

CHAPTER 2

# Legal Issues in Public Health Emergency Preparedness

## LEARNING OBJECTIVES

A number of policies govern federal, state, and local roles in emergency preparedness and response. Some policies determine how funding will be directed to disaster-stricken jurisdictions. Others define processes, physical assistance, and authority. Many types of federal policies guide preparedness and response activities, and it is important to understand the differences between these policies. By the end of this chapter, readers should be able to:

- Identify the key legislation that shapes public health emergency preparedness
- Explain the relationships among the local, state, and federal levels of government regarding the legal dimensions of public health emergency preparedness
- Assess the policy implications of the legal framework for public health emergency preparedness

## Introduction

Most observers consider the United States an extraordinarily legalistic country. Law is something of a rudder for American social life and an important one at that. It establishes frameworks, creates formal relationships, and articulates guidelines. It prescribes and proscribes. Law is perhaps the clearest and most obvious expression of public policy.

Public health law as a whole and emergency preparedness law in particular focus on protecting the health and safety of the population. Law of this sort is so important as to constitute a major part of the public health infrastructure.[1] Statutes, regulations, and judicial decisions are crucial in emergency preparedness. These statutes, regulations, and judicial decisions related to emergency preparedness can

be found at the local, state, and federal levels. The laws vary from jurisdiction to jurisdiction, and the relationships among the laws at these levels of government have evolved over time for a variety of reasons.[1(pp166–167)] As a result, there are many laws in each of the states that address public health matters and emergency preparedness specifically.

One venerable but particularly controversial variety of emergency preparedness law that illustrates the variation and the changing relationships of different laws involves isolation and quarantine. Local and state governments are empowered through the police powers as defined in state constitutions to protect the public's health and safety. Isolating and quarantining those with communicable diseases in specified circumstances is one way to safeguard the public's health and safety. State statutes specify a list of diseases that must be reported to state health departments and to the Centers for Disease Control and Prevention (CDC), which maintains a national surveillance system of notifiable diseases.

The controversial nature of quarantine as a state legal power was dramatically illustrated in the states of New Jersey and Maine in 2014. A nurse named Kaci Hickox returned in October from Sierra Leone in West Africa, where she had been working with Doctors Without Borders treating patients suffering from Ebola. Upon her arrival at the Newark Airport in New Jersey, she was ordered by Governor Chris Christie to face a mandatory 21-day quarantine in New Jersey (**BOX 2-1**).

Hickox challenged the quarantine order as she had no symptoms and had tested negative for Ebola. She was then allowed to travel to Maine, where Governor Paul LePage issued a quarantine order that confined Hickox to her home. She defied that order on a bike ride near her home, and with national media focused on Maine, a judge ruled in her favor against the state. In his ruling (see **EXHIBIT 2-1**), Judge Charles LaVerdiere stated that, "The State has not met its burden at this time to prove by clear and convincing evidence that limiting Respondent's movements to the degree requested is 'necessary to protect other individuals from the dangers of infection,' however. According to the information presented to the court, Respondent currently does not show any symptoms of Ebola and is therefore *not* infectious."[2] The judge's ruling confirms the fine line between safeguarding individual rights and protecting the health of the public.[3]

The federal government is also legally authorized to use isolation and quarantine. This would be most likely if someone with a communicable disease crossed state lines or entered the United States from an international destination. In 2007, the federal government isolated Andrew Speaks in Atlanta after he had been diagnosed with a dangerous form of tuberculosis that is resistant to antibiotics (XDR TB) and returned from Europe to the United States via Montreal and New York.

## BOX 2-1 Challenging a State Quarantine Order

In an interview with CNN on October 26, 2014, Kaci Hickox described her feelings on being placed in quarantine at a New Jersey hospital after returning from West Africa. "This is an extreme that is really unacceptable, and I feel like my basic human rights have been violated."

Data from Crowley C. (26 October 2014). Quarantined nurse slams new policy. State of the Union with Candy Crowley. CNN Press Room.

STATE OF MAINE
AROOSTOOK, SS.

DISTRICT COURT
Location: Fort Kent
Docket No: CV-2014-36

Mary C. Mayhew, Commissioner )
State of Maine Department of Health )
and Human Services, )
Petitioner, ) Order Pending Hearing
v. )
Kaci Hickox, )
Respondent. )

The State has requested that the court issue an order restricting Respondent's activities pending the final hearing on its Verified Petition for a Public Health Order. This decision has critical implications for Respondent's freedom, as guaranteed by the U.S. and Maine Constitutions, as well as the public's right to be protected from the potential severe harm posed by transmission of this devastating disease. Given the gravity of these interests, the Court yesterday entered a temporary order maintaining the status quo until a further hearing could occur this morning. It was imperative that the court take the necessary time to review in detail the parties' submissions, the arguments of counsel, and the cases cited by counsel regarding the necessity of entering an order pending the final hearing in this matter.

