

# **Mutual Aid and Mutual Assistance for Public Health Emergency Planning in California**

**White Paper  
2011**



**Contamination Warning  
System Demonstration  
Pilot Project**



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## Introduction

In 2009, the U.S. Environmental Protection Agency awarded the San Francisco Public Utilities Commission (SFPUC) a three-year grant to evaluate the effectiveness of contamination warning systems for community drinking water distribution systems. The project focused on six technical areas: on-line water quality monitoring, sampling and analysis, enhanced security monitoring, consumer complaint surveillance, public health surveillance, and consequence management planning. This white paper is a product of the public health surveillance component, realized by the San Francisco Department of Public Health, which included an analysis to assess syndromic surveillance alarm thresholds that might enhance waterborne disease detection, the establishment of partnerships with hospitals in San Francisco to improve case finding in the event of a contamination incident or other outbreak, and the establishment of regional collaboration for emergency response coordination and planning.

Mutual assistance between local jurisdictions, occurring through a formal agreement or, more likely, in the absence of one, is fundamental to public health emergency response. This document was developed to gain a better understanding on how mutual aid/assistance agreements can be and are applied to public health emergency preparedness in California. The California Public Health Mutual Aid Survey (see Appendix A) was undertaken to characterize the extent to which mutual assistance agreements have been adopted by local jurisdictions within California and to identify example agreements upon which further work can be based.

### I. What is Mutual Aid?

A mutual aid agreement is generally defined as “an agreement in which two or more parties agree to furnish resources and facilities and to render services to each and every other party of the agreement to prevent and combat any type of disaster or emergency.” (CEMSA, 2002). In California the phrase is typically used to refer to the California Disaster and Civil Defense Master Mutual Aid Agreement (Master Mutual Aid Agreement) and similarly broad agreements encompassing State of California and its political subdivisions in which all parties agree to provide undefined resources during emergencies. Mutual Aid plans typically do not include reimbursement for provided resources and participation by signatories is ultimately voluntary and dependent upon resource availability.

The Master Mutual Aid Agreement calls for the establishment of mutual assistance agreements between public and private sector agencies and organizations. Mutual assistance agreements include a variety of agreements, memoranda or contracts which may be negotiated between one or more entities for sharing resources on a day-to-day basis or for emergency response. Often mutual assistance agreements are developed to fulfill specific, anticipated needs and include terms for reimbursement, and resource delivery and return logistics. Because the needs fulfilled with mutual assistance agreements have been scoped and sources identified in advance of an event, resource procurement through a mutual assistance agreement is likely more efficient than through the mutual aid system. Furthermore, not all resources needed during an emergency may be public resources readily available through the mutual aid system; many resources required to respond to a public health events are held by private entities such as hospitals.

Four types of mutual assistance agreements prevail:

- (1) *Local mutual assistance agreements* are often structured as memoranda of understanding and may involve jurisdictional agencies, non-governmental organizations such as the Red Cross and public and private entities such as health care facilities and vendors.

- (2) *Local automatic aid agreements* are those in which parties agree that resources will be provided by the closest available source. This type of assistance is usually provided quickly and for short duration.
- (3) *Local assistance by hire agreements* are used to delineate terms for purchasing equipment and contracting personnel from private providers. Agencies must ensure that private resource providers have not completed similar agreements with other partners which are likely to be invoked simultaneously. Agreements may describe the circumstances, conditions, limitations and other defining factors, including provisions for the reimbursement of costs incurred, related to the provision of assistance during and emergency.
- (4) *Cooperative assistance agreements* are used by local governments and private entities to delineate the conditions under which resources will be cooperatively shared during an emergency. (CDPH, 2010)

## II. The California Emergency Services Act

The California Emergency Services Act (CESA) authorizes the provision of mutual aid by the state government, its departments and agencies and all political subdivisions. CESA established the Disaster Council<sup>1</sup> and authorizes the development of six mutual aid regions and three administrative regions by the council to facilitate the coordination of mutual aid. (§ 8600) (Figure 1)

CESA covers a wide range of topics including how an emergency is declared, how mutual aid is activated, reimbursements for costs associated with providing mutual aid, and liability of those agencies or persons providing mutual aid. Some of the more important mutual aid topics for local jurisdictions are summarized below.

- Activation without a declaration of state of emergency. In the absence of a state of war emergency, a state of emergency, or local emergency, CESA permits California state agencies and political subdivisions to exercise mutual aid powers which are in accordance with the Master Mutual Aid Agreement and local ordinances, resolutions, agreements or plans. (§ 8617)
- Mutual aid during local emergencies. A local emergency can be declared by the governing body of a city, county, or city and county, or by an official designated by ordinance adopted by that governing body. (§ 8630) Given a local emergency declaration, political subdivisions, or at the discretion of the Governor, California state agencies may provide mutual aid to any affected area in accordance with local ordinances, resolutions, emergency plans, or agreements. (§ 8631 & 8632)
- Reimbursement during a state of emergency. In the event of an emergency or state of emergency, the governor may order mutual aid by political subdivisions. Those impressed jurisdictions are entitled to reimbursement from the state for equipment damaged or destroyed while being used outside of the territorial limits of the owner. (§ 8653) To receive compensation a claim must be presented to the State Board of Control. (§ 8652)<sup>2</sup>

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<sup>1</sup> As of June 29, 2011 California Assembly Bill 92 had not yet been signed by the Governor. If, and when passed this bill will eliminate the California Disaster Council and shift responsibilities to the California Emergency Management Agency. (personal communication, Tom Ahrens)

