidy field of health law.

In the subsections below, I highlight the influence and impact of the denial of the ubiquity of infection on three different areas of health law, each of which are closely associated with a different leading paradigm. In addition, I suggest how these different areas of the field both reflect the field's neglect of infection and contribute to the health care system's inability to respond to a major epidemic. In so doing I make no claim that the areas of health law I have chosen are representative of the entire field. Rather, I simply want to show how the assumptions of the leading paradigms are reflected in positive law and public policy in ways that undermine the nation's ability to prepare for a pandemic.

A. The Patients' Rights Paradigm and the Law of Informed Consent

The doctrine of informed consent forms the bedrock of contemporary health law. Not only does the law of informed consent help to define the relationship between patients and providers, its influence reaches broadly throughout the field and can be seen in such diverse areas as the regulation of human subject research, the protection of medical privacy, and the termination of medical care at the end of life.

110 See supra notes 39-53 and accompanying text.
111 The discussion below focuses on the patients' rights, market, and safety net paradigms. I have chosen not to emphasize the professional paradigm here because although it remains highly influential in law, especially in medical malpractice law, it exists in tension with the patients' right and market paradigms and thus its influence can be seen, and will be noted, in the discussions of those two paradigms. See supra notes 104-05; infra notes 116-17 and accompanying text.
112 Although the discussion has focused on infection, the lack of preparedness extends to other broad threats to a population's health, consider here the health care system's inability to respond to Hurricane Katrina. See SENATE COMMITTEE ON HOMELAND SECURITY & GOVERNMENTAL AFFAIRS, HURRICANE KATRINA: A NATION STILL UNPREPARED, supra note 13, at 13-14.
For the most part, the doctrine of informed consent reflects a patients’ rights paradigm. According to Furrow and colleagues, the doctrine developed out of and articulates “a prevalent belief in American jurisprudence that an individual has a right to be free from nonconsensual interference with his or her person, and a basic moral principle that it is wrong to force another to act against his or her will.” Thus, the doctrine seeks to give force to the right of self-determination enunciated almost a hundred years ago by Benjamin Cardozo when he exclaimed “[e]very human being of adult years and sound mind has a right to determine what shall be done with his own body.”

In order to effectuate self-determination, the law of informed consent requires health care providers to give patients information relevant to their decision making. Courts, however, do not require providers to inform patients about whatever they would want to know. Instead, courts have sought to balance a patient’s self-determination with considerations that arise from the older, professional paradigm, including the impact of unfettered autonomy on providers and the care they may offer. Courts also worry about the costs that a too-patient friendly informed consent standard would place on the judicial system. Hence, courts do recognize some of the potential social costs of patient autonomy. What the courts generally fail to consider, however, are the social costs of illness itself. Indeed, in privileging patient autonomy, the doctrine of informed consent presupposes that at least in the ordinary case, an individual’s decision whether or not to undertake a medical treatment is a matter of concern to that individual alone.

This is not to say that the courts do not consider the problem of contagion

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118 Courts are divided as to whether physicians must adhere to a standard of care determined by medical custom or by a reasonable patient standard. See FURROW ET AL., supra note 116, at 313-315.
119 As a result, even those courts which adopt a patient-based standard do not require physicians to inform a patient about whatever he or she individually would wish to know. Instead, courts rely on a reasonable patient standard. See id.
120 Id.
121 Id. at 315.
when it is presented front and center. Thus, courts have at times held that providers must inform patients of the risk that they will contract an infectious disease from a blood transfusion.\textsuperscript{122} In such cases, however, the risk at issue is to the patient, not to the social risk that the patient's decision poses to others. More interesting are cases such as \textit{Reisner v. The Regents of the University of California} in which the California Court of Appeals found that a physician, treating an HIV positive child, had the duty to warn the child or her parents about her infection so that she could refrain from practicing unprotected sex years later with the plaintiff.\textsuperscript{123} \textit{Reisner}, which relied on \textit{Tarasoff v. Regents of California},\textsuperscript{124} placed a limited duty on physicians to inform patients about the risks that the patient's own infection may place upon others.\textsuperscript{125} In that sense, \textit{Reisner} recognized the social cost of infection. Nevertheless, this recognition has been limited to cases in which the patient either is infected with a serious infection at the time of treatment or becomes infected as a result of treatment. Not appreciating the ubiquity of infection, courts have not extended the doctrine of informed consent to the more indirect, but nevertheless, important ways in which a patient's treatment decision may affect others.\textsuperscript{126}

\textsuperscript{122} See e.g., Jones v. Philadelphia College of Osteopathic Medicine, 813 F. Supp. 1125 (E.D. Pa. 1993); see also Sherwood v. Danbury Hosp., 278 Conn. 163 (2006) (describing how the physician and not the hospital has the duty to obtain informed consent and warn the patient of the risk of being infected with HIV as the result of a blood transfusion).

\textsuperscript{123} See \textit{Reisner v. The Regents of the University of California}, 37 Cal. Rptr. 2d 518 (Cal. Ct. App. 2 Dist. 1995).

\textsuperscript{124} See \textit{Tarasoff v. Regents of California}, 551 P.2d 334 (Cal. 1976) (holding that a psychotherapist had a duty to exercise reasonable care with respect to warning an identifiable victim of the psychotherapist's patient). \textit{Tarasoff} in turn relied on earlier cases holding that “a doctor is liable to persons infected by his patient if he negligently fails to diagnose a contagious disease . . . or, having diagnosed the illness, fails to warn members of the patient's family.” 17 Cal. 3d. at 437.

\textsuperscript{125} See supra note 123.