Maine Law authorizes a court to "make such orders as it deems *necessary to protect other individuals from the dangers of infection*" pending a hearing on a petition for a public health order. 22 M.R.S. § 811(3) (2014) (emphasis added). At this point in time, the only information that the Court has before it regarding the dangers of infection posed by Respondent, who has potentially but not definitely been exposed to the Ebola virus, derives from the Affidavit of Shiela Pinette, D.O., Director of the Maine Center for Disease Control and Prevention, together with the attachments from the U.S. Centers for Disease Control. In her affidavit, Dr. Pinette averred, *inter alia:*

> 8. Ebola Virus Disease is spread through direct contact with the blood, sweat, vomit, feces and other body fluids *of a symptomatic person.* It can also be spread through exposure to needles or other objects contaminated with the virus.
> . . .
>
> 12. Transmission of Ebloa is usually through direct contact with the blood, sweat, emesis, feces and other body secretions of an infected person, or exposure to objects (such as needles) that have been contaminated with infected secretions.
> . . .
>
> 14. *Individuals infected with Ebola Virus Disease who are not showing symptoms are not yet infectious.* Early symptoms of Ebola are non-specific and common to many other illnesses.
>
> 15. Symptoms usually include: fever, headache, joint and muscle aches, weakness, diarrhea, vomiting, stomach pain, and lack of appetite. *Ebola may be present in an individual who does not exhibit any of these symptoms, because they are not yet infectious.*

*(continues)*

16. The incubation period for the virus, before it can be determined that a person does not have Ebola virus, is 21 days ("the incubation period"). A person who is infected with Ebola virus can start to show symptoms of the disease (become infectious) at any point during the incubation period. A person can test negative for Ebola virus in the early part of the incubation period and later become infectious and test positive.

17. The Respondent remains at risk of being infected with Ebola, until the 21-day time period has assed. The most common time of developing symptoms is during the second week after last exposure. Respondent entered that second week starting October 28, 2014. The surest way to minimize the public health threat is direct active monitoring and additional restrictions on movement and exposure to other persons or the public until a potentially exposed person has passed the incubation period. For Respondent that period expires November 10, 2014.

18. Symptoms usually appear 8 to 10 days after exposure and 90% of cases develop symptoms within the first 14 days of exposure. So the time of greatest risk of showing symptoms and becoming infectious is within the first 14 days of the incubation period. Once someone is displaying symptoms and is actually infected with Ebola, they become increasingly infectious and extremely ill, requiring attendance for basic daily needs within a matter of a few days. There is no known cure for Ebola.

. . .

27. Respondent is asymptomatic (no fever or other symptoms consistent with Ebola), as of the last check pursuant to her direct active monitoring this morning. Therefore the guidance issued by US CDC states that she is subject to Direct Active Monitoring. Health care workers in the "some risk" category require direct active monitoring for the 21-day incubation period.

28. Direct active monitoring means the MeCDC provides direct observation at least once per day to review symptoms and monitor temperature with a second follow-up daily by phone. The purpose of direct active monitoring is to ensure that if individuals with epidemiologic risk factors become ill, they are identified as soon as possible after symptoms onset so they can be rapidly isolated and evaluated. Once a person is symptomatic they become contagious to others, and their infectiousness increases very quickly.

. . .

(10/30/2014 Aff. of Dr. Pinette, at 2-4).

Based on the information in this affidavit with attachments and arguments of counsel, the Court finds by clear and convincing evidence that an order is necessary. With regard to the contents of the order, the court finds that ordering Respondent to comply with Direct Active Monitoring and to engage in the steps outlined below is "necessary to protect other individuals from the dangers of infection." The Court is aware that Respondent has been cooperating with Direct Active Monitoring and intends to continue with her cooperation. While this Court has no reason to doubt Respondent's good intentions, it is nevertheless necessary to ensure public safety that she continue to comply with Direct Active Monitoring until a hearing can be held on the State's Petition. The State has not met its burden at this time to prove by clear and convincing evidence that limiting Respondent's movements to the degree requested is "necessary to protect other individuals from the dangers of infection," however. According to the information

presented to the court, Respondent currently does not show any symptoms of Ebola and is therefore not infectious. Should these circumstances change at any time before the hearing on the petition—a situation that will most quickly come to light if Direct Active Monitoring is maintained—then it will become necessary to isolate Respondent from others to prevent the potential spread of this devastating disease.

For the foregoing reasons, the Court hereby ORDERS that, pending the hearing on the petition, Respondent shall:

1. Participate in and cooperate with "Direct Active Monitoring" as that term is defined by the United States Centers for Disease Control in its October 29, 2014 *Interim U.S. Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure* and in paragraph 28 of Dr. Pinette's October 30, 2014 affidavit.
2. Coordinate her travel with public health authorities to ensure uninterrupted Direct Active Monitoring; and
3. Immediately notify public health authorities and follow their directions if any symptom appears.

This Order is intended to and does supersede the Temporary Order entered on October 30, 2014 in this matter.

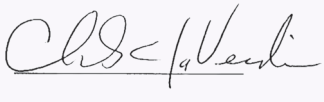
The Court pauses to make a few critical observations. First, we would not be here today unless Respondent generously, kindly and with compassion lent her skills to aid, comfort, and care for individuals stricken with a terrible disease. We need to remember as we go through this matter that we owe her and all professionals who give of themselves in this way a debt of gratitude.

Having said that, Respondent should understand that the court is fully aware of the misconceptions, misinformation, bad science and bad information being spread from shore to shore in our country with respect to Ebola. The Court is fully aware that people are acting out of fear and that this fear is not entirely rational. However, whether that fear is rational or not, it is present and it is real. Respondent's actions at this point, as a health care professional, need to demonstrate her full understanding of human nature and the real fear that exists. She should guide herself accordingly.

Further, since Respondent has waived her right to confidentiality pursuant to 22 M.R.S. § 811(6)(E), it is hereby ORDERED that all filings, orders, and hearings in this matter shall be open to the public.