<sup>2</sup> Extraordinary costs associated with emergency measures undertaken by a local agency to save lives and to protect public health and safety in a jurisdiction proclaimed to be in a state of emergency by the Governor, may be eligible for reimbursement by the California Emergency Management Agency (Cal EMA) when the Governor has also authorized state assistance under the California Disaster Assistance Act ([Cal. Gov. Code § 8685.2](#)). Costs for work performed under interagency assistance agreements, including but not limited to contracts or cooperative agreements or assistance-for-hire agreements between local governments or

- Authority. CESA stipulates that local officials will remain in charge at any incident requiring mutual aid unless expressly declared otherwise by the parties. (§ 8618)
- Liability. The policies which routinely protect officers, agents and employees of any political subdivisions are in effect for those working in another jurisdiction as part of mutual aid, *“All of the privileges and immunities from liability; exemptions from laws, ordinances, and rules; all pension, relief, disability, workers’ compensation, and other benefits which apply to the activity of officers, agents, or employees of any political subdivision when performing their respective functions within the territorial limits of their respective political subdivisions, shall apply to them to the same degree and extent while engaged in the performance of any of their functions and duties extraterritorially under this chapter.”* (§ 8655)

Furthermore, volunteers who are enrolled with the California Emergency Management Agency or any disaster council of any political subdivision or any unregistered persons impressed into service during a state of war emergency, a state of emergency, or a local emergency are granted the same immunities (i.e. not liable for personal injury or property damage) while performing their authorized functions or duties or training for them as officers and employees of the state and its political subdivisions performing similar work. (§ 8657 (a))

Political subdivisions and their agents-- officers, employees, agents, volunteers—are not liable for personal injury or property damage sustained by any volunteer engaged in or training for emergency preparedness or relief activity. However, this does not affect their rights to receive benefits or compensation which may be specifically provided by the provisions of any federal or state statute or their rights to recover under the terms of any policy of insurance. (§ 8657 (b))

Medical professionals are specifically protected during emergencies,

*“Any physician or surgeon (whether licensed in this state or any other state), hospital, pharmacist, nurse, or dentist who renders services during any state of war emergency, a state of emergency, or a local emergency at the express or implied request of any responsible state or local official or agency shall have no liability for any injury sustained by any person by reason of such services, regardless of how or under what circumstances or by what cause such injuries are sustained; provided, however, that the immunity herein granted shall not apply in the event of a willful act or omission.”* (§ 8659)

Other states and their officers and employees are also protected in CESA,

*“No other state or its officers or employees rendering aid in this state pursuant to any interstate arrangement, agreement, or compact shall be liable on account of any act or omission in good faith on the part of such state or its officers or employees while so engaged, or on account of the maintenance or use of any equipment or supplies in connection with an emergency.”* (§ 8659)

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between local governments and state agencies, are eligible for reimbursement, but are limited to those costs of the responding entity for which an eligible applicant is legally obligated to pay. Eligible costs shall include only those reasonable costs invoiced or billed in accordance with reimbursement provisions contained in such interagency assistance agreements ([Cal. Code Regs., tit. 19, § 2910\(e\)](#)). A local agency must make application to Cal EMA for state financial assistance under CDAA within 60 days after the date of the proclamation of a local emergency ([Cal. Gov. Code § 8685.4](#)). The state share shall not exceed 75 percent of total state eligible costs unless the local agency is located within a city, county, or city and county that has adopted a local hazard mitigation plan in accordance with the [Federal Disaster Mitigation Act of 2000 \(P.L. 106-390\)](#) as part of the safety element of its general plan adopted pursuant to subdivision (g) of Section 65302. In that situation, the Legislature may provide for a state share of local costs that exceeds 75 percent of total state eligible costs ([Cal. Gov. Code § 8685.9](#)).

