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Too Strange to be Just Fiction: Legal Lessons from a Bioterrorist Simulation, the Case of TOPOFF 2

John D. Blum*

In the post 9/11 world, a strange and troubling convergence of public health and terrorism has occurred. What was once fodder for science fiction novels, bioterrorism is now an increased area of concern around the globe. The threat of bioterrorism, real or perceived, can have a paralyzing impact on the daily life of any nation, and in a world on high alert the concern over biological mayhem is anything but remote. The challenges faced by government in addressing bioterrorism are both scientifically and operationally perplexing. On the one hand, there is a lack of consensus about the nature and viability of health threats posed by a seemingly ever-expanding array of disease agents. From an operational standpoint, major logistical challenges are raised in the attempt to coordinate appropriate responses to respective threats, forcing integration of civil defense and health agencies at all levels of government. The law that underpins our responses to bioterrorism represents a disparate collection of powers and principles that do not necessarily mesh together. Even in the context of public health, the relevant laws are a rather strange hodgepodge of local, state, and federal principles developed over a long period of time and typically lacking in cohesiveness. This paper will focus on law in the bioterrorism context, and that focus will center on the active and reactive roles that the law played in one bioterrorism exercise, TOPOFF 2. The discussion will be concentrated on the legal considerations raised in the Illinois portion of the TOPOFF 2 exercise, the largest simulated event of its kind to date. In addition to reviewing the TOPOFF 2 scenario and the relevant legal issues raised by the exercise, the paper will draw conclusions concerning the broader role of law in confronting bioterrorism threats.

THE EXERCISE

On May 10, 2003, unknown biological agents were released at O'Hare Airport, United Center, and Union Station in Chicago, all major venues frequented by large numbers of people. On May 12,
in Seattle, Washington, a “dirty bomb” was ignited causing concerns over radiation exposure in that region, and resulting in the Homeland Security Advisory System (HSAS) raising the threat level across the country to the highest rating, “red.” The Seattle event triggered local, county, and state responses in Illinois (as well as across the nation) as respective, responsible units of government, including the Illinois Department of Public Health (IDPH) and area hospitals, were placed on a heightened alert for a possible terrorist event.

During the evening of Sunday, May 12, hospitals across Northeastern Illinois (in Cook, DuPage, Kane, and Lake Counties) began notifying IDPH of an unusual increase in emergency room visits by patients with symptoms of lower respiratory tract infections.

By 7 a.m. on the following day, thirty-three hospitals had reported a total of seventy-six cases of undetermined respiratory tract infections in mostly young and middle aged adults who presented with fever, cough, shortness of breath, and chest pain.

In response, the IDPH mobilized its rapid response teams and requested that the Centers for Disease Control (CDC) send epidemic intelligence officers to Illinois to assist local health departments.

In addition, IDPH notified hospital emergency departments, hospital infection control practitioners, and infectious disease physicians of the occurrence of this infection, and invoked necessary powers to insure that area hospital emergency rooms remained open.

By 8 a.m. on May 13, IDPH had developed a preliminary case definition for an infectious disease that was soon replaced by a plague case definition; simultaneously, IDPH received notification of fourteen dead due to the infection, with an estimated 269 others dying.

At 4 p.m. the state lab confirmed a positive PRC for plague, and several minutes later, at 4:05 p.m., the Governor of Illinois declared a state of emergency and requested an expedited Presidential Disaster Declaration, followed by a request based on an IDPH recommendation that CDC release the Strategic National

After Action Report]. See also David Kestenbaum, National Terrorism Drills to Help Emergency Responders Prepare for Disasters, Talk of the Nation: Science Friday (NPR radio broadcast, May 16, 2003).


3. TOPOFF 2 After Action Report, supra note 1.

4. As part of the TOPOFF 2 actors were hired who showed up at hospitals in Northern Illinois and were “worked up” as though they were regular patients.