This Order shall be incorporated into the docket by reference pursuant to M.R.Civ. P. 79(a).

Dated: October 31, 2014



Charles C. LaVerdiere
Chief Judge, Maine District Court

**EXHIBIT 2-1** Court Decision—Mayhew v. Hickox, State of Maine; Ebola Quarantine Case, Judge Charles LaVerdiere; October 31, 2014

Data from State of Maine Judicial Branch. High Profile Cases. State of Maine Department of Health and Human Services v. Kaci Hickox. Order Pending Hearinf Available at: www.courts.maine.gov/news_reference/high_profile/hickox.shtml. Accessed December 2, 2014.

A comprehensive consideration of all the ways the police powers at the various levels of government are used to assure the public's health is beyond the scope of this book. The focus here is on key laws, regulations, and directives related to public health emergency preparedness and response. The goal is to highlight the important features of these laws, regulations, and directives while also underscoring the political, ethical, and practical reality of this legal landscape. The chapter begins with the federal policy and statutory framework, which addresses legislation and policy regulations. It then turns to disaster declarations followed by legal considerations in planning for threats and disasters. The chapter concludes with some thoughts on legal preparedness, that is, the capacity of practitioners to be competent in their respective legal frameworks and their ability to coordinate with others across jurisdictions in evolving emergency situations, in the context of public health emergency preparedness and response.

# Policy and Statutory Framework

The policy and statutory framework related to public health emergency preparedness and response incorporates legislation, executive orders, and presidential decision directives. Together these legal actions provide a narrative of the evolving role of the federal government's policy approaches in public health emergency preparedness and the accompanying changes in organization to carry out these policies and regulations. This narrative is, of course, shaped not only by political factors in the different presidential administrations but also by external factors, including our relationships with other nations as well as natural and man-made events with the power to realign national priorities and shift the organizational structures needed to address these priorities. This section provides a brief summary of key legislation, executive orders, and presidential decision directives.

The Cold War between the United States and Russia influenced policies and structures during the administrations of Presidents Truman, Eisenhower, and Kennedy.[4] Over the course of the three administrations, emergency preparedness evolved, becoming more closely related to national defense. Responsibility for the government's response moved from the Housing and Home Finance Administrator to the Federal Civil Defense Administrator with the passage of the Federal Civil Defense Act in 1950 (President Truman) to the Office of Defense and Civilian Mobilization (President Eisenhower) to the Office of Emergency Planning (President Kennedy).[4,5]

## Federal Emergency Management Agency (FEMA)

Several hurricanes and earthquakes in the 1960s and 1970s, especially Hurricane Agnes in 1972, underscored the inadequacy of the federal government's response to major disasters.[4,5] Important legislation during this period included the National Flood Insurance Act (1968), the Flood Disaster Protection Act (1973), and the Disaster Relief Act (1974; see discussion that follows).[4–6] By the time of President Carter's administration, the nuclear accident at Three Mile Island, Pennsylvania, had occurred in 1979,[5(pp12–15)] and over 100 federal agencies had participated in response and recovery related to emergencies of all types.[6] Authority for federal response to emergencies rested then with the Federal Disaster Assistance Administration in the Department of Housing and Urban Development.[4,5]

President Carter's *Executive Order 12127* changed the structure of the federal government's organization of emergency preparedness work, if not its approach. With input from the National Governors' Association, as well as the work of commissions following Hurricane Agnes and the Three Mile Island nuclear accident, President Carter established the Federal Emergency Management Agency, known as FEMA.[4–6] Functions that had been located in the Department of Commerce, the Department of Housing and Urban Development, and in the White House were now transferred to this new agency.[7] FEMA was responsible for coordinating national efforts related to preparation, mitigation, response, and recovery for man-made and natural emergencies.[8] However, local and state governments remained responsible for local planning, response, and recovery to the extent allowed by their resources and capacity. The federal government's role was to provide assistance.

## Homeland Security Act of 2002

The next major reorganization of the federal government's emergency preparedness infrastructure followed soon after the terrorist attacks on the World Trade Center and the Pentagon on September 11, 2001, as well as the anthrax letters in October of that year. The first step in this process of addressing the national government's approach to national security, in addition to emergency preparedness, was President George W. Bush's *Executive Order 13228* on October 8, 2001, which created the Office of Homeland Security and the Homeland Security Council.[9(p50)] This action was followed by the passage of the Homeland Security Act of 2002 (PL 107-296). This Act established the Department of Homeland Security (DHS), combining 22 different agencies into one. FEMA was one of the agencies brought under the new department.[10] In the wake of 9/11 and the anthrax attacks, there was immediate legislative action.

## Selected Public Health Emergency Preparedness Legislation and Homeland Security Presidential Directives

Not surprisingly, the events of 9/11 shaped the national legislative agenda in ways other than organizational. Subsequent legislation addressed various issues ranging from bioterrorism to liability from claims from the use of countermeasures to pandemics. Two Homeland Security Presidential Directives (HSPDs), meanwhile, created the framework for coordination and management among the three levels of government to address both man-made and natural disaster events. Finding the most prudent way to prevent, protect, respond to, and recover from emergency events has proved challenging. Issues related to agency authority and specific community needs may not emerge until government officials and community leaders sit down to evaluate what did, or did not, happen during and after a particular event.