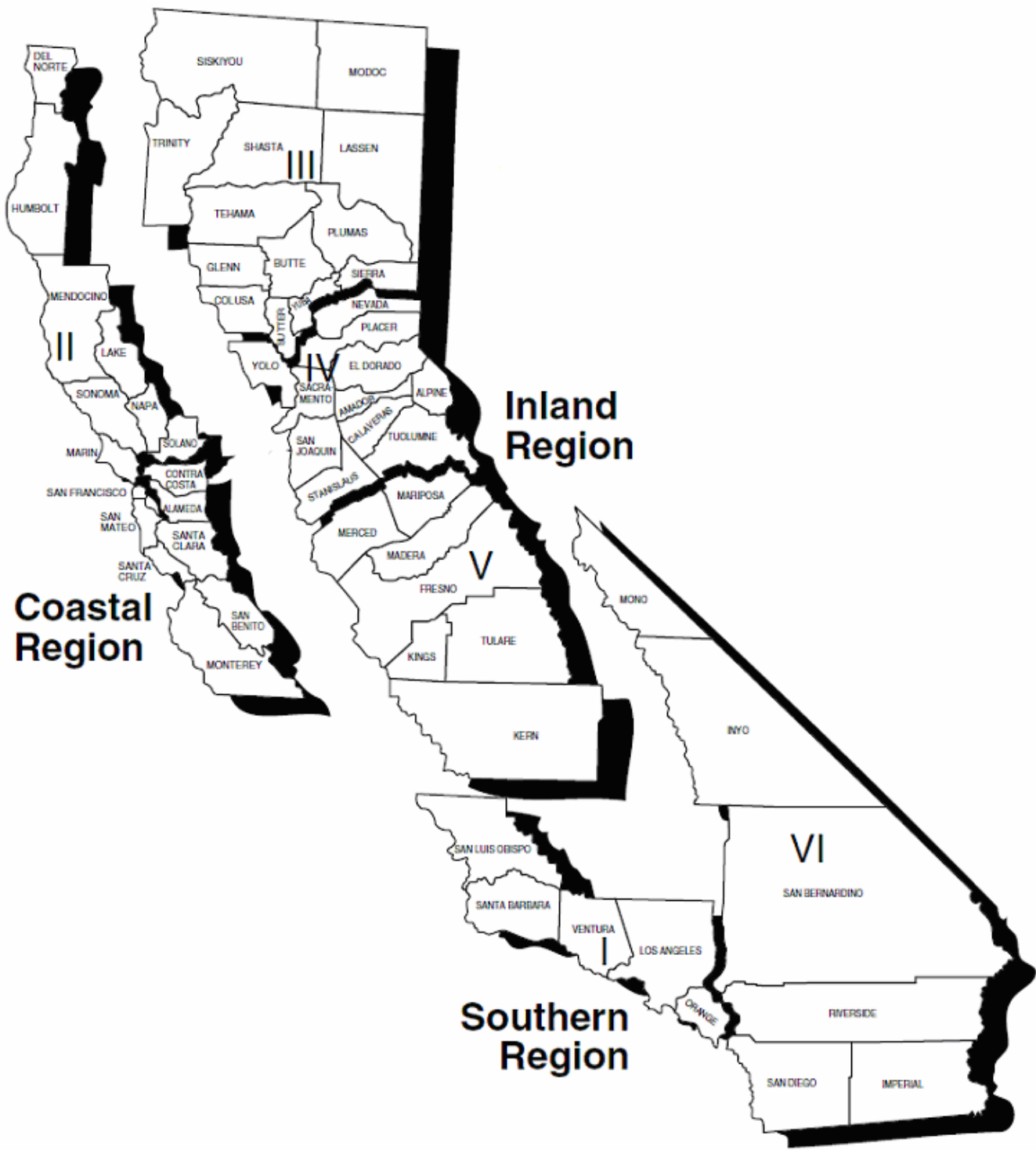


Figure 1. Mutual Aid Regions I through VI and Administrative Regions (Southern, Coastal, Inland). Map obtained from the California Emergency Management Agency [website](#).

### **III. California Public Health and Medical Emergency Operations Manual (Draft 2011)**

The California Public Health and Medical Emergency Operations Manual details procedures for communicating and requesting resources via the mutual aid system and defines roles for key participants during emergencies. A section on Disaster Financial Assistance touches upon reimbursement for the provision of mutual aid or assistance.

### **IV. Existing Mutual Aid and Mutual Assistance Agreements**

The mutual aid network in California is extensible—it may extend to additional territories as needed to procure resources. Prior to invoking mutual aid, assistance is first obtained through any existing mutual assistance agreements which an affected jurisdiction has entered into. If a resource request cannot be met through these agreements or from within the agencies of the affected jurisdiction (i.e. city or city and county), mutual aid is requested. The mutual aid system should only be invoked as a last resort; agencies should anticipate needs and develop agreements to procure those needs during emergencies to ensure efficient emergency response. By following Standardized Emergency Management System/National Incident Management System procedure (SEMS/NIMS), resources are first sought from within the operational area (i.e. county), then the mutual aid region, the state and if necessary from other states by invoking the Emergency Management Assistance Compact (EMAC) or the federal government. Interstate and federal assistance require a state of emergency declaration (Figure 2).

The following mutual aid and mutual assistance agreements in California were identified through internet searches, interviews with key persons, and an internet-administered survey of local level Emergency Medical Service agency administrators, Public Health Emergency Preparedness Grant Coordinators, and Environmental Health Directors. The methods and summary statistics from the survey are presented in Appendix A.

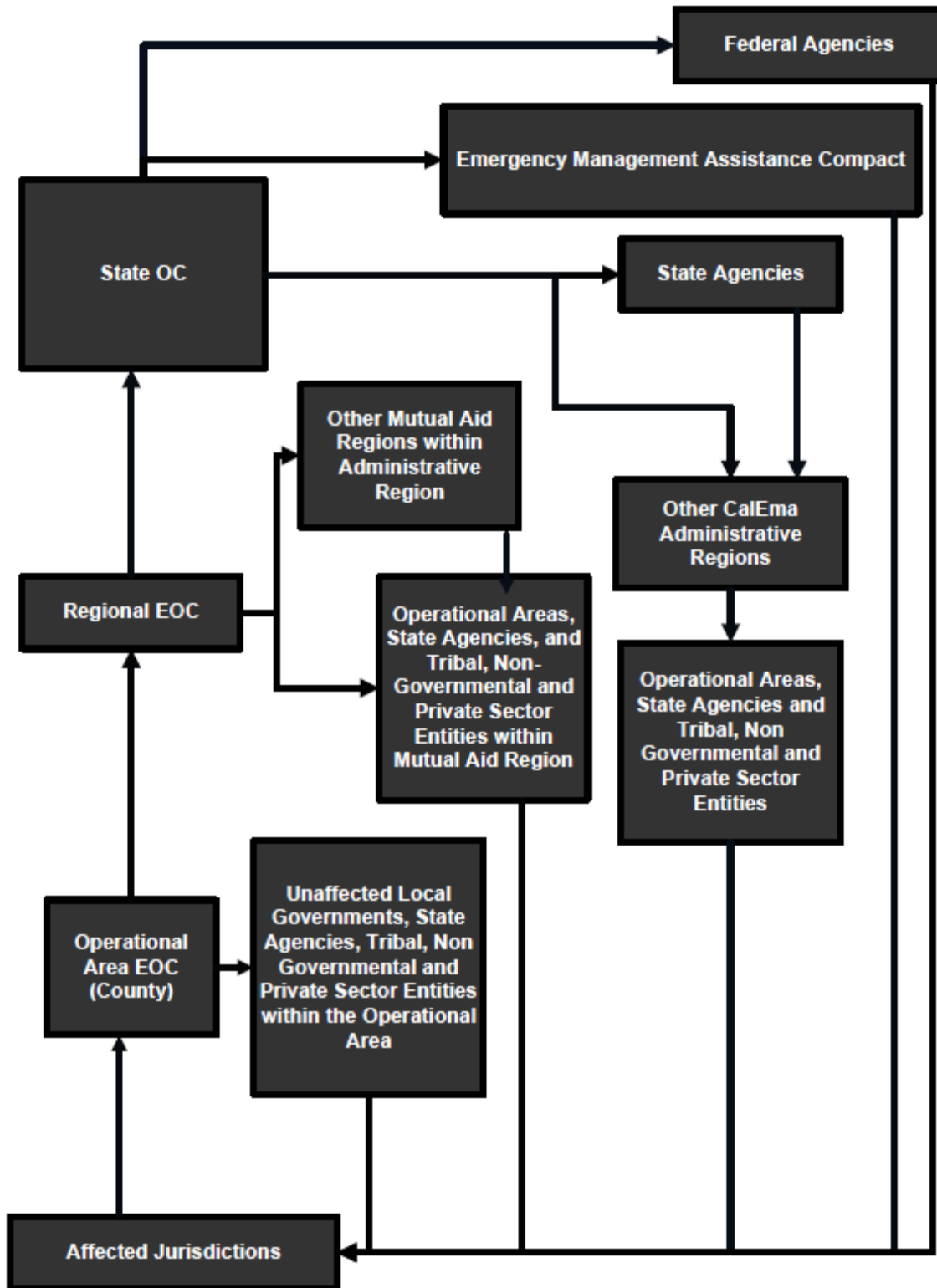
#### **IV.A Federal/Interstate Agreements**