\textsuperscript{126} See e.g. Hawkins v. Pizarro, 713 So.2d 1036 (Fla. Dist. Ct. App. 1998)(refusing to hold a physician liable to a patients' husband who contracted Hepatitis C after physician failed to diagnose and inform patient of her infection when husband was known to physician at the time the diagnosis should have occurred). Discussing the bioethics, not the legal, literature, Francis and colleagues write “No general discussion of informed consent of which we are aware brings to the forefront information about the extent to which the patient's decision about treatment—or non-treatment may affect the health status of others.” Francis \textit{et al}, supra note 43, at 312. Of course, application of the legal doctrine of informed consent in such situations would pose difficult problems of causation, as it would be extremely difficult to establish that a decision made by a patient in the absence of information about the diffused, but very real, social harms of infection caused an injury to any particular person. Thus in an important way, it is not simply the law of informed consent, but the tort system itself, and more particularly its causation requirement, that makes it difficult to recognize the social costs of infection. This point, however, does not undermine the fact that both the academic and judicial rhetoric on informed consent has helped to shape a culture in which the autonomy of individual patients is cherished.
Consider, for example, the case of a child with a painful ear infection, the cause of which is not yet known. Should the child take an antibiotic? The answer to that question, of course, depends in part on the medical risks to the child of taking or not taking the antibiotic. But, because we are dealing with a microbe, there are social costs as well. While the risk to the individual child of receiving an antibiotic for a minor and possibly viral infection (for which the antibiotic will not be effective) may be miniscule, the social cost of the practice of over-prescribing antibiotics is far from trivial.\(^1\) The doctrine of informed consent, however, does not generally require that the provider inform the parent about this social risk.\(^2\)

Informed consent's focus on the interests of the individual patient, and its failure to require providers to inform patients about the social cost of an illness or treatment decision, has helped to shape a culture of health care practice that may undermine our ability to respond to an influenza epidemic. For example, since fear of avian flu has spread, reports have surfaced of providers writing prescriptions for Tamiflu, an antiviral medication that is believed to be effective against H5N1.\(^3\) Such private hoarding of the drug may diminish the limited supply of the medication that would be available in the event of a pandemic; it also increases the risk that the influenza virus will become resistant to the medication.\(^4\) However, the law of informed consent does not require providers to explain to patients the social consequences of such hoarding.

The law of informed consent, and the practice culture it supports, may play a

\(^{127}\) David Atkins, Joanna Siegel and Jean Slutsky, *Making Policy When the Evidence is in Dispute: Good Health Policy Requires Consideration of Much More than Clinical Evidence*, 24 HEALTH AFFAIRS 102 (Jan-Feb. 2005) (discussing the difference between social costs and benefits and clinical costs and benefits in the case of prescribing antibiotics for pediatric ear infections). For a more general discussion of antimicrobial resistance, see *Microbial Threats*, supra note 19, at 32-41. As noted above, issues of causation would make it very difficult for a court to find liability in such a case. *See supra* note 126.

\(^{128}\) On the contrary, by emphasizing the patient’s right of self-determination and the physician’s duty to the patient, the law may discourage, though it certainly does not preclude consideration of social cost. As Francis and colleagues note, “[t]he checklist of information to be provided to the patient-nature of the condition, alternatives, and likely results of each alternative-reference the patient’s own condition and the likely effects of treatment on himself/herself-not what might happen to the patient’s family, friends, or community if the patient remains untreated.” Francis *et al*, supra note 43, at 312.

\(^{129}\) Delthia Ricks, *Patients’ Fear Boosts Antiviral Sales*, NEWSDAY, March 17, 2006, at A05.

similar role in the case of vaccines. Vaccines are humanity's most important and effective tool case against infectious diseases. They have led to the eradication of smallpox and dramatic reductions in the incidence of a whole host of deadly infections, including polio, diphtheria, tetanus and measles. In the case of vaccines, however, even though the treatment is designed to reduce the risk of an infectious disease, the law has generally required physicians to inform patients about their own individual risks of vaccination, not about the social consequences of failing to take a vaccine. This neglect is significant because in the case of vaccines, individual risks and social risks diverge. As the incidence of vaccination rises in a community, individuals have less of a reason to be vaccinated against a less-prevalent disease. However, if many people in a community follow that logic and decide not to be vaccinated, the risk to the community as a whole will rise.

To some degree, this problem has been mitigated in the case of childhood vaccines by laws requiring children, with some exceptions, to be vaccinated in order to attend school. These laws, however, have not traditionally applied to the influenza vaccine. As a result, individuals who do not perceive themselves to be at risk for serious complications from "seasonable flu" often do not seek vaccination, despite the fact that if they become ill they will be contagious and may

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131 See Parmet, supra note 116, at 107-110 (for a longer discussion of this issue).
133 See Parmet supra note 116, at 93.
134 See id. at 107-110. The common law of informed consent with respect to vaccination has been significantly modified by federal legislation. The National Childhood Vaccine Injury Act creates a modified no-fault compensation scheme for certain covered vaccines, meaning that an injured child can receive compensation without a showing of negligence or failure to provide informed consent. See 42 U.S.C. 300aa-1-34. In addition, recent legislation aimed at preparing the nation against a bioterrorist incident has granted the Secretary of Health and Human Services the authority to provide total immunity for vaccine-related injuries except those resulting from willful misconduct in the event of a public health emergency. See Public Readiness and Emergency Preparedness Act, P.L. 95-148, 119 Stat. 2818 (2005).
135 See Parmet, supra note 116, at 74-75.
spread the virus to others, including those who are more apt to become seriously ill with the disease.

