

A Framework for Improving Cross-Sector Coordination for Emergency Preparedness and Response

Action Steps for Public Health, Law Enforcement, the Judiciary and Corrections

Prepared by:

Public Health and Law Enforcement Emergency Preparedness Workgroup

Convened by:

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AND

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Action Steps for Public Health, Law Enforcement, the Judiciary, and Corrections

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The Centers for Disease Control and Prevention (CDC)/ U.S. Department of Justice (DOJ) Public Health/Law Enforcement Emergency Preparedness Workgroup

by

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Table of Contents

EXECUTIVE SUMMARY	i
I. FRAMEWORK	1
NEED FOR CROSS-SECTORAL FRAMEWORK	1
WORKGROUP CHARGE AND PRODUCTS	
GUIDING PRINCIPLES.	
RELATIONS AMONG SECTORS	5
Parallel but Separate Professional Worlds	6
Misconceptions: Unease with Disease	11
A Complex Jurisdictional Landscape	12
II. ACTION STEPS	17
ORGANIZING TO IMPLEMENT OPPORTUNITIES FOR ACTION	18
Rationale	18
Action Steps	
ROLES AND RESPONSIBILITIES	
Rationale	
Action Steps	
COMMUNICATION AND INFORMATION SHARING	
Rationale	
Action Steps — Communications	
Action Steps — Information Sharing	
EDUCATION, TRAINING AND EXERCISES	
Rationale	
Action Steps — High-Priority Training Topics	
Action Steps — "Cyclical" Curriculum	
III. CONCLUSION	33
APPENDIX A: ACRONYMS	35
APPENDIX B: WORKGROUP MEMBERS	36
APPENDIX C: CDC AND DOJ/BJA TECHNICAL CONSULTANTS	38
APPENDIX D: EXAMPLES OF JOINT INVESTIGATION TOPICS/EVENTS, 1975-2003	39
ADDENINIY E. DIDI IOCD ADUV	40

Executive Summary

Framework

Disaster preparedness plans have the potential to protect at-risk populations from harm and maintain or quickly restore the routines and functions of civil society. But even the most thorough and prescient plan will fall short if it does not reach across professional jurisdictions and agencies.

Workgroup Charge and Products

To make the jump across sectoral lines faster and more focused, Centers for Disease Control and Prevention's (CDC) Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER) supported a joint initiative between CDC's Public Health Law Program (PHLP) and the U.S. Department of Justice's Bureau of Justice Assistance (DOJ/BJA) in 2007. The two organizations convened a 28-member Workgroup on Public Health and Law Enforcement Emergency Preparedness that included experts representing four sectors: public health, law enforcement, the judiciary, and corrections.

Between June 2007 and February 2008, the Workgroup members met to identify opportunities for improving cross-sectoral and cross-jurisdictional collaboration (the focus of this framework document) and to craft two other tools: a model Memorandum of Understanding (MOU) for joint investigations of bioterrorism, and a guide for developing MOUs for strengthening coordinated, multi-sector responses to influenza pandemics and other infectious disease threats. The framework document is designed to be a starting point for the four Workgroup sectors, setting forth the major gaps and problems in cross-sectoral and cross-jurisdictional emergency preparedness planning as well as some key opportunities for addressing them. Additional copies of this framework report and of the guide for developing an MOU are available from either of two Web sites:

- www2a.cdc.gov/phlp/emergencyprep.asp or
- www.ojp.usdoj.gov/BJA/pandemic/pandemic_main.html.

Guiding Principles

As the Workgroup members considered ways to improve cross-sector coordination for emergency preparedness, they were guided by several core principles: balancing federal, state, and local power and responsibilities; balancing the common good with safeguarding of individual liberties; preserving the rule of law; and building on existing emergency response coordination mechanisms and structures wherever possible.

Relationships Among Sectors

While the most complementary and close connection might be between law enforcement and public health, the other sectors represented on the Workgroup —the judiciary and corrections —also are key partners. For example, in a contagious disease epidemic, a public health official may request a quarantine of a group or area and law enforcement

officers would be responsible for enforcing it, but legal challenges to either public health or police authority quickly would engage the court system. Likewise, an infected person resisting an isolation order might be arrested, but could not be admitted to a crowded jail or health-care facility without endangering other inmates, staff, or patients.

The sectors represented on the Workgroup share overlapping responsibilities for the public's health and welfare, yet in general and in most jurisdictions, they tend to operate in isolation from one another despite sharing profound common interests in protecting the public's health and safety. Many factors contribute to this *status quo*, including a complicated jurisdictional landscape, different approaches and jargon, and misconceptions about each other's roles and contributions.

Action Steps

Workgroup members identified a set of specific action steps, described below, that have particular potential to address existing barriers and misconceptions. These opportunities for action, grouped into four main categories, are intended to make cross-sectoral and cross-jurisdictional collaboration more feasible, productive, and common —without duplicating the many existing initiatives (such as the National Incident Management System and Incident Command Structure (NIMS)) designed to streamline emergency preparedness and response. The purpose of presenting these options is not to recreate or discount these important efforts, but rather to build on them in the specific area of cross-sectoral and cross-jurisdictional planning and preparedness.

Organizing to Implement Action Steps

To optimize preparedness at any jurisdictional level (i.e., local, state, territorial, tribal, federal), agencies and organizations require a comprehensive understanding of the other sectors' roles, responsibilities, legal authorities, and assets that relate to responses to selected public health emergencies (e.g., natural disasters, contagious disease epidemics, suspected biological or chemical terrorism). Therefore, each jurisdiction may first need to organize by establishing a framework for periodically convening senior representatives from each sector to review and address these and related considerations.

Action steps include:

- **Establishing a standing steering committee** to direct the jurisdiction's initiative for improved, coordinated, multi-sector response.
- Developing a detailed plan to achieve full capability to mount a coordinated, multisector response to public health emergencies.
- Integrating the steering committee's plan into the jurisdiction's NIMS-compliant emergency planning/management plans.
- Establishing direct linkages between the steering committee and the jurisdiction's emergency planning and management systems.

• Establishing direct linkages with counterparts in adjacent jurisdictions (e.g., cities, counties, states, territories, tribes, Canadian provinces, and Mexican states).

Roles and Responsibilities

Beyond organizing to consider implementation of actions, additional steps may be necessary to achieve comprehensive understanding of each sector's roles, responsibilities, legal authorities, and assets that relate to public health emergency response.

Action steps include:

- Defining roles and responsibilities for an effective coordinated, multi-sector response with a NIMS-compliant response plan; specifying roles and responsibilities for each sector; identifying key players and their back-ups; engaging other sectors; addressing implications that special populations have for each sector; developing and promoting the use of practical and operational products focused on cross-sector coordination (such as scenario-based exercises); establishing local- and state-level cross-sectoral groups; and reviewing and mapping local jurisdictions.
- Identifying and reviewing legal authorities that each of the four sectors need to fulfill their defined roles and responsibilities, including examining potential sector-specific variations in legal authorities and roles under different scenarios; clarifying enforcement roles and responsibilities in different scenarios; and reviewing the implications for each sector of a declared state of emergency.
- Identifying gaps in existing legal authorities and tools for coordinated response involving two or more of the sectors.
- Developing an action plan to strengthen or address gaps in legal authorities, tools, and roles and responsibilities necessary for coordinated response, including approaches for improving access to ready-to-use instruments (e.g., draft emergency declarations, quarantine orders, mutual aid agreements, bench books).
- Reviewing and specifying due process considerations in relation to the roles and responsibilities of each of the sectors during a public health emergency, including, for example, practical and logistical aspects such as the format and timing of written orders (e.g., for quarantine and isolation); service of orders; and affected parties' access to review and representation, particularly when movement and contact may be restricted.

Communication and Information-Sharing

Coordinated emergency preparedness and response hinge on professionals in each of the four sectors —public health, law enforcement, corrections, and the judiciary —having ready access to communications across the sectors and also to key types of information. In this context, "communication" refers to a network of interaction among professionals and agencies across the four sectors in a given jurisdiction and to established networks of

communication with other sectors, elected officials, the media, and the public, as well as the electronic systems to support communication. "Information" refers to substantive content that professionals in the four sectors need to have in order to perform their roles before, during, and following public health emergencies.

Action steps include:

- Establishing a workgroup to assess the existing communications network for interactions among the four sectors and to recommend any improvements needed, including assessing the adequacy of existing electronic systems.
- Developing communications plans for events that cross sectors that encompass what constitutes a crisis communication issue involving agencies/organizations in different sectors, and those for which a single-sector agency or organization would be responsible for most communication.
- For each sector, communicating each agency's/organization's emergency plans for coordinated response to counterparts, including steps for establishing a central hub and for identifying the implications of each agency's/organization's continuity of operations plans for the others.
- Designating Points of Contact (POC) for each sector's agency/organization to facilitate
 consistency in messages to the media and the public and specifying information each
 sector requires of other sectors for different phases of an emergency.
- Establishing specific agreements on exchanging sensitive information between sectors, including provisions on who will authorize the release of information, and how it will be protected and further disseminated after an exchange occurs.
- Identifying barriers to sharing needed information, including determining how jurisdictions could prepare information in such a way (e.g., through removal of personal identifiers or information that would trigger clearance requirements) that it could be shared among agencies in different sectors.
- Working with the media before a crisis to arrange for assistance during an emergency in communicating useful information to the public and countering rumors and misinformation.
- Developing ready-to-use legal instruments (e.g., joint investigation protocols, protocols for joint implementation of quarantine and other social distancing measures, draft orders, court pleadings, and temporary regulatory waivers) and jointly developed information resources (e.g., briefing packets, fact sheets, press releases, and public service announcements).