**IV.A.1 The Interstate Civil Defense and Disaster Compact (1951)** provides civil defense mutual aid among the states in meeting any emergency or disaster from enemy attack or other causes, natural or otherwise. The requesting state extends the same powers (except arrest unless stated), duties, rights, privileges and immunities as if they were performing their duties in the home state.

**IV.A.2 The Emergency Management Assistance Compact (EMAC) (1996)** provides for mutual assistance between states in managing emergencies or disasters which are **declared as such by the governor** and in coordinated preparedness activities. Requests must be made by the state's authorized representative to the authorized representative of the furnishing state. Assistance may include but is not limited to: fire services, law enforcement, emergency medical services, transportation, communications, public works and engineering, building inspection, planning and information assistance, mass care, resource support, health and medical services, and search and rescue. EMAC provisions on licensing, liability, and reimbursement are described:

- **Licensing.** The governor has the power by means of executive order or other to declare persons with licenses, certificates or other permits in states providing emergency assistance to be considered as licensed, certified or permitted in the state requesting emergency aid. (Article V)





▪ Figure 2. Flow of resource requests and assistance during emergencies. Adapted from the California Public Health and Medical Emergencies Operations Manual. (Draft 2011)

Liability. Any state providing emergency assistance and its officers or employees cannot be held liable for any act or omission while acting in good faith. (Article VI)

▪ Reimbursement. Under EMAC, the state receiving emergency aid must reimburse the providing state for costs associated with providing aid. States may donate resources without charge or design agreements which allocate costs differently. (Article IX)

### **Use of EMAC in 2005 Hurricane Responses**

During the 2005 responses to hurricanes Katrina and Rita, almost 66,000 personnel were deployed under EMACS including 1,300 search and rescue personnel from 16 states, 2,000 health care personnel from 28 states, 3,000 fire and hazardous materials personnel from 28 states, 61 public works personnel from 5 states, 20 engineers from nine states, 6,880 law enforcement personnel from 35 states, 112 animal rescue personnel from 4 states, over 5,400 emergency management personnel from 38 states, and 46,503 national guard personnel from 47 states. (Waugh, 2007) The largest asset provided by EMAC during hurricanes Katrina and Rita was skilled personnel. (Kapucu et al, 2009)

A number of failures contributed to what is widely known as a slow and inadequate response. These include a lack of communication, no working knowledge of the EMAC and processes for requesting assistance, and the inability to identify and translate needs into resource requests.

Throughout the affected areas in Louisiana, Alabama and Mississippi massive destruction meant that in many cases local emergency response and management capacities no longer existed; where management offices survived, personnel were often without the necessary tools to communicate with other agencies or to assist victims.

Whereas Mississippi and Alabama established control centers on-site and were better able to identify and communicate what the local needs were, Louisiana did not, resulting in very poor communications between emergency agencies, and local and state governments. This lack of situational awareness in Louisiana allowed for exaggerated reports of violence and the subsequent further delay of response personnel deployment.

The Louisiana response also suffered from a lack of knowledge by officials on how to request resources through EMACS, ICS and NIMS and an absence of professional relationships between state and local agencies. Louisiana did not have a statewide mutual aid network in place. No inventories of capabilities or resources were kept and standardized resource typing protocol was mostly absent leading to requests for assistance which were too general and confusing. Working out assistance logistics such as costing out requests, dealing with state legal and operating protocols and reconciling actual and negotiated costs were proven to be very difficult to manage during the response. However, with the assistance of Florida's governor who had been heavily involved in EMAC development, Mississippi was better able to work within the EMAC system. Mississippi officials anticipated the response needs and made an early disaster declaration which enabled them to have EMAC teams in place prior to the event. Throughout the region deployment orders came slowly as governors waited to make sure all response personnel were mobilized under EMAC assuring eligibility for reimbursement and legal liability waivers.

The response to the devastation caused by hurricanes Katrina and Rita may have additionally been affected by a number of other factors. Due to foreign deployments, the number of National Guard troops available in affected areas was reduced. Short, 14 day deployments of response personnel, which limit fatigue on the deployed person, required repeated introductory attention when agency personnel were ill

equipped to give it and the shortage of man power was exacerbated by these required short stints. Furthermore, responders themselves were often victims and lacked food, water and shelter.

