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Partnering with the community for establishment of alternate care sites during disasters or emergencies: A staff training matrix

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PARTNERING WITH THE COMMUNITY FOR ESTABLISHMENT OF ALTERNATE CARE SITES DURING DISASTERS OR EMERGENCIES: A STAFF TRAINING MATRIX

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Executive Summary

An approach to fulfill a need for additional hospital beds during emergency and disaster situations has been establishment of alternate care sites (ACS). Kern County, California, with a population of about 856,000 and approximately 1,500 hospital beds, is at significant risk for inability to care for the medical needs of its residents in the face of a disaster or an emergency. Even the most conservative estimates of additional hospital beds requirements in a disaster or emergency would indicate the need for nine to ten ACSs accommodating up to 50 patients each in Kern County.

Recognizing the need for alternatives to manage hospital surge, the local public health department along with state and federal officials are collaborating with community partners to establish alternative sites where emergency medical facilities can be established to help deliver medical care in a catastrophe. Preparing community partners with tools to assist in establishment of ACSs is one goal in a long-term plan to assist in disaster and emergency response. While healthcare personnel will be needed in the activation and operation of an ACS, little work has been done to define what other personnel will be needed and what training would enhance staff performance of these roles. Development of an ACS staff training matrix tool was the aim of this project.

Guidance exists for organization of healthcare staff during an emergency or disaster in the form of the Hospital Incident Command System (HICS). There also are numerous training modules available providing instruction in emergency and disaster response. However, no previous reference has matched the job positions defined by HICS with the training required to fulfill the requirements of the job descriptions for each of the job positions.

The ACS Staff Training Matrix was designed to support emergency planners mustering appropriate staff for an ACS during a disaster or emergency. The ACS Staff Training Matrix was based on selection of job positions from HICS and coupling of those job positions with existing emergency and disaster training modules selected for availability, affordability, and relationship to the job descriptions for each position. Training capabilities selected for the ACS Staff Training Matrix were reviewed by subject matter experts to ensure the level of requirement (mandatory versus recommended).

The ACS Staff Training Matrix is intended to provide guidance to emergency planners and ACS partners in training of staff who might be called upon to respond to ACS activation during a disaster or emergency. The ACS Staff Training Matrix also provides capacity to list persons qualified to fill those positions based on training completed, along with contact information for each individual. Job descriptions provided through links to HICS simplify pre-event and event planning and identification of training needs. When insufficient staff is identified as a need, the ACS Staff Training Matrix can be used to define and communicate specific requirements for completion of resource requests transmitted outside the operational area using terminology and nomenclature easily recognized by other jurisdictions. Training obtained through use of the ACS Staff Training Matrix also is applicable to a wide variety of Incident Command System (ICS) and HICS job positions, leading to flexibility of staff relative to needed job assignments in the “all-hazards” approach that is encouraged in emergency planning and training efforts.

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CHAPTER I: Introduction

Although it is hoped that a disaster or emergency situation that would surge the healthcare system of an area is a rare event, national mandates for disaster preparedness demand consideration of how the additional stress on the healthcare system, or hospital surge, would be addressed.

One approach proposed to meet the need for additional hospital beds during emergency and disaster situations has been establishment of alternate care sites (ACSs). An ACS is defined by the State of California as a location typically not intended for provision of medical services that can be quickly converted to enable provision of care after a declared emergency (California Department of Public Health [CDPH], 2008). This project was developed to address a gap in disaster response identified involving training of staff to support medical personnel at ACSs.

While the training and credential requirements for medical personnel are provided by California laws and regulations, no training requirements have been defined for staff who may be called upon to support medical personnel during a disaster or emergency. Therefore, a tool was developed based on Hospital Incident Command System (HICS) job positions selected to support medical staffing at an ACS. Job descriptions provided for these positions included as part of HICS were matched to available training courses. These training courses were selected based on wide availability in various formats and from various providers as well as the cost effectiveness of the training. Training was evaluated to determine applicability to the job positions selected and if the training should be designated as mandatory for each position, recommended, or not needed. The

job positions then were coupled with mandatory and recommended training to create a matrix intended to support staffing efforts should establishment of an ACS become necessary. Most of the training selected is available online at no cost, with additional courses offered locally, by states, or by the federal government.

The ACS Staff Training Matrix, which is provided in Microsoft Excel® format, is intended to serve as guidance for training efforts for staff or volunteers who could be assembled for operation of an ACS. The matrix includes a sheet for recording of individual contact information and training completed. This combination allows emergency planners to easily identify individuals with the training and experience required to fill positions needed in support of medical personnel in staffing of ACSs. The matrix supports the training of healthcare providers, governmental entities, volunteer groups, and others who would be expected to participate in emergency activation. While the intention is to train personnel to staff an ACS in support of medical personnel, the training specified is applicable to participation in a variety of Incident Command System (ICS) and HICS job positions that could be activated in response to a variety of disasters or emergencies, anticipating and furthering the "all-hazards" approach recommended for emergency response planning and training efforts.