Education, Training and Exercises

Within each jurisdiction, the steering committee with oversight for coordinated, multisector response should consider plans for assessing and identifying gaps in the preparedness and response competencies among each sector's workforce, and strengthening the workforce through training, exercises, after-action reviews, corrective action programs, and other educational initiatives.

The Workgroup suggests that delivery of most of the following topics would result in optimal benefit if provided through joint training or exercises for individuals from different sectors and jurisdictions:

- Develop a plan to assess the existing emergency preparedness and response competencies among workforce members in each of the four sectors and to deliver training/exercises and corrective action programs/improvement plans to address gaps and needed competencies.
- Develop a curriculum comprising a variety of topics for emergency preparedness training and exercises that advance collaboration across sectors and jurisdictions, including roles and approaches; exercises that transcend current COOP planning; "Infectious Diseases 101" for non-public health professionals; and joint bioterrorism investigations.

Workgroup members also described a "cyclical" training model that places education, through training and exercises, within the broader context of sectoral/agency roles and responsibilities. The elements of this model —which apply equally for preparedness for intentional (e.g., bioterrorist) or natural (e.g., an influenza pandemic or other infectious disease threat) events —require agencies, organizations, and multi-sector steering groups to identify players, their roles and responsibilities; identify required skills and competencies; develop a curriculum of training and exercises and then conduct these; and conduct afteraction assessments.

Conclusion

It is the Workgroup's hope that this framework and set of opportunities for action will spark conversations, plans and concrete actions among public health, law enforcement, the judiciary, and corrections —and that these efforts will traverse and erode the boundaries separating four sectors whose interests in the public's health and safety are both shared and profound.

I. Framework

Need for Cross-Sectoral Framework

Well before the events of 9/11 and the anthrax attacks that followed in the fall of 2001, the Centers for Disease Control and Prevention (CDC) portfolio of core public health functions included preparing for and responding to a variety of man-made and natural emergencies. In the last decade, a series of disasters —including the events of 2001, the Severe Acute Respiratory Syndrome (SARS) epidemic, and the threat of pandemic avian influenza —has drawn more attention and resources to emergency preparedness. Then in 2005, Hurricanes Katrina and Rita proved that natural disasters can be as destructive and terrifying as their man-made and naturally occurring infectious disease counterparts.

These actual disasters, near misses, and impending threats, so different from one another, demonstrated that investments in the public health system fortuitously strengthen preparation for both man-made and natural disasters. Indeed, improvements such as stronger local health departments, new laboratory techniques, upgraded surveillance and communication capabilities and heightened vigilance by physicians of symptom complexes among their patients have yielded public health payoffs regardless of whether a disease outbreak is the work of man or nature.

As a result, CDC's investments in emergency preparedness have accelerated and expanded the capacity of state, territorial, and local health departments as well as capacity within CDC in the past decade, especially since 2001. Law enforcement agencies, the corrections system, the judiciary, and many other sectors have re-examined their own policies and procedures, identified potential gaps, launched task forces and committees, and drafted plans for continuity of operations (COOP) for future emergencies. As described below in greater detail, many of these initiatives shifted from disaster-specific scenarios to a more comprehensive all-hazards approach, adaptable to a wide range of naturally occurring and man-made disasters.

These efforts to strengthen each sector's all-hazards preparedness and continuity are essential and ongoing. However, among the many lessons of our most recent disasters is the realization that no sector or jurisdiction is likely to face a major disaster or its aftermath alone. Effective use of disaster preparedness plans has the potential to protect at-risk populations from harm and maintain or quickly restore the routines and functions of civil society. But even the most thorough and prescient plan will fall short if it does not reach across professional jurisdictions and agencies.

Workgroup Charge and Products

To make the jump across sectoral lines faster and more focused, CDC's Coordinating Office for Terrorism Preparedness and Emergency Response (COTPER) supported a joint initiative between CDC's Public Health Law Program (PHLP) and the U.S. Department of Justice's Bureau of Justice Assistance (DOJ/BJA) in 2007. Building on previous work together, PHLP and BJA convened a 28-member Workgroup on Public Health and Law Enforcement Emergency Preparedness that included representatives from four sectors: public health, law enforcement, the judiciary, and corrections. (A list of acronyms used in this document is provided in Appendix A, followed by a full listing of Workgroup members in Appendix B and consultants and staff in Appendix C.)

The Workgroup's members represent sectors and agencies that share joint responsibility for the public's health, safety and welfare. In the case of states' public health and law enforcement agencies, as part of the executive branch of government, their authority to protect the public derives from police powers — those powers reserved under the U.S.

Organizations Represented on the Public Health/Law Enforcement Emergency Preparedness Workgroup

- CDC Public Health Law Program
- DOJ Bureau of Justice Assistance
- DOJ Counterterrorism Section
- U.S. Department of Homeland Security
- National Association of Attorneys General
- City, County, University, and Transit Police Departments
- State Departments of Public Safety
- Association of State Correctional Administrators
- Federal Bureau of Investigation, WMD Directorate
- Association of State and Territorial Health Officials
- National Association of County and City Health Officials
- Council of State and Territorial Epidemiologists
- Association of Public Health Laboratories
- U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response
- National Center for State Courts
- Administrative Office of the U.S. Courts
- National Institute of Corrections

Constitution to the states to create and implement laws that protect the public's health, safety and welfare. As the third branch of government, the judiciary's role in public health has long been overlooked, but it is crucial because of the role of the courts in preserving the rule of law during and after an emergency, resolving disputes, and assuring the constitutionally guaranteed rights of individuals. The corrections system is responsible for the health of millions of incarcerated Americans who move through its facilities. Corrections institutions face unique challenges in maintaining security, providing health care to inmates, and supporting correctional officers during a disaster.

This overall framework document and two related tools are the product of a series of three Workgroup meetings between June 2007 and February 2008 as well as interviews, literature reviews, revisions and discussions among Workgroup members between meetings. One tool is a model MOU for joint investigations of bioterrorism, and the other is a guide for

developing MOUs for strengthening coordinated, multi-sector responses to influenza pandemics and other infectious disease threats. The MOU on strengthening multi-sector responses and this framework document are available from either of two Web sites:

- www2a.cdc.gov/phlp/emergencyprep.asp or
- www.ojp.usdoj.gov/BJA/pandemic/pandemic_main.html.

The audiences for this document include the federal, state, territorial, and local agencies collectively responsible for the public's health, safety and

welfare. These include, but are not limited to, the four sectors represented on the Workgroup: public health, law enforcement, the judiciary and corrections.

The framework document is designed to be a starting point for these sectors, setting forth the major gaps and problems in cross-sectoral and cross-jurisdictional emergency preparedness planning. Included are short- and long-term steps and considerations that policy makers, officials, task forces, committees and the like can take to begin addressing these gaps.

Framework Document Organization

I. Framework Overview

- Need for Cross-sectoral Framework
- Workgroup Charter
- Guiding Principles
- Relations Among Sectors

II. Opportunities for Action

- Organizing to Implement Opportunities for Action
- Roles and Responsibilities
- Communication and Information Sharing
- Education, Training, and Exercises

Guiding Principles

As the Workgroup members considered ways to improve cross-sector coordination for emergency preparedness, they were guided by several core principles.

First, federalism —the constitutional division of sovereignty between federal and state governments —frames the interactions between public health and law enforcement, as well as the actions of the courts. Sharing public health authority, public health officials at the federal, state, and local levels must cooperate in developing efficient and effective means to address public health threats. Likewise, public health must collaborate with federal, state, and local law enforcement officials to ensure effective and equitable enforcement of public health measures. In turn, federal, state, and local law enforcement must cooperate with one another. Depending on the facts of particular cases, people or other legal entities

¹ Throughout this document, the term "state" refers to "state and/or territorial" when referring to jurisdictions.

that are adversely affected by public health measures or their enforcement may file challenges in federal or state courts. As a result, it is crucial for public health and law enforcement officials and their attorneys to have a firm grasp of federal and state court jurisdiction and procedures, as well as public health law.