## **IV.B Statewide Agreements**

**IV.B.1 [The California Disaster and Civil Defense Master Mutual Aid Agreement \(1950 & 1970\)](#)** covers the state of California, departments and agencies, political subdivisions, municipal corporations and other public agencies of the State of California. In all cases of local peril or emergency and states of extreme emergency, all parties agree to provide services and facilities including fire, police, medical and health, communication, and transportation to cope with the rescue, relief, evacuation, rehabilitation, and reconstruction voluntarily in the event of any disaster such as flood, fire, earthquake, pestilence, war, sabotage, and riot. Signatory jurisdictions agree to **voluntarily** furnish services or goods to the fullest extent possible without depleting the resources of the providing party sufficiently so that their own needs can not be met.

The Master Mutual Aid Agreement does not specify how mutual aid is to be furnished, reimbursement by the receiving party, or liability and instead calls for the development and adoption of cooperative agreements for the interchange of mutual aid on a local, countywide, regional, statewide, and interstate basis. Details on how to formalize mutual aid plans are included. All jurisdictions are called to develop resource mobilization plans to cope with any type of disaster.

**IV.B.2 [The California Water/Wastewater Agency Response Network \(CalWARN\)](#)** developed a mutual aid agreement and resource materials for water and waste water utilities. Signatory agencies may request resources directly from another utility without the declaration of an emergency. Any member can directly request assistance from another and activation may occur in anticipation of an event (i.e. severe storms) to ensure a timely response. Upon activation, the CalWARN Steering Committee must be notified.

At the time of the request the terms of deployment are set. The Agreements includes the terms of reimbursement and a release of liability for services provided. Response times and the amenities to be provided are not included. CalWARN maintains a database of resources and contacts for participating utilities. The [AWWA Resource Typing Manual](#) may be used to determine resource and personnel needs to be requested.

**IV.B.3 [The Emergency Managers Mutual Aid Plan \(EMMA\) \(1997\)](#)** establishes a process for the provision of emergency management personnel to affected California jurisdictions during emergencies. All requests for management personnel must be routed through the operational area which will act as the coordination point between counties, cities, and districts in the operational emergency service region.

EMMA terms include reimbursement for mutual aid given a state of emergency declaration and the protection of emergency managers from liability claims. EMMA also outlines required qualifications for emergency managers and how to request assistance.

**IV.B.4 [The Law Enforcement Mutual Aid Plan \(2009\)](#)** developed by the California Emergency Management Agency describes procedures for requesting law enforcement mutual aid at the local, state and federal levels. **[The Coroners Mutual Aid Plan \(2006\)](#)**, a companion plan to the law enforcement mutual aid plan, delineates procedures for coroners' responses to events with mass fatalities.

**IV.B.5 The California Fire Service and Rescue Emergency Mutual Aid Plan (2002)** provides for the mobilization, organization and operation of fire and rescue resources in California. (See Appendix B)

#### **IV.C Local and Regional Agreements**

See Appendices C through G for local and regional agreements:

Appendix C: [The San Francisco Infectious Disease Joint Investigation Memorandum of Understanding \(2010\)](#).

Appendix D: [Memorandum of Understanding between Glenn County Health Services Agency and Glenn Medical Center](#)

Appendix E: [Personnel Services Agreement Between County of Shasta Through its Health and Human Services Agency, Public Health Department and County of Glen](#)

Appendix F: [Stanislaus County Healthcare Coalition Mutual Aid Memorandum of Understanding for Healthcare facilities \(2007\)](#)

Appendix G: [Inter-Regional Cooperative Agreement for Emergency Medical and Health Disaster Assistance](#)

## **V. Conclusions and Recommendations**

Mutual Aid agreements are clearly useful and our survey indicated that jurisdictions are using these tools in preparing for public health emergencies. The survey (Appendix A) revealed a wide interest in state-developed, standardized agreements or a standardized public health mutual aid process similar to that developed for fire and law enforcement. A standardized system could provide a uniform process for requesting and providing aid and template agreements could reduce the costs of developing local agreements. Two explicit needs were identified:

- (1) Direct agreements between or among counties would expedite mutual aid especially when in response to a planned need rather than an immediate need.
- (2) A standardized epidemiology response plan would ensure that all participating counties could follow the same response framework.

## **VI. Additional Mutual Aid/Assistance Resources**

- (1) The California Department of Public Health Standards and Guidelines for Healthcare Surge During Emergencies, [Foundational Knowledge](#) provides an excellent overview of statutes pertaining to emergency response and details the steps for responding to and making mutual aid requests.<sup>3</sup>
- (2) The California Emergency Management Agency [website](#) includes a multitude of resources on mutual aid and general disaster preparedness.<sup>4</sup>

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<sup>3</sup> [http://bepreparedcalifornia.ca.gov/NR/rdonlyres/52B36F50-E74A-441E-9638-AE1FDD19124F/0/FoundationalKnowledge\\_FINAL.pdf](http://bepreparedcalifornia.ca.gov/NR/rdonlyres/52B36F50-E74A-441E-9638-AE1FDD19124F/0/FoundationalKnowledge_FINAL.pdf)

<sup>4</sup> [http://cms.calema.ca.gov/prep\\_plans\\_and\\_publications.aspx](http://cms.calema.ca.gov/prep_plans_and_publications.aspx)

- (3) Procedures for requesting aid through the California Mutual Aid System is outline in the [California Public Health and Medical Emergency Operations Manual](#).<sup>5</sup>

## VII. Acknowledgements

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## VIII. References

California Department of Public Health Standards and Guidelines for Healthcare Surge During Emergencies: Foundational Knowledge. 2008. [http://bepreparedcalifornia.ca.gov/NR/rdonlyres/52B36F50-E74A-441E-9638-AE1FDD19124F/0/FoundationalKnowledge\\_FINAL.pdf](http://bepreparedcalifornia.ca.gov/NR/rdonlyres/52B36F50-E74A-441E-9638-AE1FDD19124F/0/FoundationalKnowledge_FINAL.pdf). California Department of Public Health. Accessed June 2011.

