Achieving public health legal preparedness: how dissonant views on public health law threaten emergency preparedness and response

Anda Botoseneanu1, Helen Wu2, Jeffrey Wasserman3, Peter D. Jacobson4

1Department of Health Management and Policy, University of Michigan School of Public Health, 1415 Washington Heights, Ann Arbor, MI 48109-2029, USA
2Frederick S. Pardee RAND Graduate School, RAND Corporation, Santa Monica, CA, USA
3RAND Corporation, Santa Monica, CA, USA
4Department of Health Management and Policy, University of Michigan, Ann Arbor, MI, USA

Address correspondence to Anda Botoseneanu, E-mail: andabm@umich.edu

ABSTRACT

Background Effective management of modern public health emergencies requires the coordinated efforts of multiple agencies representing various disciplines. Organizational culture differences between public health (PH) and emergency management (EM) entities may hinder inter-agency collaboration. We examine how PH and EM differ in their approach to PH law and how such differences affect their collaboration towards PH preparedness.

Methods We conducted 144 semi-structured interviews with local and state PH and EM officials between April 2008 and November 2009. Thematic qualitative analysis in ATLAS.ti was used to extract characteristics of each agency’s approach to PH legal preparedness.

Results Two conflicting approaches to the law emerge. The PH approach is characterized by perceived uncertainty regarding legal authority over preparedness planning tasks; expectation for guidance on interpretation of existing laws; and concern about individual and organizational liability. The EM approach reveals perception of broad legal authority; flexible interpretation of existing laws; and ethical concerns over infringement of individual freedoms and privacy.

Conclusions Distinct interpretations of preparedness law impede effective collaboration for PH preparedness. Clarification of legal authority mandates, designation within laws of scope of preparedness activities and guidance on interpretation of current federal and state laws are needed.

Keywords government and law, management and policy, public health

Introduction

Recent catastrophic events, such as the September 11th tragedy, Hurricane Katrina and the H1N1 pandemic, highlight the critical role of the public health (PH) system in responding to a variety of current and emerging threats. A fundamental challenge facing PH agencies is how to use the law to prepare for and respond to emergencies. PH is created, defined and re-shaped by law (defined as the totality of statutes, regulations and rules, contract specifications, licensing requirements, judicial rulings, authorities and other legally enforceable governmental policies).1 The interdependence between law and PH is especially apparent in preparing for and responding to disasters, such as (bio)terrorist attacks or epidemics.2 Legal preparedness is composed of four core elements: (i) laws and legal authorities; (ii) competency in using those laws; (iii) coordination of legally based interventions across sectors; and (iv) information resources on the content and interpretation of law.3 PH legal preparedness is, in turn, a pre-requisite to an adequate emergency preparedness state.4
Despite the critical importance of law in PH, there is almost no systematic examination of how law shapes the PH system or how PH practitioners understand the legal requirements, interpret their constraints, and apply the law in planning for emergencies. Further, the law is an essential component of cross-sector (e.g. PH, emergency management (EM), law enforcement, health-care providers)\(^4\) and cross-jurisdictional (local, state, federal) cooperation.\(^5\) Yet no study to date has empirically examined how differences in organizational culture shape the interpretation of the law and further shape collaboration across sectors.

This paper has two main goals. First, we examine how PH and EM practitioners interpret and respond to federal and state laws affecting PH preparedness. Second, we assess whether differences in the interpretation of the law facilitate or hinder the ability of PH agencies to participate in emergency preparedness initiatives. We expect that our results will generate valuable information on the influence that laws have on shaping PH agencies’ responses, thus suggesting organizational and policy changes to improve the current state of legal preparedness.

**Methods**

We interviewed 144 PH and EM officials in nine states—Pennsylvania, Nevada, Connecticut, Michigan, New Mexico, Florida, California, Oregon and Colorado—between April 2008 and November 2009. Two senior researchers with extensive experience in qualitative research conducted all interviews in-person and one-on-one, to ensure the feedback was independent and confidential. Respondents received a strict confidentiality assurance and were informed that their participation was completely voluntary.

We used a qualitative case-study approach that relied on interviews with a broad range of stakeholders. This methodology is especially appropriate in situations, as with PH preparedness, where quantitative data are not readily available and prior research has not yet generated testable hypotheses.\(^6\) The site selection was based on explicit criteria—variation by US region, per capita PH expenditures, degree of centralization of preparedness responsibilities and emergency preparedness indicators (Table 1)—designed to enhance the study’s generalizability.\(^7,8\) Variation in these criteria captured the range of situations that is likely to exist across the USA to increase the external validity of the study’s findings.