More generally, because many individuals have not taken account of the social consequences of low vaccination rates against flu, there has traditionally been a small and inconsistent market for flu vaccines in this country, resulting in a meager manufacturing capacity. This leaves the nation with a very weak manufacturing infrastructure with which to respond to the surge demands created by pandemic influenza, or even a very bad year of seasonal flu. In other words, because the market is responding to decisions made by individuals who are informed only about and rely upon their own immediate individual interests, the system lacks the resiliency necessary to respond to the inevitability of an epidemic. To be sure, other legal mechanisms, such as government purchases and stockpiling of vaccine can mitigate this effect and are therefore part of the government’s pandemic influenza plan. But the need for an emergency response is likely exacerbated by the fact that the fundamental building block of health care decision making, the conversations between providers and patients, need not include the social costs of deciding not to vaccinate.

In concluding this discussion, it is important to note and concede that informed consent is not the only factor responsible for the shortcomings discussed above. Both drug resistance and vaccination shortages are complex problems that arise from many sources. Moreover, the law of informed consent does not itself preclude a provider from informing a patient about social cost; nor could it require a patient to opt for a decision that sought to reduce social cost. Nevertheless, the law of informed consent has had an enormous impact on health care practice. By establishing a fundamental norm that neglects the ubiquity of infection and overlooks many of the social costs of disease, informed consent law helps to perpetuate a health care system that is unprepared for an infectious epidemic.

139 See TIMOTHY J. BROOKES, A WARNING SHOT: INFLUENZA AND THE 2004 FLU VACCINE SHORTAGE 24 (2005). In the fall of 2004, the United States experienced a shortage of influenza vaccine as one of the two licensed manufacturers of traditional (not nasal) influenza vaccine announced that it could not meet its anticipated production. For a discussion of the shortage that resulted and the steps that government officials took in response, see id. General Accounting Office, Statement by Marcia Cross, Influenza Pandemic: Applying Lessons Learned from the 2004-05 Influenza Vaccine Shortage, GAO-AO-06-221T, November 4, 2005.
140 See Implementation Plan, supra note 1, at 104-105.
141 See ROTHMAN, supra note 67, at 93-101 (discussing the impact of the patients’ right movement on the delivery of health care).
B: The Market Paradigm: Managed Care and Consumer Driven Health Care

As noted above, the market paradigm developed in response to the escalation of health care costs and the growing belief that traditional models of command and control regulation could not rein in that inflation. As a result, proponents of the paradigm sought to promote competition and to diminish, if not end, laws and payment systems that resulted in excess revenue going to the health care system. Rosenblatt writes: "The function of law in this model is to ensure that choices about health insurance and health services are made by individuals based on their own financial resources (assuming them to be above some specified minimum), and (in some versions of the model) to eliminate as much as possible hidden "cross-subsidies." Of course, the use of the term cross-subsidy presupposes that the treatment of one individual does not benefit another individual. In a world in which infection is ubiquitous and epidemics always possible, charges for one patient's treatment that exceed the cost of caring for that one patient alone may sometimes be appropriate charges for the external benefits conferred by treating the patient.

The market paradigm's influence on contemporary health law and its emphasis on promoting economic efficiency and reducing cross subsidies is pervasive. Originally, it showed its face in the application of antitrust law to the health care field, a development that opened the door to competition among health care providers. The paradigm has also been especially evident in the ascendance of managed care. Put most simply, managed care is a form of health insurance that combines, in some form or another, the financing aspects of health insurance with clinical decision making. As Peter Jacobson explains, "[a]t the heart of managed care is the promise that . . . [it] could

142 Havighurst, supra note 55, at 116.
143 Rosenblatt, supra note 102, at 155-56
144 Recognition of the ubiquity of infection does not deny the existence of cross subsidies or inefficiencies in the health care system. Undoubtedly many of the costs in the health care system that the market paradigm's advocates seek to reduce are not used to reduce social risk or provide for the protection of populations against infection. Indeed, in the absence of public policies or market incentives, there is little reason for providers to use their revenue to that effect. The point here is simply that by neglecting the ubiquity of infection, the market paradigm overlooks the external benefits of the provision of health care to individuals and therefore sees inefficiencies where in some instances there may an appropriate recognition of externalities.
145 Havighurst, supra note 55, at 115.
146 For a discussion of the growth of managed care, see FURROW ET AL., supra note 116, at 492-496.
lower costs by imposing restraints on the amount of care provided without sacrificing quality of care. To achieve these goals, managed care initiated the widespread use of cost-containment practices and financial incentives to encourage physicians to limit medical treatment."

Ideally, in the eyes of market advocates, managed care was to be combined with a policy of managed competition in which managed care organizations ("MCOs") would compete for the dollars of cost-conscious purchasers of health plans.

Although managed care was credited with stalling health care inflation for a time, in recent years health care costs have begun to rise at a rapid rate. This may be due, in part, to the fact that consumers have shied away from the most aggressive cost-containment measures of managed care, such as utilization review, provoking a "managed care backlash." In the place of managed care, market advocates and the Republican leadership in Washington are now endorsing "consumer driven" health care which seeks to "increase consumer sensitivity to cost and effectiveness by making people spend their own money for health care." The recent Medicare Modernization Act attempts to spur consumer driven health care by providing for favorable tax treatment for health savings account, which individuals could use to pay for routine medical care in conjunction with their purchase of a high-deductible health insurance plan.

