Operationalizing Legal Preparedness for Disease Outbreaks: Incorporating Legal Requirements into Health System Readiness

Corey M. Peak
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CDC and The American Bar Association
Disclaimer

- This work was performed and published prior to employment at CDC
- The ideas presented here do not necessarily represent the opinion of the CDC
- I declare no conflicts of interest
HIGHLIGHTS

- There have been 10,141 EVD cases in eight affected countries since the outbreak began, with 4,922 deaths.
- Mali has reported its first confirmed case of EVD.
- A confirmed case has been reported in New York City, in the United States of America.
New York City Doctor Tests Positive For Ebola, 3 Others Quarantined

Dr. Craig Allen Spencer, 33, had been working with Doctors Without Borders in Guinea. He returned home to New York on Oct. 17.

Claudia Koerner
BuzzFeed News Reporter

Posted on October 23, 2014, at 9:21 p.m. ET
**Quarantine “Bill of Rights”**

1. Quarantine or isolation will be imposed only when medically and epidemiologically necessary to prevent the spread of Ebola.

2. When those measures are carried out, they must be in the least restrictive means to prevent the spread of Ebola, and after less restrictive measures have been explored.

3. To authorize quarantine, there must be a comprehensive order documenting information such as the legal authority under which the order is issued, the medical basis of the isolation, and a statement explaining the right to retain an attorney and appeal, among other provisions.
“The Ebola virus CANNOT spread to others when a person shows no signs or symptoms of Ebola Virus Disease (EVD).”

Interim U.S. Guidance for Monitoring and Movement of Persons with Potential Ebola Virus Exposure

Updated: November 16, 2014

<table>
<thead>
<tr>
<th>Clinical Criteria</th>
<th>Public Health Actions</th>
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| **Fever** (subjective fever or measured temperature ≥100.4°F/38°C) OR any of the following:* | • Implement rapid isolation with immediate contact of public health authorities to arrange for safe transport to an appropriate healthcare facility for Ebola evaluation  
• Medical evaluation is required.  
  ○ Isolation orders may be used to ensure compliance  
  ○ Air travel is permitted only by air medical transport  
• If medically evaluated and discharged with a diagnosis other than Ebola, conditions as outlined for asymptomatic individuals in this exposure category will apply |
| • severe headache  
• muscle pain  
• vomiting  
• diarrhea  
• stomach pain  
• unexplained bruising or bleeding  |
| **Asymptomatic** (no fever or other symptoms consistent with Ebola) | • **Direct active monitoring**  
• Public health authority will ensure, through orders as necessary, the following minimum restrictions:  
  ○ Controlled movement: exclusion from all long-distance and local public conveyances (aircraft, ship, train, bus, and subway)  
  ○ Exclusion from public places (e.g., shopping centers, movie theaters), and congregate gatherings  
  ○ Exclusion from workplaces for the duration of the public health order, unless approved by the state or local health department (telework is permitted)  
• Non-congregate public activities while maintaining a 3-foot distance from others may be permitted (e.g., jogging in a park)  
• Federal public health travel restrictions (Do Not Board) will be implemented to enforce controlled movement  
• If travel is allowed, individuals are subject to controlled movement  
  ○ Travel by noncommercial conveyances only  
  ○ Coordinated with public health authorities at both origin and destination  
  ○ Uninterrupted direct active monitoring |
Motivating Questions

• What are the characteristics of a disease and of a setting that would lead us towards quarantine or symptom monitoring?
• How do we determine the least restrictive but effective intervention?
• What are the key pieces of information that we need to know to make this decision? What are the influential uncertainties we need to keep in mind when drawing our conclusions?
Factors that make an infectious disease outbreak controllable

Christophe Fraser*, Steven Riley*, Roy M. Anderson, and Neil M. Ferguson

Department of Infectious Disease Epidemiology, Imperial College, St. Mary’s, London W2 1PG, United Kingdom

Edited by Robert May, University of Oxford, Oxford, United Kingdom, and approved February 27, 2004 (received for review November 13, 2003)

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R_0 = \text{basic reproduction number}
\]

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\theta = \text{proportion of infections that occur prior to symptoms or by asymptomatic infection.}
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Comparing nonpharmaceutical interventions for containing emerging epidemics

Corey M. Peak\textsuperscript{a}, Lauren M. Childs\textsuperscript{a,1}, Yonatan H. Grad\textsuperscript{b,c}, and Caroline O. Buckee\textsuperscript{a,2}

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Edited by Simon A. Levin, Princeton University, Princeton, NJ, and approved February 22, 2017 (received for review October 3, 2016)
Reproductive Number (Quarantine)

Reproductive Number

(Symptom Monitoring)
## Most Influential Factors

<table>
<thead>
<tr>
<th>Disease Characteristics</th>
<th>Intervention Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Duration of Infectiousness</td>
<td>1. Fraction of Contacts Identified</td>
</tr>
<tr>
<td>2. Pre-symptomatic Infectiousness</td>
<td>2. Effectiveness of Isolation</td>
</tr>
<tr>
<td>3. Change in Infectiousness over Course of Illness</td>
<td>3. Frequency of Monitoring Symptoms</td>
</tr>
</tbody>
</table>
https://coreypeak.shinyapps.io/InteractiveQuarantine/
**Take Away Points**

- Quantitative methods can be used to estimate the impact of different intervention strategies.

- The choice between quarantine and less restrictive interventions depends on multiple characteristics of both the disease and the setting.

- For controlling Ebola in a high-resource setting, we expect symptom monitoring to be similarly effective and less restrictive than quarantine.
Thank You

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Preparing Michigan Courts for a Public Health Emergency

Creating a Training Model That Actually Works for Judges and Court Administrators
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I have no disclosures to make.