The project in establishing an ACS Staff Training Matrix followed a quality improvement approach modeled on the National Response Framework, the Homeland Security Exercise and Evaluation Program (HSEEP), and Plan-Do-Study-Act (PDSA) and is grounded in complexity theory. Sustainability and maintenance of the developed program is based on ongoing feedback from additional and current ACS partners. The ACS Staff Training Matrix is updated regularly based on receipt of evidence-based

innovations that have proven successful and additional training offerings applicable to the ACS Staff Training Matrix.

The specific project goals included determining what job positions defined by HICS would be applicable to ACS activation and operations and then coupling the job positions with training that would be needed by comparing training contents to the job descriptions defined by HICS. Training then was evaluated to determine if the training listings should be proposed as mandatory or as recommended based on the information provided in training essential to completion of the job duties outlined in the job descriptions. The ACS Staff Training Matrix was augmented with a form for capturing individual training records and contact information to consolidate this information in a single reference for emergency planners attempting to muster staff when facility recordkeeping offered no other method of performing this function. When emergency planners identify that insufficient staff are available for ACS activation and operation, the ACS Staff Training Matrix can be utilized to compose resource requests for communication of needs to other jurisdictions in nomenclature readily understood across multijurisdictional areas. The ACS Staff Training Matrix was designed as well to help guide training efforts for local jurisdictions with sufficiently broad application of training to provide the “all-hazards” approach desired in emergency planning.

CHAPTER II: Review of the Literature

Literature Search Strategy

A literature search was undertaken to identify evidence-based practices or in their absence best practices that would provide a foundation for development of the ACS Staff Training Matrix. Initial attempts were focused on identification of existing literature that would provide guidance for training of staff who might be called upon to fill job positions supporting ACS healthcare staff during a disaster or emergency. Quickly, it became apparent that little literature exists regarding training of individuals supporting medical staff for alternate care sites (ACSs).

Others have noted the paucity of literature related to ACS staff and training (Fierro, 2011; Jennings-Sanders, 2004; Veenema, Rains, Casey-Lockyer, Springer, & Kowal, 2015). Much of what little literature informing establishment and operation of alternate care sites (ACSs) existing is contained in government manuals. The guidelines in existing government manuals are broad and provide little in terms of specific information regarding training of staff to support an ACS. Paucity of results obtained during initial literature search necessitated an approach of searching broadly through subject matter in hopes of identifying as much relevant material as possible. As the search narrowed, alerts were set using terms employed in broader searches to preserve the potential of identifying additional results.

Searches employing Google Scholar showed reference only to the need for ACSs, offering little guidance in staffing needs for an ACS. Cumulative Index to Nursing and Allied Health Literature (CINAHL) search of “nurse staffing” and “disaster” returned 150 results. Adding “alternate care site” to the mix returned zero results. A search of

CINAHL using the phrase “alternate care site” produced 17 results, negating the need to further filter search terms. Of the 17 articles identified, only six identified subjects of interest in emergency and disaster planning for ACSs and none were related to training of staff. A search of Cochrane Reviews was negative for guidance regarding ACSs. Additional literature was found based on information provided at the work site during the first year of the project, but none provided guidance in staffing for an ACS.

Search of the Agency for Healthcare Research and Quality (AHRQ) archive revealed a Disaster Alternate Care Facility Selection Tool (Cantrill, Pons, & Bonnett, 2011). One article addressed integration of healthcare in incident command (Burkle, Loehr, Christian, and Markenson, 2007), but most of this information was general in nature and did not address the types or quantities of positions that would be needed to support medical personnel in an ACS or if so addressed only triage needs. Some articles hinted at the need for additional personnel, such as childcare specialists to tend to the needs of children of healthcare workers responding to a disaster (Buttross, 2006). In studies where staffing was addressed at all, the need for pre-event planning and resource coordination was discussed, but frameworks for staffing planning were scant if they existed at all and were mostly related to general topics such as the difficulty of achieving sufficient levels of healthcare professionals for staffing of sites (Hick, Hanfling, Burstein, DeAtley, Barbisch, Bogdan, and Cantrill, 2004). Kanter and Moran (2007) noted that national policy for emergency preparedness calls for surge capacity of 500 additional beds per million in population during a disaster or emergency. Based on the population of Kern County, this would equate to an additional 433 beds, or the equivalent of nine 50-bed ACSs. The estimates of Kanter and Moran (2007) may be conservative or based on

anticipation of a higher level of care delivered at ACSs. Even at this conservative estimate, personnel needs quickly become an exponential concern.