Although there are significant differences between managed care and consumer driven health care, and the legal issues surrounding each approach are extremely complex, they share some important similarities that suggest the neglect of infection

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148 Id.
154 Pub. L. No. 108-173. For a fuller discussion of these accounts, see Jost and Hall, supra note 153 at 395-397.
155 For a very useful overview of the legal issues surrounding consumer driven health care, see Jost and Hall supra note 153, at 395-418. There are many more discussions available about the law of
and exacerbate the health care system's inability to respond to an epidemic. First, and foremost, both managed care and consumer driven health care seek to reduce the cost of health care by reducing the use of health care (managed care relies on insurers to limit care; consumer driven care relies on economic incentives to patients). Each approach attempts to "get the fat" out of the system by making parties more conscious of the costs of the health care services that are used. In addition, both managed care and consumer driven health care place a heavy emphasis on contract, seeing the private agreements between parties as an essential tool for enabling competition and price-shopping to flourish. This "contract-centric" perspective has gained considerable support in judicial decisions, particularly the federal courts' analysis of the intersection between managed care law and the federal Employee Retirement Income Security Act (ERISA), which has made clear that the benefits available to individuals insured under ERISA plans depends first and foremost upon the terms of the ERISA contract.

In the absence of infection, these developments could be viewed as counterbalancing the patients' rights perspective with one that places the good of the community at the center. After all, managed care consciously denies some patients benefits they would like in order to maximize the economic good of a plan as whole. Likewise, consumer driven health care seeks to reduce moral hazard and incentivize individuals for using only that care which they actually need, thereby reducing the costs to society as a whole.

When the ubiquity of infection is considered, however, both approaches become highly problematic on several levels. First, by putting contract law and competition to the forefront, each approach encourages parties to bargain and make

managed care. For an interesting set of articles on these issues, as well as the ethical issues that arose from managed care, see Symposium: Managed Care Systems, 23 J. L. MED. & ETHICS (1995). Clark Havighurst has been a particularly strong proponent of the role of contract in health law. See Havighurst, supra note 149, passim. See also E. Haavi Morreim, Moral Justice and Legal Justice in Managed Care: The Ascent of Contributive Justice, 23 J. L. MED. ETHICS 247 (1995).


See Pegram v. Herdrich, 530 U.S. 211, 218-221 (2000). Haavi Morreim has been especially articulate in arguing that respect for contract law in managed care promotes a common good. See E. Haavi Morreim, Quality of Life: Erosions and Opportunities Under Managed Care, 28 J. L. MED. & ETHICS 144 (2000).
treatment decisions based upon their own short-term interest. This may be appropriate when the "bargain" relates to the treatment of a non-infectious condition, but it makes little sense when an infectious disease that can harm others who are not a party to the bargain is at issue. When infection is present, the disease itself and not only the cost of its treatment or prevention is a social harm, one that is likely to be undervalued in a health care system based heavily on contract and private bargaining. Indeed, from the vantage point of the market, resources allocated to the social cost of a disease may well appear as inefficiencies that would be eliminated in a competitive market.

The latter point raises a related shortcoming of the market approach in the face of infection. By encouraging greater efficiencies in the system, the market approach may relieve the health care system of its redundancies. Thus managed care and like-minded prospective payment measures, such as Medicare's DRG system, encourage providers to perform fewer procedures and discharge patients from hospitals more expeditiously. Likewise, consumer driven health care encourages patients to seek fewer services. In each case, they leave health care providers with less extra income with which to "cross subsidize" the care of the uninsured and maintain extra beds and supplies. This has helped give the United States an increasingly "lean and trim" health care system, which may be the goal if we are trying to reduce the nation's health care costs. A lean and trim system however looks less than ideal if the ubiquity of infection is considered. In the event of an emerging epidemic, or a major bioterrorist incident, extra beds and supplies would no longer look like waste; they would look

160 For a criticism of this approach, however, see Robert A. Berenson, Perspective: Which Way for Competition? None of the Above; Advocates of Consumer-Directed Care Do Not Speak the Language of the Public, No Matter How Often They Invoke "Consumer Sovereignty" HEALTH AFFAIRS (Nov.-Dec. 2000).
161 Nor do private bargains generally take account the problem of epidemics, and the sudden upsurge of risk. Because health insurance contracts are generally short term contracts, parties have little incentive to consider the possibility that new diseases will emerge and become prevalent in future years.
164 See INST. OF MED., AMERICA'S HEALTH CARE SAFETY NET: INTACT BUT ENDANGERED (2000).
166 On the other hand, a "fat" system need not be one that uses its resources in a manner that reduces social risk. See supra note 144.
instead like essential ingredients of preparedness.\textsuperscript{167} This point was captured well by the \textit{Wall Street Journal}:

The very rules of capitalism that make the U.S. an ultra-efficient marketplace also make it exceptionally vulnerable in a pandemic.

Most fundamentally, the widely embraced “just-in-time” business practice—which attempts to cut costs and improve quality by reducing inventory stockpiles and delivering products as needed—\textsuperscript{168} is at odds with the logic of “just in case” that promotes stockpiling drugs, government intervention and overall preparedness.\textsuperscript{168}

In effect, the competitive forces the market paradigm sought to unleash have helped to create a hospital system especially vulnerable to epidemics.

\textbf{C. The Safety Net Paradigm and EMTALA}

As Rand Rosenblatt has wisely reminded us, health law has not only focused on the autonomy of patients and the economics of care,\textsuperscript{169} it has also paid considerable attention to the problem of access to care. This is a problem of monumental import in a nation without universal health insurance and with over forty-six million non-elderly people without health insurance.\textsuperscript{170} Indeed, it goes without saying that that fact alone, perhaps more than any other, reveals our health care system’s failure to appreciate the ubiquity of infection. As Mark Rothstein has noted, the lack of universal health insurance complicates the nation’s ability to respond to an epidemic.\textsuperscript{171} Individuals without care may delay seeking treatment, a problem that may reduce the effectiveness

\textsuperscript{167} In 2003, the General Accounting Office noted the problems that lean ventilator inventories might pose in the event of a bioterrorist incident. General Accounting Office, \textit{Hospital Preparedness: Most Urban Hospitals Have Emerging Plans But Lack Certain Capacities for Bioterrorism}, GAO 03-924 (Aug. 2003). The problem persists as evidenced by the Congressional Budget Office recently reporting that the nation’s hospitals would need seven times the number of ventilators they now have in the event of an influenza pandemic. Congressional Budget Office, \textit{ supra} note 15.