**California Disaster and Civil Defense Master Mutual Aid Agreement.** 1950.

[https://encrypted.google.com/url?sa=t&source=web&cd=1&ved=0CBwQFjAA&url=http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/California%20Master%20Mutual%20Aid%20Agreement/\\$file/CAMasterMutAid.pdf&ei=06DRTPHNoqisQPXxOyKCQ&usg=AFQ](https://encrypted.google.com/url?sa=t&source=web&cd=1&ved=0CBwQFjAA&url=http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/California%20Master%20Mutual%20Aid%20Agreement/$file/CAMasterMutAid.pdf&ei=06DRTPHNoqisQPXxOyKCQ&usg=AFQ). California Emergency Management Agency. Accessed June 2011.

California Emergency Management Agency. [http://cms.calema.ca.gov/prep\\_plans\\_and\\_publications.aspx](http://cms.calema.ca.gov/prep_plans_and_publications.aspx). Accessed June 2011.

**(CESA) California Emergency Services Act.** 2006.

[https://encrypted.google.com/url?sa=t&source=web&cd=1&ved=0CBgQFjAA&url=http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/CALifornia%20Emergency%20Services%20Act/\\$file/ESA-all8-06-final.pdf&ei=zbLRTfSHLJOWsgPD6eSKCQ&usg=AFQjCNGaX](https://encrypted.google.com/url?sa=t&source=web&cd=1&ved=0CBgQFjAA&url=http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/CALifornia%20Emergency%20Services%20Act/$file/ESA-all8-06-final.pdf&ei=zbLRTfSHLJOWsgPD6eSKCQ&usg=AFQjCNGaX). California Emergency Management Agency. Accessed June 2011.

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<sup>5</sup> [http://www.emsaac.org/attachments/article/96/Draft California Public Health and Medical EOM 12-21-2010.pdf](http://www.emsaac.org/attachments/article/96/Draft%20California%20Public%20Health%20and%20Medical%20EOM%2012-21-2010.pdf)

**(CEMSA) California Medical Mutual Aid Plan.** 2007. <http://www.emsa.ca.gov/pubs/pdf/emsa218b.pdf>. California Emergency Medical Services Authority. Accessed June 2011.

**(CDPH) California Public Health and Medical Emergency Operations Manual.** Draft 2011. [http://www.emsa.ca.gov/meetings/2011/06-22-11/08B\\_EOMAttach.pdf](http://www.emsa.ca.gov/meetings/2011/06-22-11/08B_EOMAttach.pdf). California Department of Public Health. Accessed June 2011.

**(CalWARN) California Water/Wastewater Agency Response Network.** <http://www.calwarn.org/>. Accessed June 2011.

**Coroners Mutual Aid Plan. 2006.**

<https://encrypted.google.com/url?sa=t&source=web&cd=1&ved=0CBgQFjAA&url=http://www.oes.ca.gov/WebPage/oeswebsite.nsf/Content/A4C9B4F4332EB427882576C0006FC32E?OpenDocument&ei=WaPRTb7KL4uosAOxyPigCQ&usg=AFQjCNHjsBzNCsXaxdbuZB8GyC5PAhPNtg>. California Emergency Management Agency. Accessed June 2011.

**(EMAC) Emergency Management Assistance Compact.** 1996. <http://www.emacweb.org/>. Accessed June 2011.

**(EMMA) Emergency Managers Mutual Aid Plan.** 1997.

[https://encrypted.google.com/url?sa=t&source=web&cd=1&ved=0CB8QFjAA&url=http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/Emergency%20Managers%20Mutual%20Aid%20Plan/\\$file/Emma.pdf&ei=5KLRTbmEE4TSsAPfkLWxCQ&usg=AFQjCNGIQCwyGK7\\_W](https://encrypted.google.com/url?sa=t&source=web&cd=1&ved=0CB8QFjAA&url=http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/Emergency%20Managers%20Mutual%20Aid%20Plan/$file/Emma.pdf&ei=5KLRTbmEE4TSsAPfkLWxCQ&usg=AFQjCNGIQCwyGK7_W). California Emergency Management Agency. Accessed June 2011.

**Interstate Civil Defense and Disaster Compact.** 1951.

[https://encrypted.google.com/url?sa=t&source=web&cd=1&ved=0CBgQFjAA&url=http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/California%20Emergency%20Services%20Act/\\$file/ESA-all8-06-final.pdf&ei=zbLRTfSHLJOWsgPD6eSKCQ&usg=AFQjCNGaX](https://encrypted.google.com/url?sa=t&source=web&cd=1&ved=0CBgQFjAA&url=http://www.oes.ca.gov/Operational/OESHome.nsf/PDF/California%20Emergency%20Services%20Act/$file/ESA-all8-06-final.pdf&ei=zbLRTfSHLJOWsgPD6eSKCQ&usg=AFQjCNGaX). California Emergency Management Agency. Accessed June 2011.

Kapucu, N. et al, 2009. Interstate Partnerships in Emergency Management: Emergency Management Assistance Compact in Response to Catastrophic Disasters. *Public Administration Review*, 69:2:297. MMAA, 1950. California Disaster and Civil Defense Master Mutual Aid Agreement.