### Public Health Security and Bioterrorism Preparedness and Response Act of 2002

The first legislation for public health preparedness, the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (PL 107-188) is notable for the speed with which the U.S. House and U.S. Senate considered and passed the bill, and the House and Senate Conference Reports were agreed to within a day of each

other.[9(p68)] There was an urgency for coordination among key federal agencies as well as an approach to planning across all levels of government.

This Public Health Security Act amended Section 319 of the Public Health Service Act, "To improve the ability of the United States to prevent, prepare for, and respond to bioterrorism and other public health emergencies."[11] Title I of the Act calls for the development of a national preparedness plan, "a coordinated strategy," that should "build[ing] upon the core public health capabilities," as spelled out in Section 319A.[12] Specific goals focused on surveillance, laboratory capacity, training, medical countermeasures, and hospital preparedness (see **BOX 2-2**).

Title I also established the position of Assistant Secretary for Public Health Emergency Preparedness in the Department of Health and Human Services (DHHS). The purpose of this position was the coordination of federal agencies and the National Disaster Medical System (see discussion of National Disaster Medical System in Chapter 13) during an emergency. The Assistant Secretary was also charged with evaluating the outcomes of the National Preparedness Plan. Other titles in the Act focused on controlling biological agents and toxins (Title II) as well as protecting food, drug, and drinking water (Titles III and IV) supplies.

## BOX 2-2 National Preparedness Goals of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002

SEC. 2801. NATIONAL PREPAREDNESS (b) PREPAREDNESS GOALS—The plan under subsection (a) should include provisions in furtherance of the following:

1. Providing effective assistance to State and local governments in the event of bioterrorism or other public health emergency.
2. Ensuring that State and local governments have appropriate capacity to detect and respond effectively to such emergencies, including capacities for the following:
   - A. Effective public health surveillance and reporting mechanisms at the State and local levels.
   - B. Appropriate laboratory readiness.
   - C. Properly trained and equipped emergency response, public health, and medical personnel.
   - D. Health and safety protection of workers responding to such an emergency.
   - E. Public health agencies that are prepared to coordinate health services (including mental health services) during and after such emergencies.
   - F. Participation in communications networks that can effectively disseminate relevant information in a timely and secure manner to appropriate public and private entities and to the public.
3. Developing and maintaining medical countermeasures (such as drugs, vaccines and other biological products, medical devices, and other supplies) against biological agents and toxins that may be involved in such emergencies.
4. Ensuring coordination and minimizing duplication of Federal, State, and local planning, preparedness, and response activities, including during the investigation of a suspicious disease outbreak or other potential public health emergency.
5. Enhancing the readiness of hospitals and other healthcare facilities to respond effectively to such emergencies.

Data from Government Publishing Office. Public Health Security and Bioterrorism Preparedness and Response Act of 2002. SEC. 2801. NATIONAL PREPAREDNESS (b) PREPAREDNESS GOALS Available at: www.gpo.gov/fdsys/pkg/PLAW-107publ188/pdf/PLAW-107publ188.pdf. Accessed: 12/7/14

## Homeland Security Presidential Directives

Two important Homeland Security Presidential Directives followed not long after the Public Health Security and Bioterrorism Preparedness Act was signed in June 2002. Issued by the National Security Council, these Homeland Security Presidential Directives reflect President George Bush's policies on bioterrorism and preparedness in the wake of 9/11.[9(p52)] In Homeland Security Presidential Directive-5 (HSPD-5), released on February 28, 2003, President Bush called for the "establish[ment] of a single, comprehensive approach to domestic incident management." The intent of this policy was to "treat[s] crisis management and consequence management as a single, integrated function, rather than two separate functions."[13] HSPD-5 called for the development and implementation of a National Incident Management System (NIMS). Together with a National Response Plan, the federal government wanted to create a "consistent approach" to preparedness, response, and recovery at all levels in "one all-discipline, all-hazards plan."[13] HSPD-5 highlights several features of incident command with implications for public health practice related to terminology and language, multiagency coordination, unified command, and training, among other topics. The plan for implementing NIMS was to be ready by August 2003.

Issued on December 17, 2003, as a companion to HSPD-5, Homeland Security Presidential Directive-8 (HSPD-8) focused on efforts in the states "to build capacity to address major events, especially terrorism."[14] In addition to the development of a national preparedness goal, the policy emphasized equipment standards for interoperability among first responders and training and exercises for all workers who would be involved in prevention, response, and recovery. An important aspect of training and exercises was sharing lessons learned and best practices through an integrated national system. Best practices for citizen participation in preparedness were also to be disseminated widely in support of local and state preparedness work. Through the creation of a national preparedness goal and implementation of consistent standards across a range of activities, the federal government sought to integrate preparedness, response, and recovery initiatives into a more seamless approach.