\textsuperscript{169} Rosenblatt, \textit{ supra} note 102, at 155.


\textsuperscript{171} Rothstein, \textit{ supra} note 100, at 179.
of efforts to keep track of and contain an epidemic. Moreover, lack of insurance denies health care providers, especially hospitals, with a source of funds to help pay for the care that many of uninsured will inevitably end up having if and when an epidemic arrives.\textsuperscript{172}

The safety net paradigm focuses on the access problem. Although the paradigm has not been dominant or influential enough to ensure universal access to health insurance, it remains a vital strain in many of our health laws.\textsuperscript{173} As Rosenblatt suggests, these various laws reflect the belief that society has at least some obligation to make health care available to those who cannot otherwise afford it.\textsuperscript{174}

Although the social safety net that these laws create is porous and thus fails to resolve the problem of access in comprehensive way,\textsuperscript{175} one federal statute creates a universal right of last resort. The Emergency Medical Treatment and Labor Act, known as EMTALA, was enacted in 1986.\textsuperscript{176} Most basically, EMTALA provides an obligation on the part of hospitals that participate in the Medicare program to conduct an “appropriate medical screening” of all individuals seeking emergency care,\textsuperscript{177} and to either stabilize patients or provide them with an appropriate medical transfer.\textsuperscript{178} Put most bluntly, EMTALA prohibits hospitals from “dumping” uninsured or otherwise undesirable patients,\textsuperscript{179} thereby enforcing the ideal that all individuals, regardless of their ability to pay, should have some access to care when they are need.

Despite EMTALA’s recognition of a social obligation with respect to health

\textsuperscript{172} See Elizabeth Weeks, \textit{After the Catastrophe: Disaster Relief for Hospitals}, 85 N.C.L. REV, 5, available at http://www.ssrn.com/abstract=883686. (last visited November 25, 2006)(discussing the economic situation that hospitals would face in an emergency and noting how the existence of uninsured patients exacerbates the problem); See also Williams, \textit{supra} note 165.


\textsuperscript{174} Rosenblatt, \textit{supra} note 102, at 172-76. Many ethicists and philosophers have made such a claim and have developed arguments in support of it. Perhaps the most influential attempt is: \textit{NORMAN DANIELS, JUST HEALTH CARE: STUDIES IN PHILOSOPHY AND HEALTH} (1985).

\textsuperscript{175} Recently, Massachusetts enacted health care reform legislation that was designed to provide insurance for most state residents. \textit{See} An Act Providing Access, Affordable, Quality, Accountable Health Care, H.R. 4479, 187th Gen. Ct. (Mass. 2006).

\textsuperscript{176} 42 U.S.C. § 1395dd (1986).

\textsuperscript{177} \textit{Id.} at § 1395dd(a).

\textsuperscript{178} \textit{Id.} at § 1395dd(b)(1).

\textsuperscript{179} \textit{See} Sara Rosenbaum & Brain Kamoie, \textit{Finding a Way Through the Hospital Door: The Role of EMTALA in Public Health Emergencies}, 31 J.L.MED. & ETHICS 590, 591 (2003). For a history of pre-EMTALA federal efforts to assure emergency care for those who need it, \textit{see id.}
care, the statute as written and interpreted fails to heed the lessons of the ubiquity of infection. In fact, there is substantial reason to believe that EMTALA, as it stands, may worsen the nation’s ability to respond to a pandemic.

EMTALA’s neglect of infection is easy to see. To simplify, the statute requires that hospitals provide “an appropriate medical screening” to everyone who seeks treatment in an emergency room. Via the screening, the hospital must determine if the patient is facing a medical emergency. If not, the hospital’s obligations under EMTALA end. Thus EMTALA only requires treatment in the case of an emergency medical condition, which the statute defines, except in the case of a pregnant woman, as:

(A) a medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain) such that the absence of immediate medical attention could reasonably be expected to result in—

(i) placing the health of the individual (or, with respect to a pregnant woman, the health of the woman or her unborn child) in serious jeopardy,

(ii) serious impairment to bodily functions, or

(iii) serious dysfunction of any bodily organ or part; ...  

This definition, as Sara Rosenbaum and Brian Kamoie have noted, “is individual-centric, not focused on populations; that is, the emergency exam is expected to center on the individual, not whether the health of the population at large would be seriously jeopardized were the patient not stabilized or given a medical transfer.” If a

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181 The courts have read the hospital’s obligations to conduct an appropriate medical screening narrowly, so as not to create a federal law of medical malpractice. The result is that a hospital will not be liable if it simply misdiagnoses the situation, even in cases in which the hospital has failed to diagnose a deadly infection that could potentially spread to others. See, e.g., Cleland v. Bronson Health Care Group, 917 F.2d 266, 271-72 (6th Cir. 1990) (finding that the hospital did not violate EMTALA when it misdiagnosed a case of influenza, sending a child home who later died).
182 The statute provides a different definition of an emergency medical condition in the case of a pregnant woman, so that an emergency medical condition covers when a pregnant woman is having contractions and there is inadequate time to move her to another hospital for delivery, or in those cases in which transfer of the woman may pose a threat to the health or safety of the woman or the unborn child. 42 U.S.C. § 1395dd(c)(1)(B)
184 Rosenbaum & Kamoie, supra note 179, at 592.
patient has an infectious disease, say influenza, but is not experiencing symptoms severe enough to satisfy the statutory definition, a hospital would be perfectly free under EMTALA,\textsuperscript{185} to release the patient, even though he or she might then spread the disease to others. Thus EMTALA’s most basic provision presupposes a world in which infection is either not common enough to consider, or not severe enough, to be thought of as an emergency.