**Law Enforcement Mutual Aid Plan. 2009.** [http://www.oes.ca.gov/WebPage/oeswebsite.nsf/PDF/Law Enforcement Mutual Aid Plan/\\$file/BlueBook\\_Revision dy.2009.pdf](http://www.oes.ca.gov/WebPage/oeswebsite.nsf/PDF/Law%20Enforcement%20Mutual%20Aid%20Plan/$file/BlueBook_Revision_dy.2009.pdf). California Emergency Management Agency. Accessed June 2011.

Water and Wastewater Mutual Aid and Assistance Resource Typing Manual. 2008. <http://www.awwa.org/files/WARN/AWWA%20Resource%20Typing%20Manual%20Final%20-%20April%202,%202008.pdf>. American Water Works Association. Accessed June 2011.

Waugh, W.L., 2007. EMAC, Katrina, and the Governors of Louisiana and Mississippi. *Public Administration Review*, 67:107.

## Appendix A: [The California Public Health Mutual Aid Survey](#)

In an effort to characterize the extent to which mutual assistance agreements have been adopted by local jurisdictions within California and to identify example agreements, we surveyed Emergency Medical Service Agency (EMS) Administrators, Public Health Emergency Preparedness Grant (PHEP) Coordinators, and Environmental Health (EH) Directors from all 58 counties and the cities of Berkeley, Pasadena, Long Beach and Vernon City where these positions existed in each.<sup>3</sup>

Thirty-five percent of the 31 EMS agency administrators, 24 representing single counties and seven representing the remaining 34 counties, completed the survey (Table 1). Thirty-six percent of the 67 PHEP Coordinators, which included two each for the City of Berkeley, and San Diego and Mono Counties, and three each for Mendocino, Inyo and Riverside Counties, completed surveys. Of the 62 Environmental Health Directors invited including directors for the cities of Berkeley, Pasadena, Long Beach and Vernon City, 14 (23%) completed surveys. One PHEP coordinator was also listed as the county EMS administrator and is included as an EMS administrator.<sup>4</sup>

In total, 49 surveys were completed. Sixty-nine percent of California counties (40/58) and one city (25%) were represented with at least one survey response (Table 1). Two EMS administrators representing five and three jurisdictions each completed surveys.

	<b>Response Rate</b>
EMS Agency Administrators	35% (11/31)
PHEP Coordinators	36% (24/67)
Environmental Health Directors	23% (14/62)
Counties Represented	69% (40/58)
Cities Represented	25% (1/4)

Twenty-eight survey respondents (57%) reported providing and or receiving public health resources to or from another local California health department or agency (Table 2).<sup>5,6</sup> Of these, 14 (50%) reported receiving aid and 16 (57%) reported providing aid. Less than half of these, 39%, reported that the providing jurisdiction was reimbursed for the aid. Eleven respondents reported sharing ambulance services with another jurisdiction making it the most frequently shared resource (Table 3). Also mentioned were nurses and other medical professionals, management, hazardous materials and emergency management staff, general supplies such as cots and respirators, laboratory services, immunization supplies and personnel, and epidemiologic training and analysts. Obstacles to receiving or providing aid included a lack of or late reimbursement by the receiving jurisdiction or, where applicable, a state or federal agency, delays in providing aid resultant from determining the delivery and support logistics at the time of need, and difficulties in retrieving durable resources following response conclusion.

	<b>Responses</b>	<b># Jurisdictions Represented</b>
<b>Total</b>	49	40 counties, 1 city
<b>Provided and/or Received Aid</b>	57% (28/49)	27 counties
<b>Provided Aid</b>	57% (16/28)	19 counties
<b>Received Aid</b>	50% (14/28)	14 counties
<b>Reimbursed</b>	39% (11/28)	13 counties
<b>With Agreement</b>	32% (9/28)	13 counties
<b>Have MOU(s)</b>	39% (19/49)	22 counties
<b>Used for Aid</b>	47% (9/19)	13 counties

Excludes statewide agreements.  
Providing and receiving counts include two events which were noted by both the providing and receiving jurisdictions.

<sup>3</sup> The survey questions are available at:

[http://www.sfphes.org/water/mutual\\_aid\\_white\\_paper/Appendix\\_A\\_California\\_Mutual\\_Aid\\_Survey\\_Questions.pdf](http://www.sfphes.org/water/mutual_aid_white_paper/Appendix_A_California_Mutual_Aid_Survey_Questions.pdf)

<sup>4</sup> In some instances invitees designated other staff to complete the survey.

<sup>5</sup> San Francisco, Tuolumne, and Los Angeles counties each had two respondents both responding “yes” to providing or requesting Aid. Alpine, Amador, Calaveras, Mariposa, Stanislaus are all represented by one response.

<sup>6</sup> An option to provide information if both providing and receiving aid was not included in the survey and only those who explicitly described both events are included in both counts.

Nineteen respondents reported that their jurisdiction had developed memoranda of understanding with another California county or city for the sharing of public health resources during an emergency. Nine of these reported employing the memoranda for public health resource sharing. Memoranda for sharing epidemiologic services were most frequently reported. Agreements for sharing laboratory services, ambulances, trauma and other medical services, warehouse space, hazmat response resources, and EMS agency personnel have also been developed.

Nine respondents (18%) reported that their jurisdictions are currently working on or planning to develop memoranda with other local California health departments or agencies. Memoranda are being developed for sharing ambulances and other medical assets, hazardous materials and environmental health response supplies and personnel, regional warehouses, mass vaccine support, and [CHEMPACK](#) and other strategic national supplies.