## Public Health Readiness and Emergency Preparedness (PREP) Act of 2005

The Public Health Readiness and Emergency Preparedness Act of 2005 (PREP Act; Public Law No. 109-148; 42 USC 247d-6d and 6e) focused on another aspect of preparation for a major event, that is, medical countermeasures. Under this law, anyone involved in the development, manufacture, distribution, administration, and use of a medical countermeasure for a specific disease or potentially harmful event would not be liable for any claims of injury or loss stemming from the administration and use of such a drug or antidote or device.[10] This immunity from liability was considered especially important for those cases in which a drug or vaccine might not yet be approved by the U.S. Food and Drug Administration (FDA) but was an essential part of the government's response to protect the population from a particular threat.[9(p53)] The Secretary of the DHHS must issue a declaration that presents the specific threat and countermeasure and defines the time frame, population affected, particular geographic area if any, and distribution plan for the immunity.[15] Since January 2007, there have been declarations for immunity from liability for countermeasures for radiation, smallpox, botulism, anthrax as well as several amendments to the H5N1pandemic flu, including one for H1N1 on June 15, 2009.[16] For example, Secretary of DHHS Sylvia Burwell issued a declaration under the PREP Act in

**BOX 2-3** Responsibilities of the Assistant Secretary of Preparedness and Response

- National Disaster Medical System
- Medical Reserve Corps
- Emergency System for Advance Registration of Volunteer Health Professionals
- Hospital Preparedness Program Cooperative Agreement
- Strategic National Stockpile
- Cities Readiness Initiative

Data from Government Publishing Office. Pandemic and All-Hazards Preparedness Act of 2006. Public Law 109-417. SEC. 102. Assistant Secretary for Preparedness and Response. December 19, 2006. 120 STAT. 2834 42 USC 300-hh-10) Available at: www.gpo.gov/fdsys/pkg/PLAW-109publ417/pdf/PLAW-109publ417.pdf. Accessed: 1/4/15.

2014 for the development of an Ebola vaccine, which was amended in early 2017, and there are also declarations for Zika virus and nerve agents.[17]

## Pandemic and All-Hazards Preparedness Act of 2006

The Pandemic and All-Hazards Preparedness Act of 2006 (Public Law No. 109-417; 120 STAT. 2832) addressed organizational issues as well as security infrastructure, surge capacity, and medical countermeasures.[10] This Act established that, "The Secretary of Health and Human Services shall lead all Federal public health and medical response to public health emergencies and incidents covered by the National Response Plan developed pursuant to section 502(6) of the Homeland Security Act of 2002, or any successor plan."[18] The position of Assistant Secretary for Preparedness and Response replaced the position of Assistant Secretary for Public Health Emergency Preparedness from the 2002 Public Health Security and Bioterrorism Preparedness and Response Act. **BOX 2-3** lists several of the Assistant Secretary's responsibilities, which range from countermeasures to hospital preparedness to the Cities Readiness Initiative.

The Act required states to prepare pandemic flu plans and provided grants to states for enhancing their "public health situational awareness systems for public health emergencies,"[19] as well as for workforce and health professional volunteers training. Finally, the Act also authorized creation in DHHS of the Biomedical Advanced Research and Development Authority (BARDA; PL 109-417) to promote the development of vaccines and drugs through collaboration among a range of government, private, and academic institutions. This step was consistent with the government's goal of implementing a national security plan that addressed the issue with a variety of actions.

## Pets Evacuation and Transportation Standards Act of 2006

The experience during Hurricane Katrina in 2005 of pets stranded and abandoned revealed shortcomings in planning at the local and state levels before, during, and after the storm for household pets and service animals. An amendment to the 1988 Robert T. Stafford Act (see discussion of the Stafford Act later in this chapter), the Pets Evacuation and Transportation Standards Act of 2006 (PETS; Public Law No. 109-308) focused on people with pets and service animals through planning, funds, and delivery of services. The Act authorized the FEMA director to establish standards for preparedness planning at the local and state levels for people with pets and service animals. The director could designate funds for emergency shelters for

**FIGURE 2-1** A dog being carried through a flooded street
Courtesy of FEMA/Jocelyn Augustino.

approved animal preparedness projects. Finally, the Act also "authorizes . . . provision of rescue, care, shelter and essential needs to individuals with household pets and service animals and to such pets and animals."[20] Images from flood-ravaged Houston, Texas, of pets being carried to safety by their owners and held wrapped in towels in shelters across the city (see **FIGURE 2-1**) illustrate the significant impact of this legislation, which had bipartisan support.[21] People knew that pets would be welcome in the shelters, which made fleeing their homes from the rising waters slightly easier.

## Post-Katrina Emergency Management Reform Act of 2006

The federal government's handling of Hurricane Katrina in August 2005 prompted a reconsideration of the organization of DHS and FEMA, the first since the 2002 Homeland Security Act. The Post-Katrina Emergency Management Reform Act of 2006 was passed as part of the DHS Appropriations Act of 2007 (Public Law No. 109-295).[10] The DHS was reorganized, with some functions moving to FEMA, and FEMA's responsibilities during emergency events were increased.

## Pandemic and All-Hazards Preparedness Reauthorization (PAHPRA) Act of 2013

The Pandemic and All-Hazards Preparedness Reauthorization Act (PAHPRA) of 2013 (Public Law No. 113-5) continued funding for the Hospital Preparedness Program and the Public Health Emergency Preparedness Cooperative Agreement. The Act also ensured ongoing funding for countermeasures, including drugs, vaccines, and medical equipment and supplies. Another purpose of the legislation was to promote "advanced research for and development of potential medical countermeasures" through the Bioshield Project,[22] and the FDA was given the ability to use the Emergency Use Authorization (EUA) for a given drug as a medical countermeasure before a public health emergency had been declared.[22] Finally, PAHPRA mandated that grantees' All-Hazard Preparedness plans include specific information related to children and vulnerable populations and address coordination with the local Medical Reserve Corps and Cities Readiness Initiative.[10]