Exercising the states' police powers to protect the public's health during emergencies (as well as from more routine threats) requires balancing the common good with safeguarding individual liberty interests (including freedom of movement, individual autonomy, and expectations of privacy). The constitutionality of the use of police powers in a public health context initially was articulated over 100 years ago by the U.S. Supreme Court in the case of *Jacobson v. Massachusetts*, in which the Court upheld

the conviction of a Cambridge, Massachusetts resident who failed to comply with a smallpox vaccination requirement as a proper exercise of the police power to protect public health.2 However, the Court limited its ruling to say that exercise of the power may not unduly interfere with the fundamental rights of individuals. The "perennial tension" between the public's health and individual liberty interests has been inherent in the exercise of police powers ever since.³ Contemporary due process and other constitutional standards ensure maintenance of the delicate balance between protection of public health and individual rights.

Guiding Principles for Coordinated Emergency **Preparedness**

- Balance federal, state and local power and responsibilities
- Balance the common good with safeguarding of individual liberties
- Preserve the rule of law
- Align with existing emergency preparedness structures and activities

A paramount role for courts during emergencies and other public health events is to preserve the rule of law. For example, courts may issue orders authorizing certain actions or affirm orders issued by public health or law enforcement officials to protect the public's health. Courts also may intervene to restrain public health or enforcement actions that are determined to interfere unduly with civil rights. To perform their important role, courts must be able to continue operating in an emergency. An "all-hazards" approach to emergency contingency planning should address public health threats, such as an influenza pandemic, particularly since there may be a need to provide timely due process access to the courts for large numbers of people who may be affected by public health emergency actions. Addressing the operational needs of the judicial system will ensure that courts are available to serve as guardians of liberty and protectors of the rule of law —even if face-to-face

² 197 U.S. 11 (1905)

³ Cetron M and Landwirth J. Public health and ethical considerations in planning for quarantine. Yale Journal of Biology and Medicine 78 (2005);325-330.

interactions become difficult or impossible and the court's business proceeds through closed hearings, video conferences, and the like.

As discussed in greater detail below, the Workgroup members also recognize that many emergency preparedness activities are underway at the federal, state, territorial, and local levels. Efforts to improve all hazards emergency preparedness across sectors and jurisdictions should build on these existing structures and activities whenever possible.

Relations Among Sectors

While the most complementary and close connection might be between law enforcement and public health, the other sectors represented on the Workgroup — the judiciary and corrections —certainly are key partners.

health crisis."

For example, many scenarios implicate the use of quarantine and/or isolation.

— Commander William T. Bowen

"Many public health preparedness

plans include law enforcement —

professionals are not aware of this and, more importantly, do not see a

role for themselves in a public

yet most law enforcement

Isolation is the separation or restriction of movement of people who are sick with an infectious disease, in order to prevent transmission to others. **Quarantine** is a restraint upon the activities —e.g., physical separation or restriction of movement within the community/work setting —of an individual(s) who has been exposed to an infection, and is not yet but may become ill, to prevent the spread of disease. Many respiratory infections, including pandemic influenza, can be transmitted by a person before he or she develops symptoms of the illness.

In a serious contagious disease outbreak, a public health official may request a quarantine of a group or area and law enforcement officers might be responsible for enforcing it, but legal challenges to either public health or police authority quickly would engage the court system. Likewise, an infected person resisting an isolation order might be arrested, but could not be admitted to a crowded jail without endangering other inmates and staff. Ideally, the implications of these scenarios would be discussed before the person resisting quarantine first enters custody.

As this report indicates, in recent years, there have been significant improvements in coordination across these sectors, although significant challenges remain. The sectors represented on the Workgroup share overlapping responsibilities for the public's health and welfare, yet in general and in most jurisdictions, historically they have tended to operate apart from one another. Many factors contribute to this separation, autonomy, and lack of shared experience between agencies and disciplines that actually have profound common interests.

Some of the gap is a product of custom and culture, with different philosophies, approaches, and even language contributing to the gap between sectors. Until recently, the opportunities and incentives to work and train together were relatively rare. Some of the gap is resource-driven; appropriations to federal agencies are made at the Department Secretary or agency level and remain preserved in their compartments as they are disseminated to state and local agencies, reinforcing the silos from which they started.

Current disaster scenarios have changed this equation quite radically. It is difficult to imagine a severe contagious disease pandemic, for example, that would *not* require the involvement of both law enforcement and the judiciary. Courts would issue orders and/or hear challenges to orders that have been issued. Infected people would have to be isolated, groups and individuals might be quarantined if exposure were a possibility, public events would be cancelled and schools may be closed, travel might be curtailed, and curfews enforced. As Commander William Bowen (former chief of the Albany, New York Police Department) has written, "Many public health preparedness plans include law enforcement —yet most law enforcement professionals are not aware of this and, more importantly, do not see a role for themselves in a public health crisis." Likewise, public health officials may be assuming a level of assistance and preparation from local law enforcement in their pandemic planning that has not been tested in joint training or exercises, nor detailed with the specificity that front-line public safety officers would require to act.

As these examples suggest, the Workgroup enters the realm of all-hazards emergency preparedness with a rather tall order: fostering cross-sector efficiencies that will improve emergency preparedness by filling procedural gaps, identifying authoritative consistencies, improving communication and supporting joint training. As discussed below, the Workgroup's discussions and categories of products are intended to provide a philosophical framework and specific tools that will make it easier and more efficient for state and local jurisdictions to reach across the jurisdictional and sectoral divides that constrain current emergency preparedness efforts.

The Workgroup members also recognize that other sectors beyond the four described here —such as agriculture, education, and transportation — already are part of existing coordination efforts and would potentially be involved in the types of scenarios described in this document.

Parallel but Separate Professional Worlds

Closer proximity among public health, law enforcement, the courts and corrections has revealed different approaches and priorities. For example, at its onset, the 2001 anthrax attack triggered only a public health

⁴ Bowen WT. Law enforcement and public health. The Police Chief. 2007;74(8).

investigation. But, in short order, when findings strongly suggested that a deliberate and criminal act was unfolding, the public health investigation was joined by a criminal one. (Appendix D provides examples of other joint public health and law enforcement investigation topics and events that occurred between 1975 and 2003.)

As several observers have noted, public health and law enforcement have learned a great deal about each others' approaches since then, including different definitions of the same terms and concepts (such as "case," "surveillance," and "evidence," among others). But, the missions of public health and law enforcement are fundamentally different. Public health is responsible for stopping the occurrence of infectious diseases and other health problems. Law enforcement is responsible for identifying and apprehending people who have committed crimes or pose a threat to others. While both equally share the goal of protecting society, the differences in their responsibilities and legal authorities are profound.

The **public health** approach to an investigation is rooted in the science of epidemiology, in which people are interviewed about their possible exposure, other data and samples or material are collected (such as food or blood samples), hypotheses generated, and tests conducted to gauge whether the hypotheses are correct. Even in an emergency—such as an outbreak—the emphasis is on thoroughness and scientific accuracy, with great deference to expert scientific knowledge and laboratory results. The goals of a public health investigation include protecting the public, diagnosing the disease, determining who has been or still is at risk, establishing if disease transmission is ongoing from a common source or spread from person to person, providing treatment or prophylaxis, stopping the spread of disease, and protecting public health personnel. Historically, public health investigators only rarely encounter malicious intent in their investigations.

The law enforcement approach to an investigation has many similarities, but also some crucial differences. It too involves interviewing witnesses, but the purpose, from the outset, is to identify suspects. Leads are developed and pursued; evidence is carefully collected and tracked. However, this process is geared to solving a crime and collecting proof that will meet legal (as opposed to scientific) standards —standards designed to protect individual rights and the innocent. Thus, issues such as preserving the chain of custody for a particular piece of evidence are a

⁵ Marcella Layton, presentation to Workgroup, June 8, 2007.

⁶ Butler JC, Cohen ML, Friedman CR et al. Collaboration between public health and law enforcement: new paradigms and partnerships for bioterrorism planning and response. *Emerging Infectious Diseases* 2002;8(10):1152-56.

⁷ Federal Bureau of Investigation, Centers for Disease Control and Prevention, U.S. Department of Justice, and U.S. Army Soldier Biological Chemical Command. *Criminal and epidemiological investigation bandbook, 2006 edition*.

priority for law enforcement investigations and typically not a consideration for public health ones.⁸ Law enforcement investigations share with public health investigations a paramount interest in protecting the public as well as their own personnel. In addition, investigation goals of law enforcement include preventing criminal acts and identifying, apprehending and prosecuting the offender(s).

As noted above, beyond their role in joint public health/law enforcement criminal investigations, local police and sheriff's personnel are likely to be involved in an emergency as first responders and as keepers of public order. During the 2003 SARS outbreak in Toronto, nearly 30,000 people (including hospital staff) complied with voluntary quarantine restrictions, with very few incidents requiring police involvement. In any case, whether they are enforcing isolation and quarantine orders, controlling crowds, protecting hospitals and vaccine stockpiles, or managing traffic, law enforcement are likely to be engaged on the front lines of a serious public health emergency or natural disaster.