In each state, we interviewed PH and EM officials at the state level and in two to four local jurisdictions. Table 2 shows the characteristics of the study sample.

We developed a semi-structured interview protocol to ensure that all relevant topics were covered and to provide a consistent data collection approach. Topics covered were: (i) how practitioners characterized the general legal and policy

---

**Table 1 State selection criteria matrix**

<table>
<thead>
<tr>
<th>State</th>
<th>Organization of PH system(^a)</th>
<th>Per capita PH expenditure(^b)</th>
<th>Organization of state PH department</th>
<th>Preparedness indicators(^c)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michigan</td>
<td>D</td>
<td>3</td>
<td>Umbrella/regional</td>
<td>9</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>M</td>
<td>2</td>
<td>Free standing/regional</td>
<td>10</td>
</tr>
<tr>
<td>Connecticut</td>
<td>D</td>
<td>1</td>
<td>Free standing/regional</td>
<td>8</td>
</tr>
<tr>
<td>Florida</td>
<td>S</td>
<td>3</td>
<td>Free standing</td>
<td>7</td>
</tr>
<tr>
<td>Colorado</td>
<td>S</td>
<td>2</td>
<td>Free standing</td>
<td>9</td>
</tr>
<tr>
<td>Oregon</td>
<td>M</td>
<td>3</td>
<td>Umbrella</td>
<td>9</td>
</tr>
<tr>
<td>New Mexico</td>
<td>C</td>
<td>1</td>
<td>Free standing/regional</td>
<td>8</td>
</tr>
<tr>
<td>Nevada</td>
<td>D</td>
<td>1</td>
<td>Regional</td>
<td>6</td>
</tr>
<tr>
<td>California</td>
<td>M</td>
<td>4</td>
<td>Umbrella</td>
<td>8</td>
</tr>
</tbody>
</table>

D, decentralized; M, mixed state and local; S, shared state and local; C, centralized.

\(^a\)PH Foundation. Turning point, survey on performance management practices in states. Available at http://www.turningpointprogram.org/toolkit/pdf/pmc_state_survey.pdf (February 2002). Also based on sources compiled by Michael Meit, PhD (used with author’s permission).


\(^c\)Trust for America’s Health, Ready or Not? Protecting the Public’s Health from Disease, Disasters and Bioterrorism, 2007. Available at http://healthyamericans.org/reports/bioterror07/. Based on a range of indicators, with six being the lowest category.
PH preparedness environment; (ii) how the law either facilitated or impeded their preparedness activities; (iii) how other agencies approach legal preparedness and the role of law in inter-agency cooperation; and (iv) what changes in current federal and state laws would strengthen PH preparedness (i.e. perceived gaps).

The interviews were transcribed to allow for qualitative thematic analysis. Based on a random sub-sample of interviews, we identified major themes and developed a codebook for subsequent analysis. Two authors coded another random sub-sample of interviews (inter-rater reliability was above 90%) and produced a modified codebook. The codes were then analyzed using ATLAS.ti 6.3 software (Scientific Software Development GmbH; http://www.atlasti.com).

**Results**

Overall, participants readily shared their insights about current federal and state laws and policies’ influence on their own activity, and on the potential for collaboration with other relevant agencies. Most PH and EM participants agreed on the significant influence of the law on preparedness activities and on the importance of inter-agency collaboration for effective PH response. Thematic qualitative analysis of all interviews suggested a divergent, though highly nuanced, approach to legal preparedness: PH and EM practitioners differ in the way they interpret the current legal environment, its impact on preparedness efforts and inter-organizational collaboration, and in their propositions for legal and policy changes.

**PH approach**

Major characteristics of the PH officials’ approach to preparedness law include uncertainty about the state and scope of legal authority, desire for consensus-based multi-stakeholder decision-making, and a task-based view of preparedness planning (illustrative quotes in Table 3).

**Uncertainty regarding legal authority**

PH respondents perceived as ambiguous the status and extent of existing legal authority over many of the preparedness planning and management tasks. First and foremost, they deemed a clear designation of legal authority as a fundamental pre-requisite for their agencies’ preparedness activities (“...we may try and make the rules, but we may not have the authority for rule-making”). PH respondents repeatedly discussed the fact that PH is a product of law and, as such, PH structures, activity domains and boundaries and conditions for inter-agency cooperation must be set through legal venues. A substantial number of PH respondents stated that laws were unclear as to the scope of activities under their authority during emergency situations and perceived that the current ‘all-hazards’ approach dilutes the existing legal authority over routine or core PH functions (immunizations, infectious or communicable disease prevention, or food and water safety). As a consequence, they saw a need for the specification of legal authority for routine PH operations as distinct from the authority for emergency or exigent circumstances (bioterrorism or other mass-scale disasters).