### Sandy Recovery Improvement Act of 2013

An amendment to Title IV of the Robert T. Stafford Act (see discussion of the Stafford Act later in this chapter), the Sandy Recovery Improvement Act of 2013 was intended to simplify disaster assistance administered by FEMA. To enhance flexibility and speed up the recovery process, eligibility criteria for individual assistance were clarified; childcare expenses were deemed allowable along with funeral, medical, and dental costs; debris removal was to be based on a cost-share program with the federal government, with incentives for local and tribal governments with specific contractors in place before the declaration of a major disaster; and FEMA could lease multifamily housing to speed up the resettlement process.[23] In addition, tribal leaders of federally recognized nations would be able to request an emergency or major disaster declaration directly from the president, without going through the governor of the state. FEMA accepted comments on a draft Tribal Declaration Pilot Guidance through August 2014.[24]

## Disaster Relief and Disaster Declarations

Tracing the history of disaster declarations in the United States takes us back to 1803. Katz[9(p48)] cites the Congressional Act of 1803 as the first national disaster declaration. This act, the Federal Domestic Disaster Aid Bill, provided relief for merchants in Portsmouth, New Hampshire, following a major fire by suspending the collection of bonds owed to the U.S. government. The approach for the next century or so was similar, that is, individual declarations approved by Congress for federal assistance after specific disasters. By the 1930s, both the Reconstruction Finance Corporation and the Bureau of Public Roads, among other federal agencies, also supported relief for specific disasters.[4,6]

The first, comprehensive legislation to address disaster relief came in 1950 with the passage of the Disaster Relief Act. Signed into law by President Harry Truman, the program required a presidential disaster declaration[5(p8)] and was intended only to "supplement the efforts and available resources of States and local governments."[8] President Truman's 1953 Executive Order 10427 underscored that, "Federal disaster relief provided under this act shall be deemed to be supplementary to relief afforded by State, local, or private agencies and not in substitution therefore; Federal financial contributions for disaster relief shall be conditioned upon reasonable State and local expenditures for such relief; . . ."[9,25] This Executive Order also changed the authorized federal agent from the Housing and Home Finance Administrator to the Federal Civil Defense Administrator.[9,25] While this change grew out of the federal government's response to the Cold War,[5] it is interesting to note that figuring out where in the federal bureaucracy responsibility for disaster relief should reside would be an ongoing issue.

Other shifts in focus and authorizing agency followed this initial legislation. The Disaster Relief Act was amended in 1966 to include authority for federal assistance during recovery, not just during response, as in the 1950 legislation.[8] In 1974, the Disaster Relief Act (PL 93-288) signed by President Nixon amended the original legislation in several key ways. Title II created a program for disaster preparedness that included technical assistance from the federal government as well as grants to support states in their efforts "for the development of plans, programs, and capabilities for disaster preparedness and prevention."[26] Title III, Disaster Assistance Administration, described the process for a presidential disaster declaration (Section 301, p. 146) and called for the appointment of a federal coordinating officer in the area designated for major disaster relief through this process (Section 303,

p. 147). Emergency support teams could be formed to work with this coordinating officer (Section 304, p. 148). This law also addressed federal assistance programs (pp. 153–159) and economic recovery in the affected area (pp. 160–163).

## Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988

The next significant legislation related to disaster declarations was the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (PL 100-707) that amended the 1974 Disaster Relief Act. This act, now the current source of regulations for disaster declarations, requires that a governor indicate through a formal request that the state is responding to the disaster and that the state lacks sufficient resources for its response.[10] The president may issue two types of declarations: "Emergency" or "Major Disaster." These declarations are defined in **BOX 2-4**.

Disaster relief provided under any presidential declaration is administered by FEMA. Recall that FEMA was created in 1979 by President Carter's Executive Order 12127 in a move to coordinate the federal government's response to public health emergencies.[9]

A presidential disaster declaration means that a state is eligible for specific types of financial, technical, and logistics assistance in the specified local jurisdictions.[27] Individuals may receive assistance directly, local jurisdictions dealing with a major disaster may request grants for hazard mitigation, and local jurisdictions and certain other organizations (e.g., the American Red Cross) may qualify for public assistance for help with removal of debris, repairs to infrastructure, and provision of emergency medical care, food, water, and housing.[27] The Stafford Act also

**BOX 2-4** Robert T. Stafford Disaster Relief and Emergency Assistance Act: Definitions

Section 103. AMENDMENTS TO TITLE I—Disaster Relief and Emergency Assistance Amendments

(b) DEFINITION OF EMERGENCY.—Section 102(1) is amended to read as follows: "(1) EMERGENCY.—'Emergency' means any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States."

(c) DEFINITION OF MAJOR DISASTER.—Section 102(2) is amended to read as follows: "(2) MAJOR DISASTER.—'Major disaster' means any natural catastrophe (including any hurricane, tornado, storm, high water, winddriven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this Act to supplement the efforts and available resources of States, local governments, and, disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby."

Data from Stafford Act, Public Law 100-707, 11/23/88; 102 STAT. 4689-90; 42 USC 5122 www.gpo.gov/fdsys/pkg/STATUTE-102/pdf/STATUTE-102-Pg4689.pdf

covers reimbursement by the state where the disaster occurred for services provided through mutual aid agreements, as stated in the 1996 Emergency Management Assistance Compact (EMAC; see in the next section). The Stafford Act provides the framework through which FEMA administers disaster relief programs following any disaster declaration.