One potential problem is that public health pandemic plans may be assuming a level of assistance from local law enforcement that has not been well defined, agreed to, or tested with law enforcement agencies themselves. Another issue is that even when such agreements are in place, they lack the clear, definitive guidance that law enforcement officers would require to act. For example, if a state quarantine order is defined as "Don't let anybody past this point/door/street," what exactly does that mean? Does "anybody" really mean anybody? Should transgressors be arrested? (If so, where would they be taken, especially if a local jail is locked down?) How much force is appropriate? If force were used, what kind of liability would an officer and agency face? How will officers who come into contact with exposed or infected individuals be protected?^{11, 12} Currently, answers to many of these questions are not clearly defined and would be left to the interpretation of officers on the street —a situation that both commanders and their subordinates, for good reason, try to avoid.

The **judiciary's** role, in parallel with public health and law enforcement, includes guarding the rule of law by balancing the needs of government authorities against the preservation of individual civil liberties that we value as a society. Before, during and after an emergency, courts may be

⁸ Ibid.

⁹ Fantino J. 2003 SARS outbreak: the response of the Toronto Police Service. *The Police Chief* 2005;72(3).

¹⁰ U.S. Department of Justice, Bureau of Justice Assistance. The role of law enforcement in public health emergencies: special considerations for an all-hazards approach. 2006. [Executive Paper summarizing full report]

¹¹ James Pryor, Seattle Police Department, personal communication, September 27, 2007.

¹² Kamoie B, et al. Assessing laws and legal authorities for public health emergency legal preparedness. *Journal of Law, Medicine and Ethics.* [Special Supplement to 2008;36(1):23-27.]

engaged in a number of ways —ruling on whether a particular public health statute is constitutional or whether an action (such as a quarantine) is authorized, or approving or extending timeframes for public health orders. At the same time, the judiciary will be trying to continue its routine operations while contending with added burdens, such as challenges to curfews and cancelled public events, price gouging cases, commandeering of private resources, or even, in a mass casualty scenario, unusually high volumes of wills and estates, as well as dependency, custody and adoption cases. 15

Some of these issues —particularly contingency planning for keeping courts open and operating during a disaster, perhaps in different locations and with fractions of existing personnel —are well covered by internal COOP plans and a steadily growing set of tools from different states and jurisdictions, such as bench books and other guides for judges and court administrators. Still, the Workgroup members recognized the need for continued investments in these areas, and urge both the courts and public health to continue to explore each other's worlds. As noted in Stier et al., "Put simply, public health officials, as well as their attorneys, must know their way around the courthouse." 16

Without this familiarity and perspective, public health officials might not appreciate some philosophical tenets of the judiciary that would govern and possibly jeopardize their interactions. These vary from one jurisdiction to another, but generally are unfamiliar to the public health

"Put simply, public health officials, as well as their attorneys, must know their way around the courthouse."

Daniel Stier et al., 2007¹⁶

community. For example, judges place a premium on independence and on basing their decisions on the application of relevant law to facts in each case. In many scenarios, this would make it ethically and legally difficult for a judge to discuss the substance of a particular case with a public health official who is a party to it, without others present.

Another scenario involves hypothetical "what-if" speculations—for example, about due process shortcuts during an emergency. During an emergency, some cases could come before the court *ex parte*; in these situations, judges may suggest methods to address procedural due process in orders involving methods of service, for example. Depending on the setting and circumstance, "what if" discussions might not be

¹³ Task Force on Pandemic Preparedness Planning for the Courts. *Guidelines for pandemic emergency preparedness planning: a road map for courts.* Criminal Courts Technical Assistance Project at American University, U.S. Department of Justice grant number 2006-DD-BX-K013, April 2007.

University of Pittsburgh and Administrative Office of Pennsylvania Courts. 2006. Courthouse preparedness for public health emergencies: Critical issues for bioterror/biohazard preparedness planning.
 Stier DD, Nicks D, Cowan GJ. The courts, public health, and legal preparedness. American Journal of Public Health, 2007;97(S1):S69-S73.

inappropriate, but public health officials should learn to proceed with caution so that their interactions foster trust, rather than distrust.

On the other hand, judges may lack specialized knowledge in public health and may benefit from learning about the public health implications and rationale behind various statutes (or challenges to them). More public health officials, public health attorneys, and court systems are acquiring this familiarity and knowledge about one another. However, such exchanges are far from routine, and public health officials require opportunities to interact more with court administrators and judicial counterparts.

The **corrections** system includes correctional institutions that function as "total institutions"—i.e., facilities in which inmates are housed in isolation from the larger society and lead an enclosed, formally administered life that makes them completely dependent on others for their care and feeding. This means that the allotment of staff and material resources during an emergency has an immediate effect on the population of inmates, making institutional corrections more similar to hospitals than to police stations, courtrooms, or parole offices.

The corrections system encompasses not only jail and prison facilities, but also **community corrections**—and thus the millions of men and women who are on probation or parole. In some jurisdictions, the duties of police and sheriff's departments overlap as well.

The health issues that arise in both institutional and community corrections settings affect the large numbers of people

The Corrections System

- Pre-trial
- Parole
- Jails
- Prisons
- Probation
- Juvenile facilities

who move through them, including staff, inmates and visitors. As such, key health-related aspects of incarceration (and subsequent probation or parole) can be thought of as an extension of the public health system. High rates of turnover (98 percent of those incarcerated eventually are released to the community) mean that diseases and conditions cross back and forth quite efficiently. As a result, as noted above, corrections officers may have more in common with counterparts running health facilities and more familiarity with public health roles and approaches than others in the law enforcement arena. Indeed, a Tennessee Sheriff compared jails (with their 1,000 percent turnover per bed per year) to an emergency department, and prisons (with a 38 percent average turnover) to nursing homes.¹⁷

¹⁷ Hall D. Jails vs. Prisons. [Commentary.] *Corrections Today* 2006. Available at http://www.allbusiness.com/public-administration/justice-public-order/976230-1.html.

Infectious disease outbreaks in corrections facilities do not always get media coverage, but they do provide glimpses into the potential consequences —still largely unexplored and unaddressed —of pandemic diseases moving rapidly through society. In March 2007, Sheriff C. T. Woody Jr., working in concert with public health colleagues, restricted the movement of people in and out of the Richmond City Jail in an effort to contain an outbreak of norovirus in one wing of the jail. During the quarantine, none of the 1,500 inmates incarcerated at the time could receive family visitors or meet with their lawyers. Their court hearings were rescheduled and they had to spend 24 hours a day in their cells (although Sheriff Woody did grant expanded phone and television privileges to minimize the tensions of a lock-down situation). Deputies patrolling the building wore protective suits and face masks; those from the affected wing did not patrol other parts of the jail (as they normally would have). As the city's emergency management coordinator said, "The biggest job is we are trying to make sure the deputies don't get sick because then you've got a much bigger problem."18

Protecting the health of corrections officers was the subject of a lawsuit by the California Correctional Peace Officers' Association, alleging that four officers at Folsom Prison contracted a contagious strain of methicillin-resistant Staphylococcus aureus, or MRSA.¹⁹

As is the case with the judiciary, some of the effects of all-hazards emergencies in the corrections system will be addressed through existing COOP and other types of planning. Even so, it behooves all the players in these overlapping sectors to be aware of the implications their actions generate for their counterparts in other agencies.

Misconceptions: Unease with Disease

Not surprisingly, the parallel professional universes described above sometimes lead to misconceptions about roles, responsibilities and even basic facts or knowledge. In the throes of an emergency, it will be difficult to educate, much less convince, skeptical counterparts in other agencies about the different risks of exposure to various infectious diseases or environmental threats. Incubation periods, modes (and efficiency) of transmission, severity and treatment options —all may be self-evident and reassuring to public health personnel, but unknown (and therefore frightening) to others. A better understanding of these nuances of risk can help people make better decisions about returning to work, potentially

¹⁸ Associated Press. Jail under lockdown because of norovirus. Richmond Times-Dispatch, May 18, 2007. Available at:

http://www.timesdispatch.com/servlet/Satellite?pagename=RTD%2FMGArticle%2FRTD_BasicArticle&c=MGArticle&cid=1149193449275&path=%21news&s=1045855934842.

¹⁹ Phua C and Furillo A. *Folsom prison staph illness up, union says.* Sacramento Bee, August 29, 2007. Available at: http://www.sacbee.com/101/story/349710.html.

exposing family members (or colleagues), wearing protective masks and gear and seeking vaccination or treatment.

Alternatively, some first responders or others involved in a crisis may under-estimate their risk of exposure, failing to heed warnings or don protective equipment. Misconceptions about disease-specific dangers also can lead to poor decisions. The rationale for public health decisions likely to engage law enforcement, the courts, and corrections needs to be well understood if policies and procedures are to be upheld through collective efforts of all these sectors. For example, the use of quarantine can still be effective in containing and controlling transmission of some diseases, even if compliance is well below 100 percent. For commanders and officers contemplating some level of force to enforce a quarantine order, this is crucial information.

Quarantine and isolation are diseasespecific tools. Their effectiveness depends not only on the nature of the disease itself (i.e., the type of infectious agent, how efficiently it infects others, the disease's incubation period, and availability of antibiotics or other treatment), but also on the phase of a potential pandemic. Once a disease becomes widespread in a community or larger geographic area, mandatory quarantine and isolation would be unlikely. However, voluntary compliance with quarantine and isolation orders to reduce face-to-face contact would be possibilities.