6. Id.

7. Id.

8. Id.
Stockpile, a federal program which provides bulk medication packets for treatment and prophylactic purposes. By 8 p.m. on May 13, IDPH had reports that fifty-seven people had died from the plague and that another 403 individuals were dying.

By 8 a.m. on May 14 the numbers had increased to 351 dead and 2,214 dying, with confirmation being received by IDPH from hospital labs that blood cultures were confirming the diagnosis of plague. By mid-morning drugs were received from the CDC national stockpile; considerable activity on May 14 entailed the breakdown and distribution of the stockpile drugs, with a priority being that first responders receive necessary pharmaceuticals, and that five local distribution centers be supplied with drugs for the general public. By the end of the day, 646 were dead and another 2,332 were dying. On May 15, law enforcement identified a biolaboratory being operated by a terrorist cell in the Chicago area. On the same day, an air crash occurred at Chicago Midway airport, allegedly caused by terrorists, which further complicated the emergency response to the broad public health crisis. By the end of the plague outbreak on May 16, 2,287 individuals had died from the plague, with an estimated 4,433 others dying, dramatically taxing the resources of the sixty-four involved hospitals. In addition to the events noted, several key declarations were made that influenced this exercise.

Homeland Security Secretary Tom Ridge declared a “snow day” which permitted individuals in the affected areas to remain at home during the plague outbreak. President George W. Bush, under the auspices of the Stafford Act, issued a disaster declaration, which allowed for federal assistance, and the Secretary of Health and Human Services Tommy G. Thompson issued a public health emergency declaration under the United States Public Health Services Act, which also made it possible for Illinois to obtain other assistance.

Fortunately TOPOFF 2 was not real, and was only an elaborate exercise in “how to attempt” to respond to two serious and successive

9. Id.
10. Id.
11. Id.
12. Id.
13. Id.
14. Id.
15. Id.
16. Id.
19. Id. § 247d(a).
bioterrorism attacks in two major American cities, Seattle and Chicago respectively. The exercise, mandated by the Congress, was the largest, simulated, mock terrorism event to date, costing a total of sixteen million dollars and bringing together top government officials from twenty-five federal, state, and local agencies, as well as individuals representing key preparedness areas of the Canadian government. The chief agency sponsors of TOPOFF 2 were the United States Department of Homeland Security/Office of Domestic Preparedness and the United States Department of State/Office of the Coordinator for Counterterrorism. While the largest, TOPOFF 2 was not the first simulated terrorism drill. TOPOFF 1, which preceded TOPOFF 2, occurred in May 2000, and involved an unannounced release of mustard gas in Portsmouth, New Hampshire, and the release of plague in Denver, Colorado, under the direction of the Federal Emergency Management Agency (FEMA) and the United States Department of Justice (DOJ). Unlike the initial exercise, TOPOFF 2 was not a surprise; instead it involved widespread, advanced planning and coordination, likely reflecting the fact that very basic, foundational work needs to be done in our emergency response systems before it can realistically handle a “real” event of the magnitude of the exercise. In the report on TOPOFF 1, a “no notice” event, it was concluded that the exercise was characterized by multiple direction and control nodes, numerous liaisons, and an increasing number of response teams that complicated coordination, communication, and unity of effort—in essence, considerable disorganization. While TOPOFF 2 was more complicated than its predecessor, the goals of the exercise were to develop the “building blocks” of national preparedness, and to develop and strengthen relationships of key actors at all levels of government. In essence the exercise involved all of the major activities of public health related to emergency preparedness, including surveillance, epidemiological investigation and analysis, laboratory investigation and analysis, intervention, risk communication, planning, community-wide response, and perhaps unique to bioterrorism, the involvement of law enforcement.