PH practitioners viewed the law as unclear in assigning authority and responsibility across various agencies expected to collaborate in emergency preparedness efforts. They were concerned that inter-agency cooperation may be hindered by other agencies’ failure to accede to PH legal authority.
Even when designation of authority was clear, PH officials saw their ability to participate in enforcement and implementation activities as limited.

Cautious interpretation and expectation for guidance
Interpreting existing laws and extrapolating legal requirements to situations not specified under the law proved challenging for PH practitioners. They conceded that limited knowledge of the law and slow diffusion of legal knowledge from the federal or state level to the local one are testing. One respondent stated: ‘...the state laws are vague, yet when we ask for guidance the answers are political rather than legal’. In general, PH officials preferred a consensus-based approach that relied upon guidance issued by national or state authorities. Lack of timely, specific guidance was therefore viewed as an impediment to effective response.

Concern about potential individual and organizational liability
As a result of perceived unclear legal mandates and gaps in privacy and confidentiality-related legislation, PH respondents were frequently concerned about the potential for personal and institutional liability. They were uncertain as to the requirements and limitations of the Good Samaritan laws in the context of exigent circumstances stemming from mass-scale public disasters. Further, the ambiguous limits of HIPAA privacy and confidentiality provisions under emergency circumstances were identified as barriers to adequate communication with other preparedness stakeholders.

Table 3 Dissonant views on legal preparedness environment—PH vs. EM officials (summary and illustrative quotes)

<table>
<thead>
<tr>
<th>Divergent views on legal preparedness environment</th>
<th>PH respondents</th>
<th>EM respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal authority</td>
<td>‘[There are] too many cannots in the law, we are not as protected as we could be with stronger laws...’  ‘The authority for quarantine is clear, authority for who enforces is the problem...’</td>
<td>‘...there is plenty of authority, we will provide care and worry about legal questions later...’  ‘We do what we have to do [to save lives] and ask for forgiveness later...’</td>
</tr>
<tr>
<td>Flexibility in interpretation of laws and need for guidance</td>
<td>‘...[there is] no official legal opinion, but many inconsistent attorneys’ opinions’  ‘...people want guidance ... things would otherwise go wayside ...’  ‘...attorneys would not put anything in writing, but written makes it standard of care; ...if not mandated, people won’t do it...’</td>
<td>‘...everything is based on laws, but laws can be put on hold to get it done, get people to safety whatever it takes...’  ‘...it is not a legal issue; decisions should be based on the number of lives saved...’  ‘...can go outside the legal apparatus to get what’s needed...’</td>
</tr>
<tr>
<td>Liability vs. ethical concerns</td>
<td>‘...some may care, but we would not risk livelihood to help...’  ‘...liability is the key legal question; [if they are afraid] they may do the wrong thing at the wrong time, MDs may not show up for work without liability coverage...’</td>
<td>‘...who cares about legal authority credentials in emergencies?’  ‘...there are standard of care issues, so we need liability protection for reduced standards [in emergencies] to salvage as many people as possible; [you may be] open to liability, but more will die if [you] uphold protocols...’  ‘...triage raises ethical questions with legal implications, because standards set base for legal action if standards are not met...’</td>
</tr>
<tr>
<td>Task-specific vs. all-hazards approach</td>
<td>‘...there is comfort in routine, [because] we are not sure about emergency rules...’  ‘...(there was a) shift of resources for planning for the big events, but routine preparedness needs to be ready all the time...’</td>
<td>‘...preparing for disaster... is just a scaling-up of routine operations’  ‘...a community that is prepared for emergencies is prepared for anything...’</td>
</tr>
</tbody>
</table>
Short-term focus on routine PH activities
PH respondents frequently questioned the utility and the legal basis for the current ‘all-hazards’ approach to preparedness. They viewed planning for task-specific scenarios corresponding to day-to-day core PH concerns as critical (‘...here [local Health Department] everyone expects that emergency preparedness will go away, but routine tasks are integral to public health’) and indicated that balancing competing priorities, such as planning for improbable large-scale terrorist attacks when ‘real-life’ daily challenges cannot be met, proved difficult. One PH official described the emphasis within the law on ‘virtual diseases’ related to bioterrorism, rather than on ‘real flu epidemics among the elderly population ...’ as ‘disproportionate and unjustified’.