A Complex Jurisdictional Landscape

In a paper and presentation at the June 2007 National Summit on Public Health Legal Preparedness, Rick Hogan, J.D., M.P.H., General Counsel for the Arkansas Department of Health, described the many jurisdictions that

Law Enforcement Agencies in the District of Columbia

- Metropolitan Police Department
- Metro Transit Police
- D.C. Housing Authority Police
- Amtrak Police
- U.S. Capitol Police
- U.S. Park Police
- Naval District Washington Police
- Treasury Police
- Secret Service Uniformed Division
- Zoo Police
- Government Services Administration Police
- U.S. Postal Service Police
- Defense Protective Service
- FBI Police
- Veteran's Administration Police
- Military District of Washington Police
- Federal Protective Service
- Government Printing Office Police
- Catholic University Police Department
- Georgetown University Police
- George Washington University Police
- Library of Congress Police
- Supreme Court Police
- U.S. Mint Police
- Smithsonian Institution Office of Protective Services

potentially engage in an emergency.²⁰ This can include, for example, government entities at the federal, state, territorial, and local levels; tribal governments; and those of other nations as well.

Each jurisdiction varies in its relevant legal authorities for different types of emergencies, complicating the task of understanding exactly what types

²⁰ Hogan R, et al. Assessing coordination for public health emergency legal preparedness. *Journal of Law, Medicine and Ethics.* [Special Supplement to 2008;36(1):36-41.]

of legal authorities are available to public health and law enforcement officials —and where key gaps might be. In addition, many local agencies grapple with the requirements of multiple jurisdictions. In Washington D.C., for example, a total of 24 law enforcement agencies (including state, city, county, transit, airport, university, zoo and ports) would have to be aware of each other's policies, procedures, and relevant statutes —and that list does not include counterparts in neighboring Virginia and Maryland.²¹ States and counties along the borders with Canada and Mexico add international counterparts and authorities to their lists.

A 2004 study of quarantine powers among the 10 most populous states found that although all 10 states had express legal authority to quarantine and isolate their residents, the laws varied substantially —especially in the absence of a declared emergency. Without such a declaration, only four states had the authority to conduct area quarantine, and only two did for group quarantine.²²

As the number of relevant legal authorities and key players associated with each set of jurisdictions proliferates, every aspect of responding to an emergency becomes more complicated —the chain of command (or, in a unified command situation, the size and composition of the team), how and under what circumstances information is shared, who the key players are, and what the thresholds or triggers are for involving other agencies and jurisdictions.

A number of national initiatives have tried to minimize or resolve some of the confusion caused by these jurisdictional variations. These include:

The National Incident Management System (NIMS) and Incident Command System (ICS) —developed by the Department of Homeland Security in 2004, NIMS is a federal codification of the ICS and is based on protocols originally developed by fire departments in California to cross boundaries among firefighters, hazardous materials teams, rescuers and EMS teams. In Fiscal Year (FY) 2006, federal preparedness grants to states began requiring compliance with various aspects of NIMS/ICS. Key elements include the ICS (which applies a unified command structure and joint decision-making to multijurisdictional emergencies), management of communications and

²¹ Lt. Douglas Durham, Metro (DC) Transit Police Department, personal communication, September 28, 2007.

²² Shaw FE, McKie KL, Liveoak CA, et al. Legal tools for preparedness and response —variation in quarantine powers among the 10 most populous US states in 2004. American Journal of Public Health 2007;97:S38-S43.

information (e.g., interoperable communication systems), and a joint information system to deliver consistent information.²³

- Fusion Centers —to promote a stronger two-way flow of intelligence information among state and local law enforcement agencies and with federal agencies as well.²⁴
- Model Legislation —the draft Model State Emergency Health Powers Act (commissioned by CDC in 2001 as an assessment tool) and the Model State Public Health Act (prepared by the Center for Law and the Public's Health in 2003) have helped states assess and address gaps and inconsistencies in state laws. The District of Columbia and 38 states have enacted at least some provisions of the Model State Public Health Act, but it does not address multiple sectors or the needs of cities, counties and tribes.²⁵
- Mutual Aid Agreements (MAAs) and the Emergency Management Assistance Compact (EMAC) —these can cover at least five different categories of shared information and supplies between and among states: planning information, epidemiological and laboratory data, equipment and/or supplies, unlicensed personnel, and licensed personnel. The EMAC is a specific mutual aid agreement whose provisions are triggered by a gubernatorial declaration of an emergency; smaller-scale events that do not trigger such a declaration would require separate MAAs.²⁶ States cannot enter into MAAs or EMAC with foreign governments, but nonbinding agreements may be an option for sharing information. Four Northwestern states (Alaska, Idaho, Oregon and Washington) are members of the Pacific Northwest Emergency Management Arrangement (PNEMA) with the two Canadian provinces (British Columbia and the Yukon Territory). On the East Coast, six New England States have a similar agreement with their Canadian counterparts.27
- Homeland Security Exercise and Evaluation Program (HSEEP). Under the HSEEP guidance, joint exercise would enhance opportunities for collaboration and further the understanding of the sectors by each of its members.

²⁷ Ibid.

²³ Jamieson G. NIMS and the Incident Command System. *The Police Chief* 2005;(72).

²⁴ Bureau of Justice Assistance (BJA), Office of Justice Programs, U.S. Department of Justice. *Fusion Center Guidelines.* April, 2006. Available at: http://www.iir.com/global/products/fusion_center_executive_summary.pdf.

²⁵ Rees C, et al. Assessing information and best practices for public health emergency legal preparedness. *Journal of Law, Medicine and Ethics.* [Special Supplement to 2008;36(1):42-46.]

²⁶ Stier DD, Goodman RA. Mutual aid agreements: essential legal tools for public health preparedness and response. *American Journal of Public Health* 2007;97:S62-S68.

Cross-Sector Coordination Example

Combining Law Enforcement, Public Health, Hazl/Vat, and EMS: The Greater Louisville Region Joint Emergency Services Unit (ESU)

In 2002, Dr. William Smock was serving as the tactical surgeon for the Louisville Metro Police Department's Metro SWAT team. His stint with the team led to the observation that like many other SWAT teams, Louisville's was not equipped or trained to operate in a HazMat environment. Likewise, HazMat units couldn't necessarily defend themselves against armed threats or provide immediate medical assistance if needed. In a post-9/11 world, scenarios in which all of these skills would be needed simultaneously were not hard to imagine.

Dr. Smock's response was to form a Joint Emergency Services Unit (ESU) that brought together members from 20 different public safety and emergency response agencies to train together monthly to keep their medical, HazMat and tactical skills sharp and ready for deployment. Every year, the team participates in four to six full-scale exercises (in addition to monthly drills and tabletop exercises), covering a wide range of scenarios. Examples include quarantining both passive and hostile people in aircraft, airports, and urban centers.

A Command Group determines whether a particular threat warrants a Joint ESU response; if so, a customized team is dispatched quickly. (Team members are deputized by the U.S. Marshals service so that they can respond to incidents regardless of whether they fall under local, state, or federal jurisdiction.) The Joint ESU normally is used when there is a known or suspected victim/human biologic vector or a need for law enforcement within a hot zone. One deployment occurred when a methamphetamine lab exploded in Southern Kentucky, radiating a red phosphorous haze into the area while a hostile suspect held the local police at bay. Within 30 minutes, the Joint ESU team arrived to evaluate the chemical hazards and deployed a protected, fully equipped eight-person team to secure, treat, and evacuate the suspect, who was not only armed but also contaminated and injured.

Sources:

Halladey, J. "Security Team a Force for the Future: Multi-agency Unit Trains to Handle Terror Threats," *The Courier-Journal*, Louisville, KY. 10/19/04.

Department of Homeland Security, Lessons Learned Information Sharing (LLIS). "The Greater Louisville Region's Joint Emergency Services Unit." (Undated)

II. Action Steps

In 2007, the Centers for Disease Control and Prevention (CDC) — specifically, its Coordinating Office for Terrorism Preparedness and Emergency Response, and Public Health Law Program —and the U.S. Department of Justice's Bureau of Justice Assistance convened the 23-member Public Health and Law Enforcement Emergency Preparedness Workgroup to develop options and tools that states, tribes, and local governments can use to improve their cross-sector coordination for emergency preparedness and response. Members of the Workgroup represent the perspectives of public health, law enforcement, corrections, and the judiciary.

In a series of meetings and deliberations held during 2007 and early 2008, the Workgroup reviewed a large number of proposals for such options and tools, focusing particularly on their practical relevance to policy makers and front-line practitioners, and their potential contribution to achieving greater coordination across the four key sectors. On the basis of its reviews, the Workgroup has identified numerous "opportunities for action," which are presented below. The Workgroup encourages jurisdictions to consider how adapting these options and implementing them could strengthen cross-sector coordination and, as a consequence, further enhance comprehensive preparedness for all-hazards public health emergencies.