EMTALA’s neglect of infection goes further. Under the statute, once a patient has an emergency medical condition, the hospital must either arrange for an appropriate medical transfer, which is a transfer to a hospital under certain limited conditions designed to ensure that the transfer will not harm the patient,\textsuperscript{186} or the hospital must treat the patient until the patient is stabilized. The statute states that a patient is stabilized when “no medical deterioration of the condition is likely, within reasonable medical probability, to result from or occur during the transfer of an individual from a facility, or, with respect to a [pregnant woman] to deliver . . . .”\textsuperscript{187} This definition is also individual-centric as it focuses on whether the patient’s own medical condition would decline if he or she were stabilized. The impact of the transfer, or release, on others is not considered by the statute. Hence, a hospital may release a patient with an infectious disease who is stable without giving any thought as to whether the patient is infectious to others, or to whether the patient will be able to receive adequate follow-up care to prevent the development of drug resistance (if the patient has been put on antibiotics or anti-viral medication).\textsuperscript{188} Nor does EMTALA require a hospital to counsel a patient who is infectious with a disease such as HIV as to the steps that the patient can take to avoid spreading the disease to others.

The greatest problem caused by EMTALA’s neglect of infection, however, is due not to its failure to mandate the treatment of people who are infectious; rather, it arises from the statute’s placement of the final safety net in the emergency room, while

\textsuperscript{185} Under state law, some infectious diseases are reportable by a hospital. When diagnosing such a disease, the physician would be required to report the infection to the local health department, which could order the isolation of the patient, in an appropriate case, or offer the patient continuing care. \textit{See} Lawrence O. Gostin, Scott Burris & Zita Lazzarini, \textit{A Study of Infectious Disease Law in the United States}, 99 COL. L. REV. 59, 101-119 (1999). Importantly, however, not all infectious diseases are reportable. Moreover, EMTALA’s failure to treat infectiousness as a condition for which hospitals must provide treatment demonstrates how health law leaves the problem of infectious disease to the public health system.


\textsuperscript{187} \textit{Id.} at § 1395dd(e)(3)(A).

\textsuperscript{188} However, in some situations, a hospital may be required by state law to contact the health department. \textit{See} Gostin \textit{et al.}, supra note 185 at 101-119.
failing to provide a mechanism for financing the cost of that care. In 2006, the Institute of Medicine issued a report, *Hospital-Based Emergency Care: At the Breaking Point*, that presents a disturbing, and in light of a possible pandemic, terrifying portrait of the state of America’s emergency rooms. According to the Report, the number of visits to emergency rooms increased by 26% between 1993 and 2003. Over 91% of hospitals in a national survey reported that their emergency rooms were overcrowded. Moreover, over 500,000 ambulances were diverted in 2003 alone, a year in which there was no pandemic. Although EMTALA is not the sole cause of this overcrowding, it contributes in multiple ways; by requiring hospitals to be the providers of last resort, by failing to offer adequate financial support for that treatment, and possibly by undermining social and political pressures to provide broader access to care for Americans. Whatever the causal chain, EMTALA has contributed to the development of a hospital system that is overcrowded and lacks the surge capacity that will be required should a pandemic arise.

Policymakers have recognized that EMTALA may present problems in the event of a public health emergency. In particular, legislators and members of the federal executive branch have agreed that EMTALA’s mandates are unrealistic in the event of an emergency, and may interfere with efforts to isolate an infectious agent, such as smallpox, in a single “hot” hospital. As a result, the federal government has undertaken several initiatives that effectively permit the waiver of EMTALA’s obligations during a public health emergency. For example, the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, permits the Secretary of Health and Human Services to waive sanctions for violations of EMTALA during a

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189 Although EMTALA does not provide any mechanism for compensating hospitals for the demands it places on them, the Medicare act, via the disproportionate share payments does provide some extra funding for hospitals that bear a disproportionate share of the burden of treating uninsured patients (usually in emergency rooms). See INST. of MED. of the NAT’L ACAD., *HOSPITAL-BASED EMERGENCY CARE: AT THE BREAKING POINT* 5 (2006), available at http://newton.nap.edu/catalog/11621.html. (last visited November 25, 2006).

190 Id.

191 Id. at 1.

192 Id at 3.

193 Id.

194 For a discussion of other contributing factors, see supra text accompanying notes 188-193.

195 Hospitals that provide a disproportionate share of the medical care to poor and uninsured patients do receive additional disproportionate share funds as part of the Medicare reimbursement. See Weeks, supra note 172, at 7.

196 INST. of MED. of the NAT’L ACAD., supra note 189, at 2.

197 See Rosenbaum & Kamoie, supra note 179, at 594-95.
declared public health emergency.\textsuperscript{198} While this relatively narrow exception to EMTALA may, if used appropriately, be a useful tool for controlling the spread of infection and husbanding resources during a public health emergency such as a pandemic or bioterrorist incident, it fails to address the underlying problems. Instead of developing a solution that ensures both continuing care to those who have infections and financial resources to those who treat them, the Act engages in “preparedness” by offering an exception for an emergency. In short, the Act continues the illusion that epidemics are occasional and that illness is generally a private matter. By so doing, it fails in its very goal: preparing for a possible pandemic.