EM approach
The EM culture showed a more flexible interpretation of existing laws and less emphasis on designation of legal authority as a pre-requisite to preparedness activities. EM officials perceived that ethical concerns overshadow the potential for liability and consistently advocated for an ‘all-hazards’ planning strategy.

Ex-post stance on issue of legal authority
EM officials appeared more content with the current status of preparedness-relevant legislation compared with their PH counterparts. EM respondents viewed the allocation of legal authority and legal responsibility as not essential to preparedness activities (‘...we have to get it done regardless of the law’) and argued that, in emergency situations, the goal of saving lives and minimizing morbidity overshadows concerns about the state or extent of legal authority (‘...it is not a legal question, ...] decisions should be based on the number of lives saved’).

A majority of EM participants agreed that ‘law is not a barrier’ and that ‘legal authorities are reasonably clear, but they are also broad’. Despite the generally positive view of the basis for and scope of legal authority, several EM participants noted the need for clarifying the legal basis for EM interventions across sectors and jurisdictions (e.g. across county or state borders) during emergencies because ‘...when everyone is in charge, no one is in charge’.

Flexible interpretation of existing laws
EM respondents approached the law as a flexible tool, which can be applied to the wide range of emergency planning situations or tasks (‘...are laws clear? No, but my interpretation is that there is plenty of discretion in them’). As all emergency preparedness efforts have a common goal, namely minimizing loss of life and damage to communities, EM officials supported a broad interpretation and application of the law across a wide range of emergency situations. They viewed the lack of legislation on specific emergency scenarios and interventions as less consequential to preparedness activities.

Prominence of ethical concerns
One EM practitioner stated that ‘ethical questions are troublesome, ...they surpass legal issues’, a position representative of many EM respondents’ views. EM participants perceived legal authority and liability protection gaps as secondary to ethical considerations, such as triage, equitable distribution of life-saving resources and duty to vulnerable populations in emergency situations. Infringement on individual freedoms and rights (mainly, the freedom of movement and the right to privacy) and ethical concerns over triage in mass casualty events, featured prominently among the issues raised by EM respondents.

‘All-hazards’ approach to preparedness
EM officials viewed disaster response as ‘just a scaling-up of routine operations’ and agreed with the need for an overall preparedness framework that works well for all possible hazards because ‘...a community that is prepared for emergencies is prepared for anything’. Respondents felt that the ‘all-hazards’ approach is supported within the law and has the benefit of addressing not only high-priority areas, such as terrorism preparedness, but also of strengthening core PH functions.

Organizational discourse and inter-agency collaboration
The interviews exposed a tenuous, antagonistic and competitive relationship between PH and EM respondents. Representative statements include: ‘PH is a toothless tiger when it comes to preparedness ...’ [EM respondent], ‘EM people walk around like cowboys and would pull the guns ...’ and ‘...it [EM] reminds me of children playing soldiers ...’ [PH respondents]. These statements depict opposing cultures and an organizational discourse that hinders effective inter-agency collaboration.

Discussion and conclusions
Main findings
Two clearly dissonant approaches to the role and current state of the law in emergency preparedness are revealed in our study. Despite acknowledging the critical significance of the
law in emergency preparedness, PH and EM officials disagree on many of the issues we probed. PH and EM diverge in the way they perceive the allocation of legal authority and responsibility across preparedness tasks and stakeholders. PH displays a clear ex-ante focus, viewing the law as a prerequisite to establishing the basis for preparedness, in contrast with EMs ex-post view that the law is secondary to the fundamental goal of emergency preparedness, namely saving lives. Further, they disagree on whether an ‘all-hazards’ focus on unlikely, but potentially catastrophic, scenarios should govern the approach to the law and on whether legal considerations take precedence over ethical considerations. These are consequential disagreements. Differences in organizational culture result in distinct interpretations of existing legal structures, requirements and mandates and they impede effective inter-agency collaboration.

What is already known on this topic

Our study is the first to systematically document the range of PH and EM organizational interpretations of the legal preparedness environment. Previous studies have identified unresolved gaps in the existing laws hindering cross-sectoral and cross-jurisdictional coordination of emergency preparedness.4,10,11 Other studies found a wide variation in how local preparedness law defines emergencies, liability protection and authorities,12 and showed that state-level PH preparedness initiatives differ significantly in their organization, administration, workforce and funding sources.13 Consistent with our findings, such differences affect the state and local level inter-agency collaboration.