The Workgroup members recognize that leaders in jurisdictions throughout the country have achieved significant advances in emergency preparedness and response, reflecting their own vision as well as lessons learned from 9/11 and the 2001 anthrax attacks, the SARS epidemic, Hurricane Katrina, preparing for a potential influenza pandemic, exercises, and response to many actual emergencies. A number of initiatives, both new and revamped, have addressed improved emergency preparedness, including: the adoption of the National Incident Management System (NIMS); mutual aid agreements such as the interstate Emergency Management Assistance Compact (EMAC); fusion centers to share law enforcement intelligence more efficiently; continuity of operations (COOP) plans; and the Laboratory Response Network (LRN) for Biological and Chemical Terrorism (which connects state and local public health laboratories with national public health and military laboratories). The purpose of presenting the options contained in this framework document is not to duplicate or discount these important efforts, but rather to build on them in the specific area of cross-sectoral and cross-jurisdictional planning and preparedness.

The Workgroup also recognizes that initiating, sustaining, and expanding cross-sectoral and cross-jurisdictional coordination is a time- and resource-intensive enterprise and that additional efforts at all levels —federal, tribal, state, territorial, and local —may be required to pursue the options for action in a comprehensive and timely way.

The action options are organized into four main sections:

- 1) organizing to implement opportunities for action;
- 2) roles and responsibilities;
- 3) communication and information-sharing; and
- 4) training, education, and exercises.

For each of these, the Workgroup suggests opportunities for concrete action, with links to more specific resources when these are known.

Since each sector and jurisdiction are unique and differ in existing levels of preparedness planning and collaboration, this document cannot cover every situation or remedy. Instead, it compiles in one place a set of options and related tools that can be considered to advance the work of emergency preparedness planners at all levels. The Workgroup members note that progress on all four fronts —organizing to implement options; clarifying roles and responsibilities; improving planning and communication; and testing these through training and exercises —is not likely to occur simultaneously. However, progress in any area should improve collaboration across sectors and jurisdictions.

For those jurisdictions interested in more specific templates, the Workgroup also developed two more detailed tools as companion pieces to this framework document —one addressing joint public health/law enforcement bioterrorism investigations and another addressing coordination of social distancing interventions for infectious disease outbreaks.

Organizing to Implement Opportunities for Action

Rationale

To optimize preparedness at any jurisdictional level (local, state, tribal, or federal), agencies and organizations require a comprehensive understanding of the other sectors' roles, responsibilities, legal authorities, and assets that relate to responses to selected public health emergencies (e.g., natural disasters, contagious disease epidemics, suspected biological or chemical terrorism). Therefore, each jurisdiction may first need to organize by establishing a framework for periodically convening senior representatives from each sector to review and address these and related considerations.

As noted above, the Workgroup members recognize that organizing in the ways suggested below requires time and resources that may be lacking in many jurisdictions; thus, ongoing federal, state, and local support may be required to move such efforts forward more widely across many jurisdictions throughout the United States, instead of in a select few.

Action Steps

- ☑ Establish a standing steering committee to direct the jurisdiction's initiative for improved, coordinated, multi-sector response, with membership to include:
 - Public health
 - Law enforcement
 - Corrections
 - Judiciary
 - Emergency management
 - Elected officials
 - Senior officials in the jurisdiction's emergency operations center
 - Other potentially relevant sectors (e.g., the National Guard)
 - Legal counsel to all of the above
- ☑ Develop a detailed plan —with functional overarching goals, goals for each of the four sectors, practical objectives, and timelines —to achieve full capability to mount a coordinated, multi-sector response to public health emergencies. Within the plan, consider addressing overarching and sector-specific standards, including:
 - Competencies
 - Communication
 - Information
 - Exercises
 - Evaluation and continuous quality improvement
- ☑ *Integrate the steering committee's plan* into the jurisdiction's NIMS-compliant emergency planning/management plans.
- ☑ Establish direct linkages between the steering committee and the jurisdiction's emergency planning and management systems.
- ☑ Establish direct linkages with counterparts in adjacent jurisdictions (e.g., cities, counties, states, tribes, Canadian provinces, and Mexican states).

Cross-Sector Coordination Example

Epidemics and the California Courts

A pandemic influenza outbreak has the potential to disrupt day-to-day court operations for months. In 2006, to help prepare for this scenario in California, the Judicial Council of California Administrative Office of the Courts' (AOC) Emergency Response and Security Unit and the California Department of Health Services' Division of Communicable Disease Control and Office of Legal Services jointly developed a guidance document for the court system, *Epidemics and the California Courts*. The document identifies the key information that California judges and court executives should consider in a pandemic influenza scenario, how the court system is likely to be affected, and specific actions that could minimize disruptions and keep the court system operating as smoothly as possible. *Epidemics and the California Courts* reinforces how important it is for both the courts and public health to be aware of their respective core functions and their dependence on each other as an epidemic unfolds.

To help courts prepare ahead of time, the document covers Continuity of Operations (COOP) topics such as mission-critical functions for courts, workforce planning if absenteeism reaches high levels, legal preparedness, communications, employee education and safety, jury considerations, and technology implications of trying to keep the court system operating (e.g., holding hearings and trials by closed-circuit television).

A set of appendices covers more specific information, including requests for judicial emergency orders, planning checklists, educational flyers, and legal opinions addressing court administration issues during an epidemic.

The full report and appendices are available from the Web site of the California Department of Health Services, Division of Communicable Disease Control: http://www.dhs.ca.gov/ps/dcdc/DCDCIndex.htm.

Roles and Responsibilities

Rationale

Beyond organizing to consider implementation of actions, additional steps may be necessary to achieve comprehensive understanding of each sector's roles, responsibilities, legal authorities, and assets that relate to public health emergency response. Steps to achieve understanding of roles and responsibilities encompass specifying functional standards for coordinated responses, defining sector-specific roles consistent with such standards, and developing legal authorities and tools necessary for fulfilling roles and responsibilities.

Action Steps

- Define roles and responsibilities for coordinated, multi-sector response consistent with the jurisdiction's NIMS-compliant response plan:
 - Define response roles and responsibilities for each of the four sectors that are consistent with the jurisdiction's response plan and recognize the need for coordination with other sectors, when indicated.
 - Identify key players and their back-ups —As the first responder adage holds, an emergency is no time to be exchanging business cards. In addition to identifying roles and individuals, other means (e.g., flow charts, call lists, periodic meetings, updates, and joint training exercises) can introduce key players to one another before an emergency, build trust, increase understanding, and minimize coordination barriers before an emergency occurs.
 - Use innovative approaches to engaging other sectors —As examples, convene a judicial education conference focusing on public health law and emergency powers, organize joint law enforcement and public health meetings to work through quarantine implications, and convene corrections with public health to review roles and plans for epidemic response among correctional populations.
 - Address implications special populations have for each sector—
 Consider each sector's roles and responsibilities during public health emergencies in relation to the most at-risk populations (e.g., disabled, hospitalized, non-English speaking, poor, homeless, incarcerated).
 - Develop and promote use of practical and operational products that focus on cross-sector coordination, such as practical scenario-

based exercises that include post-exercise evaluations. One purpose of these products is to assist in clarifying and validating each sector's roles and responsibilities when coordination is required.

- Establish local- and state-level cross-sectoral groups that meet regularly to review and exchange information on their respective roles and responsibilities in relation to coordination during specific scenarios (e.g., joint investigations of suspected bioterrorist events, implementation of social distancing measures during communicable disease epidemics, and coordinating evacuation during natural disasters).
- Review and map local jurisdictions, especially for law enforcement and public health. Confusion about responsibilities may result when jurisdictional boundaries do not overlap in clear and functionally practical ways, and may have implications for memoranda of agreement or understanding between different jurisdictions.
- Identify and review legal authorities, gaps, and ways to address gaps so that each of the four sectors has the capacity to fulfill its defined roles and responsibilities.
 - Examine potential sector-specific variations in legal authorities, roles, and responsibilities in different emergency scenarios and, if there are conflicts in authorities, determine how they can be resolved.
 - *Clarify enforcement roles and responsibilities* in different emergency scenarios.
 - Review implications for each sector of a declared state of emergency, including, for example, what emergency powers are triggered and whether a declaration affects lines of authority, enforcement, and accountability.
 - Identify gaps in existing legal authorities and tools for coordinated response involving two or more of the sectors.
 - Develop an action plan to strengthen or address gaps in legal authorities, tools, and roles and responsibilities necessary for coordinated response; include approaches for improving access to ready-to-use instruments. The plan could encompass:

- O Draft emergency declarations and protocols for implementing declarations of emergency
- Specification of legal authorities triggered by emergency declarations
- O Protocols for coordinated implementation of emergency public health protections (e.g., seizure, destruction, or decontamination of contaminated property; issuance and enforcement of quarantine orders; closure of schools and public venues; delivery of mass vaccination; evacuation; mass dispensation of medications and other countermeasures)
- Protocols for provision and receipt of aid under mutual aid agreements
- Responsibility for protection of special and/or at-risk populations (e.g., persons who are hospitalized and/or disabled; non-English speakers; patients with advanced chronic disease; homeless)
- O Informational resources and tools primary to one sector but with a strong subject matter overlap with one or more of the other sectors, such as public health bench books for the judiciary, and epidemic control guides for correctional facilities
- O Information and guidance on the development of personal protective equipment, personal care kits, and other measures appropriate for safeguarding personnel in each sector during periods of emergency response.
- Review and specify due process considerations in relation to the roles and responsibilities of each of the sectors during a public health emergency, including, for example, practical and logistical aspects such as the format and timing of written orders (e.g., for quarantine and isolation); service of orders; and affected parties' access to review and representation, particularly when movement and contact may be restricted.