Cantrill et al. (2011) included staffing recommendations for ACSs as part of their study, one of the few articles providing any guidelines at all. Cantrill et al. (2011) note the paucity of staffing suggestions and research supporting these decisions but make two recommendations, one based on a triage model and one on a more sustained response. In the second model of sustained response, recommendations were made ranging between 21 and 80 staff members for a 12-hour shift in a 50-bed unit inclusive of healthcare providers. Dr. Colin Bucks estimated a staff of about 150 per 12-hour shift in a real-event application for a 52-bed facility caring for Ebola patients in Africa (Richter, 2014). Specific jobs and job descriptions were lacking, and integration into the Incident Command System (ICS) was not addressed in the study by Cantrill et al. (2011). The remainder of the 35 results obtained searching AHRQ archives with the term "alternate care site" did not produce articles with information related to the topic of staffing the site or training of staff.

Search of EBSCO Host via University of Nevada Las Vegas Libraries using the terms "nurse staffing" and "disaster" yielded no results, and review of the 100 top "near hits" provided by the search yielded reference to several articles already reviewed but failed to identify additional useful material, a factor in determining search saturation.

Search of PubMed for "disaster" and "alternate care sites" yielded seven results. Of these, one article by Chan and Burkle (2013) on search strategies in disaster management literature confirmed search strategies employed by the author. Duplication

of results provided through searching based on the additional insights contained in this article also was a factor confirming saturation.

Search of the Homeland Security Digital Library of the Naval Postgraduate School Center for Homeland Defense and Security for "alternate care site" yielded 35 results, two of which were included in previous literature review by the author. No other literature applicable to the study of staffing of an alternate care site was identified, again confirming both the paucity of the literature on the subject and approach of saturation in identification of additional applicable studies.

Following the bulk of literature searches, Google Scholar Alerts were created for:

a. "disaster, "theory," emergency OR preparedness, "planning;"

b. "disaster," "theory," "planning," "emergency OR preparedness," "alternate care site;"

c. "evidence-based, "disaster planning;"

d. "disaster preparedness training;"

e. "disaster," "emergency," "alternate care site."

Additional articles were routed to the author's e-mail from Google Scholar based on the alerts created, but none addressed staff training needs for an ACS. Following is a review of the highlights of available literature informing the current project.

Nursing in Emergency Planning

The importance of nursing in planning and implementing strategies to address possible emergency needs is a well-established tradition at Kern County Public Health Services Department (KCPHSD). Following the events of September 11, 2001, the Director of Nursing for KCPHSD collaborated with another public health nurse to form

Kern Medical Reserve Corps (KMRC). The Director of Nursing later hired a Coordinator for KMRC as the program for emergency planning continued to grow. Two other public health nurses in succession assumed responsibility for Office of Public Health Preparedness. The author transferred to the position vacated by transfer of the latter public health nurse and suggested renaming of the section to Emergency Preparedness for simplicity and to better reflect its mission. During the course of this project, the author transferred out of the Emergency Preparedness section, signaling the end to direct involvement of nursing in emergency preparedness efforts at KCPHSD. While nursing remains involved in emergency preparedness throughout KCPHSD, the long-term effects of the loss of the direct involvement of nursing in these efforts remain unknown.

The leadership role of nursing in preparing for an alternate care sites (ACS) is obvious. Planning for care at sites other than hospitals expected to provide equivalent services would be difficult without considering how nursing care would be delivered. While oversight in the form of a medical doctor would be required under California code, almost all of the medical care delivered at an ACS could be performed by or under the supervision of a registered nurse, and much care normally performed by a doctor might be delegated using appropriate protocols (California Board of Registered Nursing, 2011). In California, additional certification and training is required for Public Health Nurses, including a baccalaureate degree and additional coursework in child abuse detection and prevention (California Board of Registered Nursing, 2014). A Public Health Nurse prepared in advanced techniques of community collaboration on grant-funded projects and leadership in multidisciplinary environments is well-suited to lead this type of project

and is well-qualified to lead establishment of a continuous quality improvement project designed to serve the community in a variety of disaster or emergency situations.

Needs Assessment

A great deal of flexibility is built into CDPH specifications for alternate care sites, and floor plans and models span to accommodate up to 50 patients at a single location. While CDPH has provided for establishment of ACS and has developed specifications that are quite broad in application, there is a paucity of guidance at the federal, state, and local levels regarding how to provide staffing for ACS locations. There is no guidance suggesting how to develop staff of a facility provided as an ACS site to assist in activating an ACS for operation in emergency or disaster conditions.