Respondents who reported invoking memoranda of understanding to provide or receive public health resources noted cited difficulties in receiving aid due to one or more agencies not following procedure, swearing in persons as disaster workers, determining reimbursement, and overly onerous requesting procedure. Respondents expressed that the creation of direct agreements between or among counties would expedite mutual aid especially when in response to a planned need rather than an immediate need. It was also suggested that a standardized epidemiology response plan be created so that all participating counties could follow the same response framework.

Many survey respondents noted that they believed agreements orchestrated at the local, regional and or state level to be necessary. Many reported an interest in state-developed, standardized agreements or a standardized public health mutual aid process similar to that developed for fire and law enforcement. A standardized system could provide a uniform process for requesting and providing aid and template agreements could reduce the costs of developing local agreements.

Impediments to agreement development included a lack of available funding for negotiations, a reliance on personal/professional relationships for obtaining resources, a belief that nearby jurisdictions would not actually be able to assist during a true disaster regardless of the presence of an agreement, and a belief that agreements were not necessary as emergency preparedness grants require sharing of resources obtained with grant monies.

<b>Table 3. Public Health Resources Requested and Included in Current and Planned Memoranda of Understanding</b>			
	<b>Aid Requested/ Provided</b>	<b>Agreements in Place</b>	<b>Agreements Planned</b>
	# Responses (Counties Represented)		
<b>Ambulance Services</b>	11 (15)	2 (6)	1 (1)
<b>Nurses and Other Medical Professionals</b>	6 (9)	8 (7)	0
<b>Emergency Management Staff</b>	4 (4)	1 (1)	0
<b>Hazardous materials response</b>	1 (1)	1 (1)	1 (1)
<b>General or strategic national supplies (Cots and respirators)</b>	4 (4)	0	2 (2)
<b>Laboratory services</b>	3 (3)	2 (2)	0
<b>Immunizations supplies and support</b>	3 (3)	0	1 (1)
<b>Epidemiologic Training and Analysts</b>	2 (2)	5 (5)	0
<b>Warehouse Space</b>	0	2 (2)	1 (1)



**Appendix B: [The California Fire Service and Rescue Emergency Mutual Aid Plan \(2002\)](#)**

[http://www.sfpbes.org/water/mutual\\_aid\\_white\\_paper/Appendix\\_B\\_The\\_California\\_Fire\\_Service\\_and\\_Rescue\\_Emergency\\_Mutual\\_Aid\\_Plan\\_2002.pdf](http://www.sfpbes.org/water/mutual_aid_white_paper/Appendix_B_The_California_Fire_Service_and_Rescue_Emergency_Mutual_Aid_Plan_2002.pdf)

**Appendix C: [The San Francisco Infectious Disease Joint Investigation Memorandum of Understanding \(2010\)](#)**

[http://www.sfpbes.org/water/mutual\\_aid\\_white\\_paper/Appendix\\_C\\_The\\_San\\_Francisco\\_Infectious\\_Disease\\_Joint\\_Investigation\\_Memorandum\\_of\\_Understanding\\_2010.pdf](http://www.sfpbes.org/water/mutual_aid_white_paper/Appendix_C_The_San_Francisco_Infectious_Disease_Joint_Investigation_Memorandum_of_Understanding_2010.pdf)

**Appendix D: [Memorandum of Understanding Between Glenn County Health Services Agency and Glenn Medical Center](#)**

[http://www.sfpbes.org/water/mutual\\_aid\\_white\\_paper/Appendix\\_D\\_Memorandum\\_of\\_Understanding\\_Between\\_Glenn\\_County\\_Health\\_Services\\_Agency\\_and\\_Glenn\\_Medical\\_Center.pdf](http://www.sfpbes.org/water/mutual_aid_white_paper/Appendix_D_Memorandum_of_Understanding_Between_Glenn_County_Health_Services_Agency_and_Glenn_Medical_Center.pdf)

**Appendix E: [Personnel Services Agreement Between County of Shasta Through its Health and Human Services Agency, Public Health Department and County of Glenn](#)**

[http://www.sfpbes.org/water/mutual\\_aid\\_white\\_paper/Appendix\\_E\\_Personnel\\_Services\\_Agreement\\_Between\\_County\\_of\\_Shasta\\_Through\\_its\\_Health\\_and\\_Human\\_Services\\_Agency\\_Public\\_Health.pdf](http://www.sfpbes.org/water/mutual_aid_white_paper/Appendix_E_Personnel_Services_Agreement_Between_County_of_Shasta_Through_its_Health_and_Human_Services_Agency_Public_Health.pdf)

**Appendix F: [Stanislaus County Healthcare Coalition Mutual Aid Memorandum of Understanding for Health Care Facilities \(2007\)](#)**

[http://www.sfpbes.org/water/mutual\\_aid\\_white\\_paper/Appendix\\_F\\_Stanislaus\\_County\\_Healthcare\\_Coalition\\_Mutual\\_Aid\\_Memorandum\\_of\\_Understanding\\_for\\_Health\\_Care\\_Facilities\\_2007.pdf](http://www.sfpbes.org/water/mutual_aid_white_paper/Appendix_F_Stanislaus_County_Healthcare_Coalition_Mutual_Aid_Memorandum_of_Understanding_for_Health_Care_Facilities_2007.pdf)

**Appendix G: [Inter-Regional Cooperative Agreement for Emergency Medical and Health Disaster Assistance](#)**

[http://www.sfpbes.org/water/mutual\\_aid\\_white\\_paper/Appendix\\_G\\_Inter-Regional\\_Cooperative\\_Agreement\\_for\\_Emergency\\_Medical\\_and\\_Health\\_Disaster\\_Assistance.pdf](http://www.sfpbes.org/water/mutual_aid_white_paper/Appendix_G_Inter-Regional_Cooperative_Agreement_for_Emergency_Medical_and_Health_Disaster_Assistance.pdf)