Sample Pandemic Event Questions/Issues for Local Law Enforcement Consideration

- What is the chain of command and who will make decisions during a pandemic event?
- What legal authority is there for the actions to be taken by law enforcement?
- What orders will be lawful or unlawful in such circumstances?
- What vaccines and antiviral and other medications will local law enforcement personnel (and their families) be
 offered, and how can leaders assure their personnel that the offered vaccines and medication are safe and
 effective?
- What problems will local law enforcement leaders face if vaccines and medication are not provided to law enforcement personnel and their families?
- How can law enforcement leaders assure their personnel that it is safe to carry out their sworn duties requiring close contact with highly infectious persons?
- How will local law enforcement securely communicate with public health partners, their own agency personnel, and personnel in neighboring jurisdictions?
- What will local law enforcement leaders communicate to the media and the public regarding the law enforcement actions taken in the face of a pandemic event?
- How will rumors inside agencies and in public circulation be countered?
- What level of force will law enforcement use to enforce an individual containment or community-wide quarantine measure?
- What steps should law enforcement leaders take to maintain control and authority without overstepping roles and overstating or understating risks?
- What lessons have been learned from recent experiences with Hurricanes Katrina and Rita and the 2003 SARS outbreak, especially the travel-related containment measures imposed in Toronto?
- How will law enforcement carry out their traditional duties while also carrying out these significant additional responsibilities, and where will the financial and personnel resources required to carry out these additional responsibilities come from?
- How will local law enforcement leaders and their counterparts in hospitals, public health, transportation sectors, local government, and local and state political leaders, not only in their own jurisdictions but in neighboring jurisdictions, come together to make meaningful plans as urged in the HHS plan?

Source: Colwell, L. The Pandemic Influenza Plan: Implications for Local Law Enforcement. The Police Chief 2006(73).

Communication and Information Sharing

Rationale

Coordinated emergency preparedness and response hinge on professionals in each of the four sectors —public health, law enforcement, corrections, and the judiciary —having ready access to communications across the sectors and also to key types of information. In this context, "communication" refers to a network of interaction among professionals and agencies across the four sectors in a given jurisdiction and to established networks of communication with other sectors, elected officials, the media, and the public. "Communication" also refers to reliable electronic systems to support rapid, secure communication across the four sectors and with partners.

"Information" refers to substantive content that professionals in the four sectors need to have in order to perform their roles before, during, and following public health emergencies. This includes information, for example, about agencies' and organizations' roles and responsibilities, tools (e.g., interagency memoranda of agreement and judicial handbooks), and information that can be communicated to the media and the public.

Action Steps — Communications

- Establish a workgroup to assess the existing communications network for interactions among the four sectors and to identify any improvements needed to ensure that the agencies have adequate methods and forums for communicating with each other, on an on-going basis, about developments relevant to their effective coordination in emergency settings (e.g., changes in federal or state emergency preparedness policy and changes in the nature of public health emergency threats).
 - Establish a technical committee to assess the adequacy of existing electronic communications systems to support coordinated emergency response across the four sectors and to identify any needed enhancements to those systems.
 - Ensure that the electronic communications systems that serve the four sectors comply fully with the technical specifications of the jurisdiction's NIMS-compliant emergency response plan.
- Develop communications plans for events that cross sectors —Plans should encompass what constitutes a crisis communication issue involving multiple agencies/organizations in different sectors, and those for which a single-sector agency or organization would be responsible for most communication. Conversely, the involvement of multiple sectors may not necessarily trigger a joint

communication response if a single agency or organization can communicate on behalf of all sectors.

- For each sector, communicate each agency's/organization's emergency plans for coordinated response to counterparts through meetings, shared documents, training exercises, and other means.
 - Within each jurisdiction, the agencies/organizations representing each sector (public health, law enforcement, corrections, judiciary) could identify steps for establishing an emergency response environment with a central hub, which is the agency/organization having primary responsibility for emergency response planning and functions; the other agencies/organizations could ensure their respective plans provide for connectivity to the central hub.
 - Agencies/organizations should review each other's plans for continuity of operations, and identify specific implications for, as well as questions and concerns that each has of, the others regarding continuity of operations; identification could be followed by communications and dialogue that explore and, if necessary, resolve issues.
 - Assure that responsible officials in each of the four sectors understand each agency's response plans and roles, and that the plans and roles of all the agencies support highly effective, closely coordinated joint response actions.
- Designate Points of Contact (POC) for each sector's agency/organization to facilitate consistency in messages to the media and the public.
 - Designate "internal" and "external" POC —Internal POCs include those who are responsible for an agency's or organization's internal operations, while external typically are public information officers.
 - Provide essential information to agencies/organizations in other sectors regarding policies and procedures, as well as the identities and roles of their own POC, and plans for potential use(s) of such information.
- Facilitate cross-sector communications by including representatives from other sectors and jurisdictions in working groups, task forces, committees and exercises related to preparedness planning.
- Specify information each sector requires of other sectors for different phases of an emergency, and develop companion matrices to

organize and share such information needs for different emergencies with other sectors.

- Establish specific agreements on exchanging sensitive information between sectors, including provisions on who will authorize the release of information, and how it will be protected and further disseminated after an exchange occurs (e.g., if a law enforcement officer may have been exposed to an infectious person during an outbreak, the health department might need to advise the law enforcement agency regarding the nature of the possible exposure).
- Identify barriers to sharing needed information Jurisdictions must adhere to privacy provisions and may need to determine how information could be prepared in such a way that it could be shared among agencies in different sectors without violating those provisions. Agencies and organizations also need to inventory the various channels (e.g., fax, e-mail) for sharing information with other sectors, whether these channels are secure, who has access to secure lines of communication, who has security clearances for any content delivered through such lines, and who has the authority to share information once it is received.
- Work with the media before a crisis to arrange for assistance in communicating useful information to the public and countering rumors and misinformation during an emergency. Agencies and organizations in each sector may need to review the relevance and roles of media in emergency situations, determine who will serve as the POC with the media for particular types of information, and orient media representatives to specific emergency scenarios.

Action Steps — Information Sharing

As noted above, "information" refers to the substantive content that professionals in each of the four sectors need to have in order to perform their roles before, during, and following public health emergencies. It includes information about agencies' and organizations' roles and responsibilities, tools (e.g., interagency memoranda of agreement and judicial handbooks), and information that can be communicated to the media and the public.

Form a "critical information" committee to review the information the four sectors need to perform their roles in coordinated planning for, and response to, all-hazards public health emergencies and to recommend action to address shortcomings in the availability of that information.

- Specify information each sector requires of other sectors for different phases of an emergency, and develop companion matrices to organize and share such information needs for different emergencies with other sectors.
- Develop and disseminate templates, checklists, and other tools that policy makers and practitioners in the four sectors can use to assess the status of their preparedness for coordinated emergency response, including, among other elements, their emergency legal preparedness.
- Develop operational MOUs that support coordinated response and provision of resources among the jurisdiction's public health, law enforcement, and corrections agencies.
- Develop ready-to-use legal instruments and a shared library of legal documents (e.g., legal memoranda, opinions, references, joint investigation protocols, protocols for joint implementation of voluntary quarantine and other social distancing measures, draft orders, court pleadings, and temporary regulatory waivers) that will facilitate rapid, coordinated response to public health emergencies.
- Prepare jointly developed information resources (e.g., briefing packets, fact sheets, press releases, and public service announcements) for use with the media and the public during responses to public health emergencies.
- Develop continuity of operations plans for agencies and organizations and ensure that they support effective interaction across the sectors during an emergency response (e.g., interaction over the release of a corrections inmate who completes his sentence during a public health emergency and whose release must be coordinated by the courts, the prison administration, local law enforcement, and the public health agency charged to protect the entire community, including the released inmate, from a disease outbreak).
- ✓ Capture "lessons learned" about coordinated response from actual public health emergency response efforts and from exercises for use in improving cross-sector coordination in future emergencies.
- Develop scholarly and practice-based reference materials on technical issues requiring coordination between two or more sectors, such as the FBI-CDC Criminal and Epidemiological Investigation Handbook²⁸ and

²⁸ Federal Bureau of Investigation, Centers for Disease Control and Prevention, U.S. Department of Justice, and U.S. Army Soldier Biological Chemical Command. *Criminal and epidemiological investigation bandbook, 2006 edition, a*vailable from http://www2a.cdc.gov/phlp/docs/CrimEpiHandbook2006.pdf.

the Law Enforcement Pandemic Planning Checklist developed by HHS.²⁹

Cross-Sector Coordination Example

Preparing for Pandemic Influenza: Training Examples from the Fairfax County, Virginia Police Department

As part of a review of the Police Department's critical infrastructure capacity and Continuity of Operations Planning in 2006, the Fairfax County Police Department prepared a memorandum for all Police Department staff explaining the threat of pandemic influenza; basic planning assumptions under low, medium, and high levels of severity; Police Department responsibilities and expectations during each phase of a pandemic; essential services and authorities; communication strategies (including different points of contact for different aspects of the pandemic); lines of succession, critical files and databases; agency policy considerations; and personal protection and logistics.