Kern County, California

The United States Census Bureau Summary estimates the population of Kern County, California, as approaching 865,000 from a level of just under 840,000 in 2012, indicating a population gain of just under 25,000 in one year (United States Census Bureau, 2014). In terms of population, Kern County is larger than Ventura County but smaller than Fresno County, falling 11th in terms of population in the State of California (Cubit Planning, 2014). In size, Kern is the third largest county in the state, covering over 8,000 square miles of the southern end of the San Joaquin Valley in central California. Driving at posted speeds from one point to an opposing point in Kern County (perhaps from Ridgecrest in the northeast to Taft in the southwest or from Edwards Air Force Base in the southeast to Lost Hills in the northwest), travel across the county easily takes a half a day. In a disaster affecting the entire county, multiple ACS sites, some in relatively remote locations, may be needed.

In terms of preparedness for emergency response through activation of ACSs, several factors inform need. Approximately 22 percent of persons in Kern County live below the poverty level (Cubit Planning, 2014), a factor known to exacerbate disaster preparedness efforts. *The Wall Street Journal* recently carried an article reporting the results of a Cornell study in which a statistical model of epidemic spread was applied to the United States (Bonislawski, 2015). While obvious areas first impacted by an epidemic are large and major cities, 28 days into the "zombie epidemic," Bakersfield was among four of intermediate cities hardest hit. While no need to activate an ACS has been realized in the past, there is obvious implication for future need. Preparation of staff and leadership for that need seems imperative, particularly since the training efforts involved are applicable over a much broader range of emergency response scenarios.

There are approximately 1,500 hospital beds available at ten hospitals in Kern County (County of Kern Emergency Medical Services, 2013). Therefore, if approximately 0.173 percent of the population were affected by a disaster or emergency to the level of requiring medical treatment, ACS activation might be anticipated. There are currently two contracted ACSs in Kern County. Anticipating 50-bed capacity at each facility, less than 0.012 percent of the population of Kern County could be housed in the current maximum capacity of ACSs contracted in Kern County. To care for one percent of its population in 50-bed ACS, Kern County would need almost 175 ACSs, with population additions indicating an increase in need of 25 ACSs in one year. Additional beds for medical care exist outside acute care facilities in Kern County, but availability of these beds to provide surge capacity in an emergency varies and is unlikely to yield doubling of acute-care facility capacity. Clearly there is need to plan for additional non-

medical staffing for ACSs to maximize use of healthcare personnel in response to a disaster or emergency.

Manuals from the State of California

California Department of Public Health (CDPH, n.d.) has released a multi-volume document, *California Department of Public Health Standards and Guidelines for Healthcare Surge During Emergencies.* Of these manuals, only *Foundational Knowledge, Government-Authorized Alternate Care Sites, Government-Authorized Alternate Care Site Operational Tools Manual, Foundational Knowledge, Training Guide, Government-Authorized Alternate Care Site Training Guide, and Reference Manual* have information applicable to ACS establishment and operation. Most of the information in these manuals is related to operation of the ACS once activated.

Definitions

Definitions found in the CDPH manuals reviewed are useful in understanding the concepts involved in ACS activation. *Foundational Knowledge* (CDPH, n.d.) offers definitions regarding ACS particularly useful to planning for ACS staff and staff training. *Volume II* defines a ***government-authorized alternate care site*** as:

> "a location that is not currently providing healthcare services and will be converted to enable the provision of healthcare services to support, at a minimum, inpatient and/or outpatient care required after a declared catastrophic emergency. These specific sites are not part of the expansion of an existing healthcare facility (i.e., extensions of general acute care hospitals, clinics, or long term care facilities), but rather are designated under the authority of the local government" (p. 12).

The ACS is differentiated by definition from a ***field treatment site*** in that a field treatment site is activated when the number of casualties in an incident is expected to exceed local capacity for treatment, when response is anticipated to be protracted and involve a large number of casualties, or when treatment is anticipated as a result of an event, even though it is not anticipated to overwhelm healthcare resources. Such may be the case in an airliner crash, an earthquake, or an athletic event with a large number of participants, particularly if the event involves an unusual physical challenge such as a marathon.

A general population shelter is opened when people are displaced from their usual residences because of the emergency or disaster. In Kern County, general population shelters are opened by the Director of the Department of Human Services, and operation is facilitated by American Red Cross (ARC) (Kern County Fire Department, 2011). Currently, ARC provides medical care through their own nursing volunteers, although Public Health Nurses (PHNs) have provided medical care in general population shelters in the past.

A medical shelter is established when the incident involves residential displacement of a population with medical needs when areas such as assisted-living facilities cannot absorb additional residents. Persons inhabiting a medical shelter would require a higher level of healthcare skill than that normally provided in a general shelter but not hospitalization. If persons need only minor first aid, assistance with activities of daily living (ADLs), or minor assistance with self-care associated with a chronic health condition, this would be expected to be provided in a general population shelter. A medical shelter would be authorized and operated by a local government entity, usually

the local health department rather than Department of Human Services, and would provide a higher level of medical care and monitoring. A medical shelter might be activated if a healthcare facility evacuation is anticipated.