23. Id. at 4–13.
GENERAL LEGAL CONSIDERATIONS

From a legal standpoint, the \textit{TOPOFF 2} exercise served as a catalyst for legal officials in the IDPH to conduct an analysis of law related to public health emergencies, with a view toward understanding the scope of existing law, as well as the administrative and judicial mechanisms needed in order to apply this broad collection of law. The appreciation of relevant law is a complex matter in the context of a public health emergency as there are multiple agencies at all levels of the government that become involved. It is not only a matter of federalism in which the scope and coordination of powers between federal and state governments must be recognized, which includes interagency policies at the same governmental levels, but local government involvement (municipal and county) is also a matter that needs to be appreciated. In Illinois virtually all of the state's 100 counties have local public health departments with their own policies, and in some cases separate ordinances.

Under the auspices of the IDPH Chief Counsel, a detailed source book of law was compiled which contains a comprehensive portrait of all relevant local, state, and national laws that may be needed in addressing a bioterrorist emergency.\textsuperscript{26} There has been a national movement, encouraged by the CDC, to enact the Model State Emergency Health Powers Act, which is an attempt to update and centralize state public health powers into a single statute that would more clearly spell out legal powers and processes.\textsuperscript{27} Illinois, however, had not enacted such an emergency powers law, so it became necessary in the TOPOFF 2 preparation to collect all related state laws, such as the powers of the Governor to suspend statutes and rules,\textsuperscript{28} utilize state and local resources,\textsuperscript{29} taking powers,\textsuperscript{30} authority to order evacuation,\textsuperscript{31} etc. In addition, other relevant state laws had to be identified and understood, such as the Illinois Emergency Management Agency Act,\textsuperscript{32} the Emergency Management Assistance

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  \item 28. 20 Ill. Comp. Stat. 3305/7(a) (2004).
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Compact Act, the Emergency Medical Services Systems Act, the Hospital Licensing Act, and the Department of Public Health Act. Laws affecting local governments, such as portions of the Illinois Municipal Code and the Counties Code, needed to be assessed in the planning process as well.

At the federal level TOPOFF 2's legal preparation necessitated awareness of the public health emergency powers of the Secretary of Health and Human Services, as well as the powers of the Secretary of Homeland Security, to respond to a bioterrorist attack. In addition, an appreciation of the role of the United States Surgeon General in a public health emergency (i.e. control of communicable diseases and quarantine), as well as the role of the CDC, was gained through TOPPOFF 2. There was a need to understand the emergency powers of the President under the Robert T. Stafford Disaster Relief and Emergency Assistance Act and the relevant distinctions in the Stafford Act between declarations of an emergency and a disaster.

Of particular interest was the federal Strategic National Stockpile program run by the United States Department of Homeland Security, which maintains drugs, vaccines, and other biological products necessary for the country's emergency health security. It was critical for the state of Illinois's officials to understand the stockpile program generally, and the legal and operational mechanisms required to access and distribute the necessary drugs for treatment and prophylactic purposes.

An area of great importance in bioterrorism concerns the law affecting isolation and quarantine, with the former referring to the enforced seclusion of individuals who have contracted a contagious illness, and the later entailing seclusion of those who have been

exposed to a particular contagion. While it is clear that the ultimate authority for isolation and quarantine rests with the IDPH, as noted in the Chief Counsel’s report, laws concerning these matters at the county and municipal level need to be considered, as well as federal laws concerning the powers of the United States Surgeon General and CDC guidelines in this area.

A detailed example of local authority in this area can be seen in the Municipal Code of the City of Chicago. The City of Chicago’s Department of Health has the authority to mandate medical examinations, isolation, and quarantine; the department’s code specifies the processes which must be followed, including the requirement that a court order must be obtained in the event an affected person refuses to consent to such mandates. Similarly, Cook County has an ordinance that allows the County Health Department to respond to public health emergencies, and includes the authority to mandate isolation and quarantine. While there are no major differences discernable in the laws noted that impact isolation and quarantine, the differences that do exist need to be appreciated, particularly in reference to the rights of the affected individuals. It is not enough to acknowledge that the state law overrides local policies when it comes to isolation and quarantine, because in a crisis situation it is likely that the laws and policies at the governmental level, at which responders are working, will not guide them, and notions of preemption may not rule the day. Appropriate concerns must also be directed toward creating some uniformity in the nature of evidence required by the courts and public health officials alike, to justify issuing orders to isolate or quarantine individuals or groups.