To ensure that each staff member had an opportunity to become familiar with the memorandum's content, the Department organized a series of meetings, simulation exercises, and training events. These ranged from requiring that all employees watch a Department of Health video during roll call to simulation exercises that staged a dry run exercise for the strategic distribution of medications.

Instead of trying to cover every aspect of pandemic influenza planning at once, the Department's leaders made a conscious decision to provide generic information first, but to add more specific training (e.g., on using and storing protective equipment) as the threat level becomes more acute.

Source: Memorandum from Major Josiah L. Moser, Commander, Fairfax County Police Department Technical Services Bureau, to Command Staff regarding pandemic influenza planning (File 06-162; October 31, 2006).

Education, Training and Exercises

Rationale

Preparedness for all-hazards emergencies is challenging not only because of the complex governing legal regimens, but also because effective response demands close coordination among each of the four sectors —public health, law enforcement, corrections, and the judiciary —as well as other highly diverse sectors. Effective coordination, in turn, hinges on multi-

²⁹ www.pandemicflu.gov/plan/workplaceplanning/lawenforcement.pdf

disciplinary professionals' attainment of understanding of their respective and shared roles and responsibilities. Accordingly, within each jurisdiction, the steering committee with oversight for coordinated, multisector response should consider plans for assessing and identifying gaps in the preparedness and response competencies among each sector's workforce, and strengthening the workforce through training, exercises, and other educational initiatives. Systematic assessment of gaps should assist with identification of high-priority, cross-sector training needs and topics, as well as with incorporation of such topics into a long-term, "cyclical" curriculum of training and exercises.

Action Steps — High-Priority Training Topics

The Workgroup suggests that delivery of most of the following topics would result in optimal benefit if provided through joint training or exercises for individuals from different sectors and jurisdictions. The effects of this approach include cross-sector exposure to and shared understanding of perspectives, as well as fostering relationships and trust that can be crucial to smooth coordination during response to an actual emergency.

- Develop a plan to assess the existing emergency preparedness and response competencies among workforce members in each of the four sectors and to deliver training/exercises and corrective action programs/improvement plans to address gaps and needed competencies.
- Explore existing training resources—e.g., the Association of Schools of Public Health network of Centers for Public Health Preparedness or CDC's Public Health Law Program—to build on existing curricula and avoid "reinventing the wheel."
- Develop a curriculum comprising a variety of topics for emergency preparedness training and exercises that advance collaboration across sectors and jurisdictions, including:
 - Training that covers the common purposes and complementary roles of different sectors, as well as differences in their priorities and approaches
 - Training and exercises that transcend current COOP planning and specifically address the expectations each sector's plans specify for the others
 - Training on foundational topics —such as principles of risk factors for, modes of transmission of, and strategies for preventing infectious diseases (e.g., "Infectious Diseases 101") for law enforcement, corrections, and court officials to increase their understanding of the rationale underlying approaches for

protecting themselves and others during infectious disease outbreaks through the use of science- and law-based protective measures such as isolation and quarantine

 Training and exercises on joint, multi-sectoral investigations of bioterrorism (e.g., "forensic epidemiology" training) and other problems potentially requiring coordinated and simultaneous efforts by public health and law enforcement.

Cross-Sector Coordination Example

Course Objectives for CDC "Forensic Epidemiology" Training Course on Joint Public Health and Law Enforcement Investigations of Bioterrorism

Criminal and Epidemiological Investigative Methods

- Demonstrate an understanding of the similarities and differences in public health and law enforcement investigative goals and methods
- Show an understanding of crime scene procedures
- Describe specimen collection and establishment of chain of custody of evidence
- Demonstrate an understanding of environmental testing
- Understand the inclusion of "intentionality" in the epidemiologic differential diagnosis and investigation

Operations and Procedures

- Demonstrate an understanding of controlling laws and sources of authorities for actions
- Demonstrate an understanding of legal issues surrounding bioterrorism
- Determine jurisdictional lead responsibilities
- Identify additional resources to call and when to call
- Recognize when to involve the other discipline after the problem is acknowledged
- Coordinate public health and law enforcement during responses and investigations
- Coordinate local, state, and federal resources
- Describe on-scene control measures and interventions

Communications

- Communicate and share information between law enforcement and public health
- Differentiate between treatment of information (e.g., privacy, confidentiality, public disclosure)
- Describe media relations and risk communication

Source: Goodman RA, Munson JW, Dammers K et al. Forensic epidemiology: law at the intersection of public health and criminal investigations. *Journal of Law, Medicine & Ethics* 31(2003):684-700.

For more information about the Forensic Epidemiology training course, please visit http://www2.cdc.gov/phlp/

Action Steps — "Cyclical" Curriculum

The Workgroup urged that training be offered frequently and consistently to ensure permanent mechanisms for sustaining competencies (and avoiding the phenomenon of "one-time events"), and that incentives be provided by organizations to individuals in each sector as a means for increasing participation in training and exercises. Workgroup members described a "cyclical" training model that places education, through training and exercises, within the broader context of sectoral/agency roles and responsibilities. The elements of this model —which apply equally for preparedness for intentional (e.g., bioterrorist) or natural (e.g., an influenza pandemic or other infectious disease threat) events —require agencies, organizations, and multi-sector steering groups to:

- Identify players, their roles and responsibilities, and where roles merge or otherwise intersect.
- Identify the set of skills and competencies required, including familiarity
 with existing plans and policies, and legal authorities for various
 actions.
- Develop a curriculum of training and exercises that encompasses the requirements for competencies.
- Develop and conduct specific joint training and exercises.
- Conduct after-action assessments of joint training and exercises to determine strengths and limitations, and use this information for modifying the curriculum and future delivery.

III. Conclusion

It is the Workgroup's hope that this framework and set of opportunities for action will spark conversations, plans and concrete actions among public health, law enforcement, the judiciary, and corrections —and that these efforts will traverse and erode the boundaries separating four sectors whose interests in the public's health and safety are both shared and profound.

Appendix A: Acronyms

BJA – Bureau of Justice Assistance (at DOJ)

CDC - Centers for Disease Control and Prevention

COOP - Continuity of Operations

COTPER – Coordinating Office for Terrorism Preparedness and Emergency Response (at CDC)

DOJ - Department of Justice

EMAC – Emergency Management Assistance Compact

HIPAA – Health Insurance Portability and Accountability Act

HSEEP - Homeland Security Exercise and Evaluation Program

ICS – Incident Command System

LRN – Laboratory Response Network (for Biological and Chemical Terrorism)

MAA – Mutual Aid Agreements

MRSA – methicillin-resistant Staphylococcus aureus

NIMS - National Incident Management System

PHLP – Public Health Law Program (at CDC)

SARS – Severe Acute Respiratory Syndrome

Appendix B: Workgroup Members

Please note that representatives of the organizations listed below participated in development of the Workgroup materials. The language and content of the materials do not represent the official policy, endorsement, or views of these organizations.

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Appendix D: Examples of Joint Investigation Topics/Events, 1975-2003

Examples of Investigations Involving Both Law Enforcement and Public Health, 1975-2003			
Year	Disease/Injury- causing Agent	Scope of Problem	Outcome
1975	Pancuronium bromide	51 episodes of cardiac arrest among 35 patients during a 6-week period in a teaching hospital	Two nurses indicted for murder, attempted murder, conspiracy to commit murder
1980-81	Undetermined	Over a 15-month period, 81% of deaths at a hospital occurred during evening shift	Strong association between infant deaths and duty times of a particular nurse. Nurse indicted and convicted on charge of injuring a patient by overdose injections of unprescribed drug
1984	Salmonella typhimurium	751 people with cases of <i>Salmonella</i> gastroenteritis, but no single common food item or mechanism of contamination was found	Two people were indicted and pleaded guilty to conspiring to tamper with consumer products by poisoning food and pleaded guilty
1996	Shigella dysenteriae type 2	12 lab workers who ate pastries in a break room became ill with rarely identified organism	Lab worker indicted and charged with first- degree felony of tampering with consumer product
2003	Nicotine	92 people ill from ground beef contaminated with nicotine	Supermarket employee accused of poisoning meat with insecticide containing nicotine

Source: Goodman RA, Munson JW, Dammers K et al. Forensic epidemiology: law at the intersection of public health and criminal investigations. *Journal of Law, Medicine & Ethics* 31(2003):684-700.

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