Therefore, a government-authorized alternate care site (ACS) would be established when all local healthcare capacity had been exhausted but additional need for local services exists at acute-care facilities.

Yolo County, California, ACS Plan

The draft copy of the Yolo County, California, ACS Plan (County of Yolo Health Department, 2013) offered to author for review in December of 2013 provided background information for the ACS Staff Training Matrix, although little was found contributing to development of the Matrix in this document.

A resource request for a Cal-MAT or a DMAT per CDPH Emergency Operation guidelines (CDPH, 2011) was suggested for hospital-level care in an ACS by the Yolo manual, since those types of medical teams are trained and equipped to perform a high level of care in a compromised setting. However, Cal-MAT availability evaporated in 2014 due to budgetary constraints, limiting such a request to federally-provided healthcare personnel, which would require Presidential declaration of a disaster for activation. This was significant to this project as availability of additional medical assistance teams immediately became more remote, and both time and effort to obtain medical resources became more extensive.

Questions were engendered by the timing of ACS activation planned by Yolo County (County of Yolo Health Department, 2013). In Kern County, a planning assumption incorporated into partner site contracting is a 72-hour period between the

time determination is made that an ACS is needed and the actual opening of the ACS for patients. Given this assumption, it would be expected that most event-related triage would have taken place by the time the ACS would be opened. The need for the 72-hour period is mostly related to provision of adequate staffing to ensure patient safety but also allows the host ACS site to transition from regular to emergency operations and assist with set-up.

Summary and Scope of the Project

Scattered best practices inform development of a matrix for staff training for an ACS, and there is little to guide that process. While there are recommendations for staffing of an ACS, there is a dearth of research and evidence substantiating these recommendations, and even the experts making what few recommendations have been offered acknowledge the lack of testing of the models suggested (Cantrill et al., 2011). The lone reference to staffing required for a 50-bed medical unit indicated need for 150 individuals for a 12-hour shift (Richter, 2014). While healthcare providers are anticipated to comprise a significant portion of this staffing, there is little literature discussing other staff needed, job descriptions, and the training needed by the individuals expected to fill these job positions.

Over 100 training courses from a variety of sources are available in emergency and disaster management, and many of these courses are necessary to ensure satisfactory performance of job requirements for positions identified as essential to support healthcare personnel in activation and operation of ACSs. However, no attempt has been made to match job positions with training essential for staff involved in activation and operation

of an ACS. Encapsulating recommendations toward this end in a single reference was the aim of this study.

The educational framework and competency set for disaster medicine and public health preparedness developed by Subbarao et al. (2008) was evaluated as part of the literature review. Subbarao et al. (2008) propose a set of competencies developed as the result of systematic review and modified Delphi consensus as the basis for development and evaluation of disaster management in a tiered approach. However, there is lack of association between the competencies developed and available training with which to bridge evaluative testing and educational efforts. In addition, the authors acknowledged that the competencies developed are fluid; this limitation eludes comparisons through longitudinal study, which in the case of disaster management may be the only method of effective evaluation. It is hoped that the ACS Staff Training Matrix developed also will help bridge this gap in disaster preparedness training efforts.

CHAPTER III: Theoretical Perspectives for Study of Disaster Preparedness and Emergency Planning

Complexity Theory

In the face of a disaster, change presents in a very real and insidious manner, and it is up to those presented with it to apply some theory that ultimately will result in return to a steady state less challenging to available resources. Embracing complexity with an eye to preserving life and property and restoring a sense of stability seems to be the most effective method of response to a disaster or emergency.

Complexity theory holds that there is no central control, although there is structure underlying systems and feedback within the system. Complexity theory includes acknowledgement that phenomena do not occur in a linear, cause-and-effect manner. Things happen independent of planning, although most of the time what emerges is resistant to change. Understanding of the system cannot be reduced to understanding of any single part—because one understands the emergency room does not mean comprehension of the medical center. Understanding occurs only when comprehension of the individual parts and their ability, or inability, to work together is realized. Paradox presents at points of change or choice, and balancing actions in the face of paradox is a hallmark of a successful leader functioning at the edge of chaos (Cameron and Green, 2012). Cameron and Green (2012) posit that by studying where feedback loops lead back to the same point, potential exists for very small changes to result in very big results.

The application of complexity theory to disaster management is not a novel approach. Comfort, Ko, and Zagorecki (2004) studied a complexity approach to

communication and coordination strategies in disaster response. Roggema (2014) defines resilience in the context of city planning grounded in complexity theory, where redundancy, diversity, modularity, and feedback loops create the capacity for the city to adjust to external forces in a dynamic termed "comfortable chaos" (p. 460).