IV: Public Health Law and the Health Care System

A. Health Law and HIV

The discussion thus far has emphasized the neglect of infection evident in health law’s leading paradigms and some of the laws and policies that reflect those perspectives. Notably absent from the discussion to this point, except to a minor degree,\textsuperscript{199} has been a consideration of the impact of HIV on health law. The most important epidemic in the United States in the last fifty years, HIV raised a whole host of legal challenges, many relating directly to the issues central to health care, such as the right rights of patients with the infection to be treated,\textsuperscript{200} the responsibility of providers to the sexual partners of patients,\textsuperscript{201} and the availability of health insurance for those who were infected.\textsuperscript{202} These questions, and many more, filled symposia and the courtrooms, leading to what an early commentator aptly described as a “legal epidemic.”\textsuperscript{203} Certainly, their quantity and prominence may appear to refute the contention that health law has neglected infection.

Unfortunately, HIV did not cause a fundamental change in health law’s treatment of infection. Although health law has grappled with HIV in many ways, the leading paradigms have not been altered. To the contrary, health law’s experience with HIV has either provided (somewhat ironic) support for existing paradigms or it has been cast to the side, treated as an exception to rather than a refutation of basic

\textsuperscript{199} See supra text accompanying notes 122-26.
\textsuperscript{201} E.g., Resiner v. Regents of the University of California, 31 Cal. App. 4th 195 (1995).
\textsuperscript{202} E.g., McGann v. H. & M. Music Co., 946 F.2d 401 (5th Cir. 1991).
Thus, the paradigms and policies discussed above have developed and flourished during the era of HIV, ignoring infection while an epidemic flared around the corners of the globe.

During the first decade of the HIV epidemic, it seemed as if a fundamental reordering might occur. By pushing the problem of infectiousness to the forefront, and demonstrating in contrast to the swine flu fiasco that serious epidemics were still with us, HIV raised fundamental questions about the relationship of providers and patients in a world of mutual risk. Such questions, Lawrence Gostin wrote, “compel reexamination of the foundational issues in health care” including such core concepts as the voluntary nature of the physician-patient relationship. Indeed, case law brought by HIV positive individuals against health care providers who refused to provide treatment due to the infection helped to establish that civil rights laws, and in particular disability-discrimination laws, limit the ability of health care providers to refrain from treating patients, thereby pointing to a public dimension to a previously private relationship.

HIV also raised long-overdue challenges to the system of laws in place to safeguard the nation’s supply of pharmaceuticals. Without recounting the story of HIV’s impact on pharmaceutical regulation, it is important to note that HIV patients and their allies mobilized around the issue of access to medication and succeeded in pressuring the Food and Drug Administration to alter its procedures for bringing new drugs to market.

Both the application of civil rights laws to the physician-patient relationship and the impact of AIDS activism on the FDA regulatory process offered the promise of a broader recognition of the social costs of infection. That promise went unfulfilled. Instead, both developments largely came to be viewed within the confines of the patients’ right paradigm. This was possible, in part, because both the communities

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204 Public health scholars have debated whether public health officials have treated HIV “exceptionally” by failing to employ aggressive and coercive laws applied in earlier years to other epidemics. See Scott Burris, “AIDS Exceptionalism” and the Law, 24 JOHN MARSHALL L. REV. 251 (1994). Less consideration has been given to whether health law has treated HIV exceptionally, as an exception to the prevailing view of illness as an individual matter.


affected by HIV and public health officials working on the epidemic came to understand that respect for the individual rights and the needs of individuals with the infection was a critical component to HIV prevention.\textsuperscript{208} Unfortunately, while the world of public health came to understand that the health of communities depends upon respect for individuals, there is little evidence that health law more generally came to appreciate that an individual's health has a social dimension.

Health law's general failure to adopt the lessons of HIV is perhaps most evident with respect to the law's treatment of the access and financing problems created by HIV. As an emerging epidemic, the costs associated with caring for HIV patients were at first (of course) unanticipated and growing dramatically.\textsuperscript{209} Operating in a climate that was becoming increasingly competitive as the market paradigm gained influence, many private insurers did the economically rational thing and refused to insure people who were HIV-positive.\textsuperscript{210} Other private insurers sought to limit the benefits available for HIV treatment. In one important case, the Fifth Circuit found that a self-insured employer could place a $5000 cap on HIV coverage, even though all other medical conditions would fall under the plan's $1 million life-time cap.\textsuperscript{211} Although such opinions made perfect sense from the perspective of the market paradigm which focuses on economic efficiency, they made little sense from a public health perspective because they reduced the availability of treatment for people who were infectious and created a great disincentive for individuals to be tested for HIV, despite the fact that testing was a basic pillar of HIV prevention.\textsuperscript{212}

As the HIV epidemic progressed, its demographics changed and HIV increasingly struck poor, inner-city, and minority communities which relied disproportionately on public insurance programs.\textsuperscript{213} As a result, both the public and private insurance systems faced severe strains. Hospitals and emergency rooms in hard-

\textsuperscript{208} Jonathan Mann\textit{ et al.}, \textit{Health and Human Rights}, 1 J. HEALTH & HUMAN RIGHTS 6 (1994).

\textsuperscript{209} See Benjamin Schatz, \textit{Commentary: The AIDS Insurance Crisis: Underwriting or Overreaching}, 100 HARV. L. REV. 1782, 1782-85 (1987). As noted above, this is one of the defining features of an epidemic; the incidence of disease is unanticipated, therefore, the costs of treating the disease will not generally be built into insurers' calculations.


\textsuperscript{211} See McGann, 946 F.2d 401.

\textsuperscript{212} Schatz,\textit{ supra} note 209, at 1801.