This presentation is for informational purposes only and does not constitute legal advice
Abstract

The Ebola Virus Disease (EVD) epidemic in West Africa during 2014-2015 demonstrated how a highly infectious disease outbreak can create major life disruptions in a community. The ability of the courts to effectively and efficiently execute their statutory mandates, and ensure access to justice and the protection of liberties is essential when a community’s traditional operations and life-sustaining needs are threatened or disrupted.
Background

HOW THIS GOT STARTED
Needs Identified

• Changes in forms for court orders, availability of online versions had also impacted the usefulness of the Bench Book
• Increased awareness for judges and court administrators of the Bench Book as a resource
• Train public health and healthcare professionals on legal authorities discussed in the Bench Book
SOLUTIONS
Revise the Bench Book
Assemble the Subject Matter Experts

- Robert Ianni, JD, Assistant Attorney General (ret); author of the original Bench Book
How Do We Promote This Updated Resource and Provide Training?
Assemble a Project Team
Part 1 – Training

• Objectives:
  – Review public health law using the revised Bench Book (AG)
  – Increase awareness of state and local planning and preparedness for an outbreak of a special pathogen
  – Increase awareness of emergency scenarios impacting the courts
Special Pathogen Legal Training

9:30 AM
• Welcome and Introduction
  Michigan Supreme Court (MSC) Chief Justice, Robert P. Young, Jr. (ret)
• Agenda Overview
  MSC, Security and Emergency Management Director, John Ort

9:40 AM
• State and Local Emergency Management Overview
  MSP, F/Lt Gabe Covey
• BETP, Healthcare and Public Health Policy Specialist, Jennifer Lixey-Terrill

10:45 AM
• Role of the Courts in Emergencies
  Purdue University, the Honorable Linda Chezem

11:30 AM
• Assistant Attorney General, Joseph Potchen
Part 2 – Table Top Exercise (TTX)

• Objectives:
  – Utilize the Bench Book (2016 edition) to inform decisions.
  – Explore legal options and identify public health legal issues.
  – Mitigate competing interests (e.g., public health versus rights of the individual).
Moot Court TTX

- Held in the court room of the Michigan Supreme Court
- 2 lawyers argued each side
- 3 judges chosen from the participants to adjudicate the moot court
Resources


• Special Pathogen Legal Training and TTX Situation Manual (Sitman)

• Flu-Ebola-Malaria symptom infographic

• **Preparing for a Pandemic: an Emergency Response Bench Book and Operational Guidebook** (National Center for State Courts)
Discussion Questions:

• What are the legal issues in this case?

• How would you decide the case and why?
KEYS TO SUCCESS
MOOT COURT
Scenario Development

Special Pathogens Legal TTX
June 2, 2016

Situation Manual
FINAL DRAFT
May 2, 2016
Scenario Objectives

- Make participants think; no easy decisions
- Common good v. individual liberties.
- Allow for more than one possible decision
Development of Legal Arguments

• Scenario given to WMU Cooley Law School Faculty and Student lawyers

• 1\textsuperscript{st} practice session with feedback given by the project team

• 2\textsuperscript{nd} practice session to finalize the case
RESULTS
Key Performance Observations

- 65% of participants indicated this event increased their understanding and ability to deal with legal issues related to an infectious disease outbreak.
- 65% of participants indicated their courts were better prepared to adjudicate public health related cases following this event.
- 88% of participants agreed this event increased their knowledge of the emergency management framework at both the state and local levels.
- 84% of participants indicated they had a better understanding of the role the courts play in emergencies with public health implications.
Strengths

• Participants identified multiple legal issues involved in the case of an emerging infectious disease.
• Participants identified the complexities, impacts, and consequences of possible courses of legal action related to the control of infectious diseases.
• Participants recognized that a number of state and local agencies, including the courts, would have a critical role in the response to Ebola or other special pathogens in Michigan due to potential community impacts.
• Participants identified the revised Bench Book as a valuable resource.
Identified Improvements for TTX

- Assure copies of the Bench Book are available to participants at least two (2) weeks in advance of future training and/or exercises.
- Inclusion of a medical review panel and/or expert medical testimony as an option courts can use before ruling on a case.
- Restructure the moot court to be either a circuit court case or a case before the Court of Appeals. The moot court in this exercise had elements of both.
Feedback Beyond the Scope of This Event

• Training on how courts would function during a disaster (i.e., continuity of operations).
• Training that would discuss the processes and procedures that court administrators and staff would follow to assure public health related cases were handled efficiently and expeditiously.
The Model in a Nutshell

• Part 1 – Training:
  – Emergency management system
  – Public health role and authorities
  – Role of courts in public health emergencies
  – Review the Bench Book (if applicable)

• Part 2 – TTX with Moot Court
  – Moot court
  – Discussion
Where to Find Stuff

Where to Find Stuff continued

• Exercise Sitman, Materials on Resource Disk, Exercise After Action Report, etc.

• Contact Jim Koval at kovalj@Michigan.gov
WHERE DO WE GO FROM HERE?
Take the Show on the Road...

- Michigan has 5 judicial regions
- Take the model and plug in local and/or regional partners as trainers and play the video of the moot court to start the TTX
- Share with others to use beyond Michigan
ACKNOWLEDGMENT
The project team would like to thank the following faculty and students from the Western Michigan University Cooley Law School who made the moot court a reality:

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- Katherine F. Mortensen, Attorney/Cooley Law School Student
- Nancy Mullett, Attorney/Cooley Law School Student
- Terry White, Attorney/Cooley Law School Student
Questions?