Key in addressing the needs of a community in a disaster or emergency is the response of the agencies tasked to perform these functions. Anderson, Crabtree, Steele, and McDaniel (2005) attempt to show that integral to understanding organizational response is knowledge of complexity theory, which allows examination of a system not only through its components but through the system as a whole and the relationships integrating its components. Key properties of a complex system listed by Anderson et al. (2005) are agents (such as people and process) capable of exchanging information, connections within which agents interact and communicate, and patterns forming from local interactions.

One tenet of complexity theory is that no single agent can perceive global knowledge of the system (lack of omniscience), although the local interactions allow information to spread rapidly and profusely. This causes what has been termed *sensitive dependence* (Stanford Encyclopedia of Philosophy, 2008). Many will recognize the concept of sensitive dependence in the classic analogy of a butterfly in China fluttering its wings affecting the weather in Brazil as illustrative that small, local changes can effect large and widespread results. The mathematical implications were discussed in a paper by Edward Lorenz in 1963 but may have originated in similar theoretical treatment by Jacques Hadamard in 1922 (Stanford Encyclopedia of Philosophy, 2008).

Because complexities are thought to arise as the result of small changes, it does not necessarily mean that the changes themselves are complex. In fact, Paley (2007) seems to purport that these changes are the results of "simple agents following simple rules" (p. 234), which is demonstrated by the seeming tendency of birds to fly in formation despite the lack of chief executive officer appointment of the first in the flight. This tendency to self-organize despite seeming lack of overt structural overlay is also a quality of complex systems. This has been noted by the author in multiple preparedness exercises in that players in the exercise at first demonstrate confusion and lack of organization, but as the scenario develops, an organized approach begins to emerge, even if an overt leader does not. Were one to stop an exercise participant and ask who was in charge, the question ordinarily would be met, at least temporarily, by an expression of confusion brought on by the lack of consciousness of any designated leadership. This emergence of organization or organized behavior without overt leadership is another property of complexity theory (Anderson et al., 2005).

Eventually, emergence of organizational behavior extends beyond the complex adaptive system, and the world beyond it begins to react in a synergistic fashion that Anderson et al. (2005) term "co-evolution." The process of co-evolution links the future with the history, or past, of the complex adaptive system in a cyclical fashion. Cyclical building is a useful framework on which to build continuous quality improvement. As continuous quality improvement is built into the National Preparedness Framework (FEMA, n.d.) and related frameworks for emergency preparedness activities, the cyclical approach of complexity theory lends itself well to projects targeting building of preparedness and resilience.

In relation to nursing, loss of complexity has been associated with worsening of healthcare outcomes, while complexity generates the need for information-sharing and support in making choices, which is a function of the nursing process. As information over time and the skills associated with the craft of nursing are incorporated by the individual, energy conservation allowing recognition of pattern deviation often is interpreted as intuition (Davidson, Ray, Cortes, Conboy, & Norman, 2006). The intuitive sense attributed to nursing blossoming from conversance in complexity should not come as a surprise to the advanced practice nurse.

AHRQ (Cantrill et al., 2011) in identifying the essential components of surge capacity developed the four-S approach—staff, stuff, structure, and systems. In discussing nursing care related to surge capacity, McHugh (2010) describes staffing as "weak links in the preparedness chain" (p. 442), noting that estimates of nurse and staff availability are overestimated in most emergency plans. McHugh (2010) notes that reliance on estimates of a surplus of nursing availability during disasters relies overmuch on a system where nurse staffing operates at best at the chaotic edge of adequacy. McHugh (2010) also noted, as has Dr. Colin Bucks (Richter, 2014), the labor intensiveness required to address outbreak of contagious disease and the impact of social distancing, care of ill family members, and personal illness in thinning the ranks of available healthcare personnel.

Grounding the ACS Staff Training Matrix in complexity theory helps ensure that a small change in relating two modalities in emergency planning—HICS and available training modules—will result in the ability to diversify training of emergency preparedness staff and volunteers. Providing a matrix of mandatory and recommended

training related to job positions and descriptions in HICS lends resilience to staff supporting healthcare personnel who may be required to activate and operate an ACS during an emergency or disaster situation. Disasters by definition bring with them an element of need for complex and thoughtful response to unique management challenges presented.

Summary

Disaster defies theory. Were there a theory of disaster, it would seem to imply the ability to circumvent catastrophe and intervene to engender a better outcome. Gawande (2003) observed that "disasters do not simply occur; they evolve" (p. 63) and that "when things go wrong, it is usually because a series of failures conspires to produce disaster" (p. 64). Both seem to imply that even one small success, if complexity theory is to be trusted, may be all that is necessary to forestall evolution to a stage of disaster. Such is the essence of resilience. But what form should this small success take? Complexity theory seems to suggest that better chances of success occur with small and incremental changes. This type of change is sought in this project to address coupling of job positions needed to support an ACS with training recommended to optimize performance of individuals in executing the job duties associated with each position. Encapsulation of this information in an easy-to-use matrix tool will be useful in defining and implementing training efforts, evaluating those efforts, and using the results to improve community ability to respond to a disaster or emergency in establishment of ACSs. Pursuit of the training selected for the ACS Staff Training Matrix may be that small butterfly of change effecting optimal disaster management outcomes to address the types of emergencies we always hope never come.