We found limited direct comparisons of the EM and PH organizational culture in the literature. Studies of management and collaboration issues within each entity suggest that PH officials are unaccustomed to the processes used by law enforcement agencies and clearly favor an inductive approach, as opposed to law enforcement’s deductive approach.11 This may lead to a disconnect between PH and other emergency responders,14 and may cause EM to delay involving PH into a response.15 The EM perception of legal structures and authorities is correlated with the structure of their practice network, rather than the objective law,16 and the EM paradigm emphasizes personal relationships for collaboration, rather than institutional formalities.17 The findings summarized here lend support to our conclusions, suggesting that adequate laws are not sufficient to ensure that PH legal authorities are recognized and that effective inter-agency collaboration occurs.

The challenges that PH faces in collaborating with various entities, given the mix of local, regional and state arrangements, are also documented in the literature.18 Lessons gleaned from existing research include the need to establish trust and reciprocity between partnering agencies19 and the important role of network, hierarchical and coalition-based structures for various types of collaboration.20

What this study adds

Our work contributes to the literature on gaps in legal preparedness by showing that organizational culture and discourse,21 derived partly from PH and EM practitioners’ interpretations of and expectations from the legal environment, influence their approach to preparedness work and to collaboration with other stakeholders. In an area where collaborative processes are essential to achieving the mission of PH,22 exposing and addressing the reasons behind ineffective collaboration should be the next step. Our study finds substantial variation in respondents’ perceptions about the existing legal environment. Aside from the objective legal environment, interpretations and the resulting organizational discourse about the law influence the effectiveness of the two agencies’ preparedness collaborative efforts. Consequently, we should approach with skepticism the view that solely changing the laws will result in an improvement in inter-agency collaboration. Yet, identifying the sources of friction within the law can create opportunities to manage the tensions between the two cultures.

Based on our findings, we recommend a number of changes to mitigate the gap between PH and EM agencies. First, legal amendments are needed to clarify the extent, scope and context of legal authority for each agency. Such amendments may include: (i) identifying which agency is responsible for planning, implementing and enforcing specific tasks and procedures; (ii) clarifying each agency’s legal authorities under routine and exigent circumstances; and (iii) specifying the chain of authority for multi-agency and multi-jurisdictional response situations. Second, effective guidance on the interpretation of current federal and state laws is needed. PH–EM variation in the interpretation of the law creates an opportunity for conflict; better guidance and transparent inter-agency communication regarding the application of laws to particular tasks and situations may reduce the potential for conflict. Third, federal and state policymakers must work to proactively define the legal boundaries of individual, professional and institutional liability in emergency response situations.

Limitations of this study

Several limitations should be noted. First, we recognize that our findings may not be generalizable across all state and local jurisdictions, PH threats or PH–EM comparisons. The explicit site selection criteria and the use of a standard
interview protocol across sites enhance the validity of our results. Further, the similarities observed within each group (i.e. PH practitioners and EM officials) regarding the type and saliency of legal issues raised also speaks for the validity of our findings. Nevertheless, conclusions about differences between PH and EM do not imply unanimity or a statement about level of statistical significance (i.e. P-values); for example, some PH respondents expressed views that were similar to those of EM respondents. This is because thematic qualitative analysis is an inductive exploratory process, through which themes common to a certain group (and eventually not to another) are identified; it is not concerned with estimating the statistical significance of observed differences between groups. Second, we did not explore organizational characteristics that predict or explain patterns of variation in the interpretation of preparedness laws. This remains to be explored in future studies. Third, major disasters are fortunately rare, so it is unclear what represents a meaningful outcome of PH interventions in such situations. Consequently, we are limited in our ability to propose meaningful outcomes to link to variations in the interpretation of preparedness laws.

These limitations notwithstanding, our findings may prove useful for both practitioners and policy-makers. Elucidating similarities and differences in how practitioners interpret and employ legal issues in their preparedness activities may suggest ways to enhance relevant legal knowledge within the PH community. Policy-makers, on the other hand, could use the information to consider alternative interpretations of relevant laws and policies, to ensure through policy-making effective collaboration between all stakeholders in PH preparedness.

**Funding**

This work was supported by grants TP000102 (to P.D.J. and J.W.) from the Centers for Disease Control and Prevention at the U.S. Department of Health and Human Services and T32-AG027708 (to A.B.) from the National Institute on Aging at the National Institutes of Health. The authors thank the funding agencies for their generous support.

**References**