A significant number of the issues reviewed in the Chief Counsel’s Legal Handbook (Handbook) in preparation for the TOPOFF 2 exercise concern matters that may not be as apparent for emergency preparedness as those previously noted. For example, the question of whether state workers’ compensation, which applies to government employees in a bioterrorism response situation, should be applied to volunteers was addressed in the Handbook. It was determined, based on an Illinois Attorney General Opinion, that

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49. Id.
volunteers could be treated as state employees for purposes of workers’ compensation, but to do so, the individual in question must be working in conjunction with the Illinois Emergency Management Agency (IEMA). The matter of governmental liability or immunity needed to be considered in the emergency response context. Under the IEMA, the state, its employees, and its agents cannot be held liable for death, injury, or property damage in carrying out their duties in response to an emergency situation, unless guilty of gross negligence or willful misconduct. Such immunity applies to responders who cross state lines under the terms of the state Emergency Management Assistance Compact Act. The Illinois Good Samaritan Act provides immunity to licensed health professionals from Illinois and elsewhere, unless the conduct in question spills over into the area of gross negligence. Other matters considered by the IDPH legal team included the information, privacy issues under the federal Health Insurance Portability and Accountability Act (HIPAA), state laws affecting disposition of human remains, state purchasing authority, governmental takings of property, the licensure and credentialing of health professionals in emergency situations, and the powers of law enforcement agencies as responders.

Beyond the detailed review of relevant law, the IDPH legal team prepared four model executive orders for the TOPOFF 2 exercise, anticipating necessary responses to the public health emergency. The first Executive Order concerned sharing communicable disease reports and laboratory tests between IDPH and law enforcement officials, suspending provisions of the Communicable Disease Report Act and the Illinois Clinical Laboratory and Blood Bank Act. Hospital representatives expressed concern that Illinois law does not allow hospitals to grant staff privileges to volunteer physicians in the event of a disaster, therefore, the second Executive Order suspended relevant provisions of the Health Care Professionals Credentialing Data Collection Act and the Hospital Licensing Act to allow volunteer physicians privileges. The third Executive Order was drafted to

54. Id. 49/25 (2004).
56. Id.
address the fear that there might not be an adequate number of physicians, nurses, and pharmacists to address a large-scale medical emergency. The third order suspended the Pharmacy Practice Act to allow individuals, other than pharmacists, to dispense medications. The third order also authorized the distribution and administration of medications at locations other than pharmacies, and it provided a general order describing the class of individuals who should receive medications, as well as what medications should be administered. In addition, the third order extended the scope of practice for physician assistants and emergency medical technicians, and it allowed for the possible suspension of laws affecting other health professionals, such as optometrists, physical therapists, and podiatrists, whereby the scopes of their practice would be broadened if human resource needs caused by an event of bioterrorism so dictated. The fourth Executive Order addressed the area of isolation and quarantine by laying out two options. One option involved the isolation and quarantine of affected individuals without prior court order, whereas the second option would provide for mass quarantine and isolation of populations and/or limitations on ingress and egress in affected geographical areas.

Recognizing that there could be a delay in obtaining the Governor's approval of the respective Executive Orders, the IDPH Chief Counsel, in cooperation with Cook County, prepared two court petitions. One petition concerned an order to empower the IDPH and Cook County to isolate individuals who had been exposed to the plague without having to seek special permission in each case under an emergency isolation order. The second petition entailed a request for an emergency isolation and quarantine order that would also absolve the state and the county from having to seek such permission in all cases. As part of its planning process, the IDPH not only prepared the two petitions previously discussed, but it also contacted a Cook County judge in advance, with experience in public health matters, alerting him to the fact that he should be available to consider such petitions.