CHAPTER IV: Project Plan

Following identification of gaps in capability to develop ACSs, formulation of a plan to address the gaps, and development of a timeline (Appendix A), the criticality of a staff training matrix was identified and targeted for this project. HICS was identified as an ideal staffing model for support of an ACS, and job positions specific to ACSs were selected from HICS for the ACS Staff Training Matrix. Available training in disaster and emergency management was surveyed for modules that were most appropriate, most affordable, and most available to a wide audience of possible ACS staff participants. From the training identified, over 100 courses in emergency management were selected for matching to the job positions from HICS for the ACS Staff Training Matrix. Job descriptions for each of the job positions selected were matched to available training to identify the training most applicable for each job position. Then, training that was mandatory in order to perform the job duties of that position was differentiated from training that would be useful but not required. A matrix of job positions was created following the five common ICS sections (Command, Operations, Logistics, Planning and Finance) and listing available training along with which modules would be required (mandatory-M) and which modules would be recommended (R) for each of the job positions using Microsoft Excel®. Assumptions that followed development of the ACS Staff Training Matrix were encapsulated in comments in an introduction sheet, and guidance was provided for navigating the ACS Staff Training Matrix in the second sheet of the document. An additional sheet was created to allow capture of information on individuals inclusive of contact information and training completed. This sheet was intended to provide capacity for facilities not having the ability to track individual

training or the training in another format. A secondary purpose for the training tracking sheet was to allow emergency planners easy access to contact information and training records in conjunction with the positions and training required for more efficient mustering of personnel necessary to establish and operate an ACS. The training tracking sheets of individuals combined with the grid of training recommendations in a program such as Microsoft Access® might automate much of this process for an emergency planner, although development of this utility was not a function of this project. The ACS Staff Training Matrix also may prove useful in planning for exercises designed to evaluate the effectiveness of ACS staff and to test if staff training efforts outlined by the matrix improve the process of ACS activation compared to activation without benefit of the Matrix.

Setting

The project was developed based on data available for Kern County, California, based on the assumption of application of the ACS Staff Training Matrix to exercise planning and training development for health department and ACS partner staffs. Relevant demographics for Kern County were discussed in Chapter 2.

Incorporation of Current Partner Experience

Interviews with personnel associated with the two ACS partnerships with Kern County Public Health Services Department (KCPHSD) were conducted to determine unmet ACS partner needs and opportunities for improvement of the contracting process. The format for the interviews was informal, and interviews were not recorded other than by the author's handwritten notes to diminish the impact of responder anxiety on

responses. Specific responses were not attributed to a particular responder to help preserve anonymity.

Responses included that no real changes were needed in the process. However, education and knowledge acquisition were pointed out as important to ACS partner participation going forward, along with provision of training resources for the ACS partners. An organizational chart also was requested by ACS partners. Explanation of how the ACS process would work if it were activated was needed. All of these comments informed the process of creating the ACS Staff Training Matrix.

Discussion took place regarding what training should be completed by the staff of the new ACS partner organization. The measure proposed to answer this need initially was conceived as a training grid indicating tiers of involvement in activation, set-up, operation, and demobilization of the ACS and accompanying links to around-the-clock contact information for each person named in the training grid. The operational goal discussed was a "three-deep" approach such that staffing for each position required for the ACS cycle would have at least three people trained and available to fulfill that need. Considerable discussion took place about this grid, and subject matter experts (SMEs) were identified among and by current ACS partner staff. It was agreed that development of the training grid should proceed under the guidance of the SMEs identified.

Risks and Threats

A major hurdle anticipated as a challenge to completion of the project was the transition from one Emergency Medical Services Director to another and related changes that might involve personnel, work duties, and targets for emergency preparedness efforts. During the transition between division directors, the KCPHSD Director served as

the division director as well. Supervision transitioned to the new EMS Director in early February of 2014. Separation of the author from Emergency Preparedness in September of 2014 was thought to present additional threat to the project, but assessment of the threat resulted in determination that the project had reached a point of completion where no further negative consequences were anticipated due to this change in events.

Institutional Review Board Exemption

There was minimal risk to participants involved in the review portion of the ACS Staff Training Matrix. Risks to individuals were identified in the participant information sheet and included possible discomfort in answering one or more of the questions. Participants were informed that they were free to decline to answer any questions to which they did not wish to respond.