\textsuperscript{213} Bradford, Zavos & the American Bar Association AIDS Coordinating Committee,\textit{ supra} note 210, at 280-283.
hit cities like New York bore especially heavy burdens. In 1987, a report of the United Hospital Fund warned that "[a]ny major outbreak of respiratory disease in the next several months would find the city's hospitals without adequate capacity to admit all the patients that might need care." A few years later, commentators noted that these strains "made apparent the need for thoughtful and significant changes in the way health care is provided in the United States."

With hindsight, however, it has become clear that HIV did not incite any thoughtful and thorough reevaluation of either the nation's health care financing system or its health laws. With respect to health care financing, the crisis provoked by HIV was calmed by Congress' enactment of the Ryan White Care Act. This Act provided for grants to cities and states to help them care for the cost of treating HIV patients. In effect, it provided a special financing mechanism for HIV treatment, undermining the need to undertake a broader reconsideration of the laws that govern health care financing. Indeed, in the years since the epidemic began, the market paradigm has increased its influence and the number of uninsured individuals has risen.

In short, health law did not take advantage of the grim opportunity brought by HIV. Confronted with a horrific and widespread epidemic, health law failed to appreciate that epidemics can happen here and now, and that each person's disease, left uncared for, can strike another. Thus the fears articulated in the 1980s about our lack of capacity to respond to a respiratory epidemic are echoed again, as we contemplate the possibility of pandemic flu.

B. Toward a Public Health Law

In the years since 9/11 and the anthrax attacks on the United States mail, legal scholars, public health officials, and policymakers have all paid new attention to public health law. To date, much of that attention has focused on the powers and duties of the government, particularly in times of an emergency, to protect the public's health. Thus a model public health emergency law has been drafted and debated, and the

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215 Id.  
218 See Wendy E. Parmet, Introduction, in PUBLIC HEALTH LAW PRACTICE xxvii, xxxv-xxxvi (Goodman et al. eds. 2006).  
federal government has suggested revision to its quarantine regulations.\textsuperscript{220} More generally, public health has become folded into the homeland security project,\textsuperscript{221} as preparedness has become the watchword of the day.

Although the expanding visibility of public health is to be applauded,\textsuperscript{222} and critical situations such as a pandemic undoubtedly require some “emergency” responses,\textsuperscript{223} the discussion thus far has been unduly focused on public health and emergency law narrowly conceived. Neither the government’s pandemic flu plan, nor the many debates that have surrounded emergency planning in the years since 2001, have recognized the critical relationship between health law itself and public health. Indeed, the disconnect has been startling. Thus while the Bush Administration warns about the dangers of pandemic influenza and the problems of hospital shortages, it has also sought to cut reimbursements to hospitals\textsuperscript{224} and promote the increased use of health savings account.\textsuperscript{225} Likewise, although the academic field of health law has opened its doors to public health law,\textsuperscript{226} the pre-existing paradigms and debates continue largely unaltered by concerns about public health emergencies.

\textsuperscript{221} The term is Professor Gostin’s. See Lawrence O. Gostin, \textit{Dunwoody Distinguished Lecture, When Terrorism Threatens Health: How Far Are Limitations on personal and Economic Liberties Justified?}, 55 FLA. L. REV. 1105, 1110 (2003).
\textsuperscript{222} I have written previously about why public health deserves increased attention. See Parmet, \textit{supra} note 218.
\textsuperscript{223} This is not to say that any particular emergency plan would be either useful or legally valid. For example, the quarantine regulations proposed by the Centers for Disease Control and Prevention, see \textit{supra} note 220, raise serious constitutional questions. See Comments of \textit{The New England Coalition for Public Health on the Interstate and Foreign Quarantine Regulations Proposed by the Centers for Disease Control and Prevention}, \textit{The New England Coalition for Law and Public Health}, 42 C.F.R. 70, Feb. 3, 2006, available at http://www.cdc.gov/ncidod/dq/nprm/-comments/2006Feb3_NECLPH.PDF. (last visited November 25, 2006). Moreover, it is doubtful whether an expansive use of quarantine could be efficacious in the event of pandemic flu. See \textit{Implementation Plan, supra} note at 1, 106-09.
\textsuperscript{226} See Parmet, \textit{Introduction, supra} note 218 at xxxv-xxxvi.
It is time to close the chasm between public health preparedness and health care law and policy. Only by taking the opportunity unrealized during the early years of the HIV epidemic, and reconsidering health law in light of the ubiquity of infection, can we have a health care system that promotes rather than thwarts protection of the public’s health. Such a public health health law paradigm would take account of the problems of infection, the social cost of disease, and the fact of epidemics. It would begin to develop and encourage norms and patterns of practice that routinely consider the social dimension of treatment and non-treatment. It would also encourage appropriate and well-directed redundancies, providing the health care system with a substantial surge capacity. Finally, it would understand that limitations on access to care do not simply raise questions of justice; they also raise profound questions of public health and safety.

Hopefully H5N1 will never become a human pandemic. Even if we are so lucky, however, other epidemics and even pandemics will emerge. The health of each of us will, in many ways, remain dependent upon the health of all of us. Only by using this season of preparedness to integrate those simple but undeniable axioms into the very heart of our health laws and health care system will the planning for H5N1 have been not in vain. Only then will we prepared for the threat of infection.

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227 This is not to say that it would be wise to maintain a surge capacity sufficient to deal with an unprecedented pandemic. Maintaining such a capacity might well preclude other, better-spent uses of health care dollars. However, the recognition of the ubiquity of infection would lead to policies that encourage a surge capacity substantial enough to respond to the frequent increases in demand, giving the system a margin with which to work if a catastrophic pandemic arose.