62. Id.
63. Id.
64. Id.
65. Petition for Emergency Isolation Order, Not an Actual Court Pleading, For TOPOFF 2 Exercise Use Only (on file with author).
66. Petition for Emergency Quarantine and Isolation Order, Not an Actual Court Pleading, For TOPOFF 2 Exercise Use Only (on file with author).
Within the TOPOFF 2 exercise itself, the legal preparations noted facilitated a reasonably smooth response to the disaster. The key challenge faced by all of those involved in TOPOFF 2, including the attorneys, was maintaining an effective chain of communication throughout the exercise and sustaining a timely and appropriate response to the simulation, which was appreciative of the roles of all of the actors at the various governmental levels. TOPOFF 2 involved 8,500 people from multiple government agencies, as well as private organizations, with occupational diversity ranging from police and fire, to epidemiologists and infectious disease specialists. The logistics of coordinating such a large scale exercise were daunting, and one can only imagine how much more challenging coordination would be in a real, unplanned event, because, as many public health experts have observed, everyone is in favor of coordination, but no one wants to be coordinated.

The exercise demonstrated that the legal response was inextricably linked to the public health identification of the nature of the medical problems as pneumonic plague and not influenza, and that the recognition of plague as a genuine emergency by the Executive was necessary to trigger the armament of prepared legal responses. It was also clear from the exercise that there will be considerable confusion about the nature of a biological threat, particularly a novel one, and that decision makers will be operating in an environment characterized by chaos. The challenge for the legal responders was to stay abreast of the thinking of the public health science officials and to maintain a presence in the decision-making process in all aspects of the unfolding events. The legal responders at the state level maintained close contact with the lawyers at the municipal and county levels and with the legal representatives of federal agencies; however, contacts need to be maintained with decision makers in all facets of response. The exercise did reveal a certain tension among the various branches of government, as each branch sought to assert itself in the decision making process, often without adequately coordinating individual responses with other government units, complicating legal approaches to the emergency.

While questions were posed to the legal team concerning the duties of first responders, the rights of responders and contacts to obtain chemoprophylaxis, and various inquiries about isolation and

68. Author Notes, supra note 5.
quarantine, a number of federal law matters also surfaced. For example, questions arose about whether HIPAA’s privacy protections prevent disaster response agencies and authorities from sharing patient specific information, without obtaining authorization from the named party. It was determined, that the HIPAA regulations covering the privacy provisions of the law allowed for use or disclosure of protected health information by public or private entities authorized to assist in disaster relief efforts. Questions of federal law were raised about whether hospital emergency rooms faced with a regional crisis could turn patients away due to the unprecedented numbers of individuals they were dealing with, and how referral mandates could be met. Under the federal Emergency Medical Treatment and Active Labor Act (EMTALA) hospitals with emergency rooms are legally obligated to screen all individuals who come into the emergency room and to treat those in an emergency condition. In consultation with the Department of Health and Human Services the legal team determined that the Secretary of the Department of Health and Human Services could waive the EMTALA requirements in a disaster situation. It was also determined that state or local authorities could develop a community protocol that would direct emergency care in the event of a plague situation.

BROAD LEGAL OBSERVATIONS

Perhaps the most significant lesson in reference to the law and TOPOFF 2 is the most obvious, namely the fact that the law at the intersection of public health and bioterrorism is extremely unsettled. There is not a lack of law to draw upon in addressing specific questions, but rather a myriad of laws that must be considered, most of which were developed to address more mundane public health matters, or designed to respond to more traditional emergency situations. It is critical, as demonstrated clearly in TOPOFF 2, that lawyers need to develop a sophisticated awareness of a large body of disjointed, but relevant law, not only concerning public health, but also focusing on emergency and security law matters as well. The body of law that must be referenced is not only large, but it may be frustrating in that it will often not provide adequate guidance or sufficient remedies to questions that may arise in the bioterrorism context. Even recent legislation such as the federal Stafford Act,

70. 45 C.F.R. § 164.510(b)(4) (2004).
72. Id.
73. Id. § 1320b-5.
which was designed to address national emergencies, does not allow bioterrorism attacks to be classified as major disasters as the Act is currently constituted, thereby reflecting the reality that law may never provide adequate answers or remedies for unforeseen occurrences.