# Legal Considerations in Emergency Preparedness Planning

As this overview of selected key public health emergency preparedness legislation, regulations, and policies illustrates, roles and responsibilities of local, state, and national governments have evolved over time as the nature of public health threats has changed since the early 2000s. Local jurisdictions and the states are responsible for the health and safety of their residents through their police powers, and states do have some authority for emergency preparedness. Yet, the authority for prevention, response, mitigation, and recovery is shaped by federal mandates that guide local and state planning, establish standards, influence relationships, and direct funding.[28] The events of 9/11, coupled with the global threats of severe acute respiratory syndrome (SARS), H1N1, and Ebola, have underscored the federal government's emphasis on national security as an important dimension of public health emergency preparedness. The response to public health emergencies is always local initially, but what local plans look like and how jurisdictions relate to each other during a public health emergency is in part driven by federal laws and regulations.

There are legal tools that enable local and state governments to prepare for and anticipate certain responses during an emergency through planning. Local jurisdictions and states use Mutual Aid Agreements and Memoranda of Understanding in planning to define what they and/or specific agencies will do following a presidential declaration of a major disaster or emergency through the Stafford Act. The purpose of these documents is to identify resources that may be needed from neighboring jurisdictions when local resources have been exhausted and to provide a framework for addressing the important issues such as logistics, liability, and costs for supplies, equipment, and personnel. Whether a jurisdiction provides assistance to another jurisdiction during recovery from a public health emergency is voluntary if there is no presidential declaration.[28(p50)]

## Emergency Management Assistance Compact

The EMAC (Public Law No. 104-321) is a nongovernmental interstate mutual aid agreement. Signed into law in 1996, EMAC is administered by the National Emergency Management Association (NEMA), and the 50 states, the District of Columbia, and three territories—the U.S. Virgin Islands, Puerto Rico, and Guam—are part of the Compact.[29] The Compact enables states to share resources, equipment, and personnel, including National Guard members, with a neighboring state once the president has declared a major disaster or emergency. The state requesting assistance is obligated to reimburse the state that provided assistance.[10] The EMAC traces its roots to initiatives within the Southern Governors, Association to support each other during hurricanes, with Hurricane Andrew in 1992 the major impetus for formalizing these relationships.[29] The largest mobilization of resources occurred

in 2005 for Hurricanes Katrina in August and Rita in September. EMAC deployed about 66,000 emergency personnel and 46,500 National Guard members over 90,000 square miles, providing helicopter and air support, communications, and advance team, security, and search and rescue personnel, among other resources.[30]

## Emergency Use Authorization

The EUA is codified in Section 564 of the Federal Food, Drug, and Cosmetic Act. Under this regulation, the Secretary of Health and Human Services (HHS) may authorize the FDA to allow the use of a particular drug or device in an emergency situation for which it is not approved.[10] The Secretaries of HHS, Homeland Security, and Defense need to establish that there is a significant risk from a chemical, biological, radiological, or nuclear (CBRN) event (see discussion of this topic later in Chapter 12) before the Secretary of HHS declares that an EUA is necessary.[10] Given the potential threat to national security in such an event, both the 2006 Pandemic and All-Hazards Preparedness Act and the 2013 PAHPRA reaffirmed the importance of the development of countermeasures, including drugs and vaccines for pandemics, and fostered conditions to promote the research, development, and manufacturing of such products.

## Quarantine and Isolation

Local jurisdictions, states, and the federal government have the authority to issue quarantine and isolation orders to protect the health and safety of residents. These orders restrict the movement of people who have been exposed to a communicable disease (quarantine) or who have symptoms and are presumed to have the communicable disease (isolation). At the local and state levels, this authority is codified in state statutes. At the federal level, this authority is codified in Sections 311, 361, and 362 of the Public Health Service Act. Federal regulations address interstate and foreign quarantine.[10] The list of diseases for which people can be confined dating from 1983 includes cholera, diphtheria, tuberculosis, plague, smallpox, yellow fever, and viral hemorrhagic fevers.[31] Since 2003, three executive orders have modified the list of communicable diseases for which quarantine and isolation may be used. Executive Order 13295 in 2003 added SARS, and Executive Order 13375 in 2005 added influenza viruses that have the potential to cause a pandemic. Finally, Executive Order 13674 in 2014 clarified the reference to SARS.

Protecting the public from communicable diseases is an essential public health service, yet implementation of an isolation or quarantine order is sometimes controversial and raises ethical concerns. At the state level, the 2014 Ebola quarantine case discussed earlier in this chapter highlighted the tension between protecting the public's health and respecting individual rights. Without any symptoms of Ebola, it was hard for the nurse returning from West Africa to accept the Maine quarantine order (see **BOX 2-1**).

As noted earlier, an example of the federal government using its power in this arena came in 2007 when the CDC placed a citizen with a severe form of drug-resistant tuberculosis who had traveled out of the country in isolation upon his return.[32] The individual disregarded both a restriction not to leave the country and an order not to travel back to the country from Europe given his disease. While he later acknowledged that his travel may not have been the best decision, he raised questions about how he was to have been treated in Italy.[9(p149),33]

## Legal Preparedness

Legal preparedness is the idea that practitioners and organizations have the knowledge about legal authorities for public health practice in their jurisdictions and the capability to act in appropriate ways based on existing laws and regulations. The expectation is that laws would be clear, lines of communication open, and actions needed in response to a particular public health event apparent. The reality is that legal issues involving the public's health are complex, and laws and statutes vary greatly among the states. During public health emergencies, this lack of coordination and standards is particularly problematic when lives and damage to property and the environment are at stake. As part of a broader initiative to strengthen public health systems, the Robert Wood Johnson Foundation and the W.K. Kellogg Foundation funded the Turning Point program, which included a national collaborative on modernization of public health statutes.[34] The model statute that local, state, and tribal governments could use to enhance their legal preparedness was issued in 2003, and as of August 2007, 48 out of 133 bills in 33 states had passed.[35] This work reflects a concerted effort to address what was acknowledged to be a gap in the public health infrastructure.