In light of the fluid and awkward nature of this large and disjointed body of laws that touch on bioterrorism issues, the experiences of the lawyers in TOPOFF 2 seem to suggest that the lessons for the future lie not so much in finding “magic bullets,” but rather, rest in developing a sense of awareness as to how unpredictable, health disasters can be addressed, at least in part, through an orderly, legal process of decision making. TOPOFF 2 demonstrated that it is critical that lawyers appreciate that a successful legal response to bioterrorism will require a harmonization of laws at the local, state, and federal level. Lawyers working at any given governmental level must be respectful of the existence and impacts of laws at all levels of government, and should not merely assume that preemption principles will moot the need for such harmonization. It is critical for the legal responders to be sensitive to the rights of affected individuals and the public at large, because in the heat of the moment concern for individual rights may be seen as a secondary matter. In particular, heightened sensitivity to human rights must be exhibited in areas where physical imposition or restraint come into question, such as isolation, quarantine, and mandated medical examinations. While considerable progress is being made in coordinating approaches to the age-old practices of isolation and quarantine, other rights issues in this context remain open questions, such as the need to be sensitive to post-deprivation rights, the right to legal counsel, the nature of clinical evidence required to justify such measures, and the policies concerning the application of isolation and quarantine to populations.

Finally, all of those involved with bioterrorism should keep in mind that the law is a tool that can be very helpful in underpinning a response to the threat of biological terror. As things stand now, the law is seen as a secondary matter to health responses in bioterrorism, and as demonstrated by TOPOFF 2, it may be viewed more as an impediment than assistance. Law, like other tools of public health, such as epidemiology and laboratory science, must be shaped in such a manner that it can be quickly referenced and readily applied, and only then will it be appreciated more broadly as a critical part of the armament of public health. While we may be a long way from a comprehensive, cohesive, and coordinated approach to law in reference to bioterrorism, experiences such as TOPOFF 2 should be taken to heart by legislatures and regulators as a catalyst for developing a legal infrastructure which is better integrated into
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public health decision making processes. Lawyers dealing with public health emergencies, in turn, must be sensitive to the needs of decision makers and responders, and realize that law is never an end unto itself, but good lawyering, particularly in crises, requires flexibility, a willingness to compromise to protect the interests of the community at large, and most importantly, an ability to find quick and reasonable solutions, dictated by unfolding events.

CONCLUDING THOUGHTS

TOPOFF 2, as artificial as it may have been, sadly contained the grains of considerable truths as our new century has clearly taught us in a very dramatic fashion, that yesterday’s unthinkable occurrences are likely to be today’s reality. Our new world may be anything but brave, but one thing it does seem to be is fragile and vulnerable. The frightening convergence of science and terrorism has presented us with a new battleground which, as seen in TOPOFF 2, taxes our abilities to understand the nature of threats and to respond effectively. The lessons learned through TOPOFF 2 and subsequent exercises should lead to significant changes in how public and private agencies react in emergency situations, and those lessons must be quickly incorporated into law. It would be foolhardy to suggest that past experiences in dealing with disasters be ignored, or basic, simple tenants, such as the need for communication and coordination be overlooked. Precedents, however, must be viewed cautiously, as responses to bioterrorism will require a willingness to forge new alliances and approaches to emergencies, and if law is to be relevant, it must be shaped in ways that meet individual and community needs simultaneously. Public health laws must be flexible enough to meet immediate and future needs raised by crises, such as bioterrorist attacks, in ways that will require creativity, harmonization and flexibility, all traits which have been in short supply in the legal context.