Particularly since 9/11, public health emergency legal preparedness has taken on more urgency. Our experience since 2001 with diseases such as SARS, H1N1, and, most recently, Ebola underscores the importance of clear lines of authority and mechanisms for assistance across jurisdictions. The Model State Emergency Health Powers Act was issued in 2001, and as of July 2006, 38 states had passed 66 bills that adopted language from the Act.[35] This work prompted considerable discussion about the role of the federal and state governments during public health emergencies as well as the need to balance the rights of individuals during periods of crisis when the health and safety of the public are of paramount importance.[9]

Along with work to modernize statutes related to public health emergency legal preparedness, efforts have been under way more generally to define gaps in legal preparedness for emergencies and to identify the key components of legal preparedness and the competencies necessary for the public health workforce. Four core elements were identified in a 2007 summit designed to address legal preparedness: laws and legal authorities, competency in using laws effectively, coordination of legal interventions across jurisdictions and sectors, and information on laws and best practices.[36] These core elements provide a framework for public health practitioners and local and state leaders to examine local practices and conditions, identify gaps, and create solutions to enhance legal preparedness during public health emergencies. To assist jurisdictions in this work, the National Association of County and City Health Officials (NACCHO) has developed an emergency preparedness training kit.[37]

With respect to competencies for educating and training the public health workforce to know how to use the laws effectively, the CDC and the Association of Schools and Programs of Public Health (ASPPH) developed the Public Health Emergency Law Competency Model in 2008 for mid-tier professionals.[38] The competencies address three domains: (1) systems preparedness and response, (2) management and protection of property and supplies, and (3) management and protection of persons. Of particular importance is the focus on a systems approach to emergency legal preparedness, as reflected in Domain 1. Having the knowledge and information about laws related to emergencies, coordinating and communicating with partners, and acting within the scope of the specific legal authorities are essential in all phases of public health emergency preparedness planning, prevention, response, and recovery.

## Conclusion

In the U.S. history of public health emergency response to both man-made and natural disasters, legislation, regulations, and presidential directives reflect the federal government's evolving policies toward prevention, mitigation, response, and recovery. While the response to disasters has always been driven at the local level, the federal government's role in the face of external events has become more centralized with respect to the articulation of a national preparedness goal and a national response plan for all phases of an emergency event. Initially, federal assistance was only provided during the recovery phase, as local jurisdictions managed to the best of their capabilities during the event. Various revisions to disaster declaration legislation now provide governors the opportunity through the Robert T. Stafford Act to request aid during the response to a disaster. Organizational structures changed over time as leaders struggled with how best to manage the response and support recovery with logistics and financial assistance. From the establishment of FEMA in 1979 via Executive Order 12127 to the creation of the DHS in the Homeland Security Act of 2002 and FEMA's more prominent role in disaster management, the federal government sought a more unified vision for ensuring domestic security and safety. Emergency preparedness planning was mandated at all levels, sometimes with specific approaches in mind. Pets and service animals, for example, were the priority in the PETS Act of 2006 following the experiences of Hurricane Katrina in 2005. The PAHPRA of 2013 mandated that protection of children and vulnerable populations be addressed in grantees' All-Hazards Public Health Emergency Preparedness and Response plans.

No one law, executive order, regulation, or directive can anticipate all the possible outcomes from either a man-made or natural disaster. Timing, scope, and complexity of the event affect the nature of response and recovery at all levels. The events of 9/11, the anthrax letters, and Hurricanes Katrina, Rita, and Sandy marked significant turning points in how the United States addresses emergency preparedness. There will always be a need to evaluate how laws work and what plans need further coordination and practice. While the federal government seeks an integrated approach to response and recovery using a whole-of-government and the whole community framework, public health law is an integral part of the infrastructure. Though the mission of public health embodies a social justice lens, the realities of the social, political, and economic environment at the local, state, and federal levels mean that legal preparedness needs to be a part of our ongoing approach to ensure a fair and equitable, coordinated, and comprehensive approach to prevention, response, mitigation, and recovery from a man-made or natural disaster.

## Discussion Questions

1. Review the information about the quarantine case involving the nurse who returned to the United States from treating West African patients with Ebola in October 2014. Do you agree with her decision to challenge both the New Jersey and Maine quarantine orders? Why or why not? Do you agree with Judge Charles LaVerdiere's decision in the Maine case? Why or why not?
2. Do you believe there should be more or less federal involvement in state and local disaster response? Explain your response.

3. Which laws answer the question, "Who is in charge?" How might we evaluate the impact of these laws?
4. What documents and/or legislation describe the roles of nongovernmental agencies in an emergency? How are these relationships defined?
5. What issues was the Post-Katrina Emergency Management Reform Act of 2006 intended to address? What evidence, if any, is there that the legislative solutions to challenges faced during Hurricane Katrina have been effective?

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