No additional risk was identified by individuals participating as part of this project. Informed consent was provided to research participants in the format deemed suitable by the University of Nevada Las Vegas (UNLV) Institutional Review Board and included research subject rights and responsibilities as well as contact information for the author and project chairperson. Because of negligible risk of harm anticipated for research participants as part of the research for this project, expedited review was requested from and granted by the UNLV Institutional Review Board (Appendix B), and the study was exempted from review. No institutional review was required by the State of California or Kern County Public Health Services Department, as no research subjects were involved.

Project Definition

This project was defined as use of the Hospital Incident Command System (Cal-EMSA, 2014) to select positions that would be appropriate and needed in support of ACS operations, with HICS providing the job descriptions for each of these positions. The project was undertaken in response to identification of the need to further define parameters for activation of ACSs in response to medical surge demands occurring as the result of a disaster or emergency and the need to train staff who would be involved in support of medical personnel at an ACS. The task then was to match the job descriptions with available training modules in an attempt to define what training would be mandatory for each position, and what training would be recommended. While it is acknowledged that not every person tasked to function in a HICS position in support of ACS operations would have all of the training required or recommended, objectives would be useful, and if personnel were not available to fill these positions, then the definitions would provide emergency management staff with the information required to complete resource requests for personnel who had those qualifications and could be mustered from other areas not involved in the emergency or disaster.

Following definition of positions and available training, training was assigned to each position based on available literature, best practices, and input from SMEs. Following designation of training required for each of the HICS positions selected for support of ACS operations, these recommendations were consolidated into a single Microsoft Excel® document with one sheet for each HICS section (Command, Operations, Logistics, Planning, Finance). An introductory sheet was added providing new users with orientation to the layout of the document and intended uses as well as

assumptions for use of the ACS Staff Training Matrix that developed in conjunction with its assembly. Another page of navigation instructions was provided for users who are new to or unfamiliar with features of Microsoft Excel® employed in conventions of the document.

Another sheet was added to the ACS Staff Training Matrix designed as a multifunctional tool. This sheet was developed to track the training completed by an individual in conjunction with contact information for that individual, including multiple modes of communication at all times such that mustering of personnel with appropriate training based on the ACS Staff Training Matrix was simplified for the emergency planner and logistics personnel in response to the need for activation of an ACS. The training tracker sheet also can be printed as a survey document for new personnel. Coupled with the ACS Staff Training Matrix in a program such as Microsoft Access®, individual training trackers can be matched to job positions to further simplify mustering options. However, this development was beyond the scope of this project.

Once the ACS Staff Training Matrix was in final draft, it was submitted to subject matter experts (SMEs) for review. These SMEs had been identified previously and had indicated interest in reviewing the Matrix prior to the author's departure from employment in EP. Two rounds of SME review were undertaken. The initial recommendations of SMEs were incorporated into the developed matrix. The ACS Staff Training Matrix then was returned to the SMEs for repeat review in an attempt to achieve consensus on the final product. Subsequent recommendations were few and incorporated into the final version of the ACS Staff Training Matrix (Appendix C).

Summary

The focus of this project was to develop an Alternate Care Site Staff Training Matrix based on HICS (Cal-EMSA, 2014) and available training modules. The Matrix was developed based on assumptions grounded in demographics for Kern County, California, in consideration of application to other operational areas. ACS partner experience and goals were incorporated into planning for the project. Risks and threats were assessed and reassessed for impact on the project when threats materialized, resulting in negligible changes to the project plan. The project was exempted for review by the University of Nevada, Las Vegas, Institutional Review Board. Project definition was finalized, and the project was implemented.

CHAPTER V: Project Implementation and Results

ACS Staff Training Matrix Development

The ACS model selected is based on addressing the needs of hospitals when the capacity to address patient surge can no longer be met by beds, supplies, and staffing available to those hospitals and licensed by the State of California Department of Licensing and Certification. The model assumes that when hospitals begin to approach this level of patient surge, they will reach out to the local health department for assistance in accordance with principles outlined in the State of California Emergency Operations Manual (EOM) (CDPH, 2011).

An additional assumption is that hospitals will triage to a lower level of care those patients closest to a level of stability usually indicative of a safe discharge to home (Kelen et al., 2006), but that the conditions precipitating the surge prevent discharge of those patients to home. For example, patients hospitalized as the result of injuries sustained during an earthquake may be at a level of stability where normally they would be discharged home from the hospital, but residual conditions precipitated by the earthquake—loss of residence, lack of transportation to remote areas of the county, interruption of transportation corridors, lack of utilities, lack of access for home support of patients by medical equipment vendors. The ACS Staff Training Matrix assumes that these patients requiring a lower level of care could be discharged instead to the ACS, where ongoing medical supportive care would be provided as well as social services anticipated as needed to return the patients to a community environment, be it safely to their homes or to alternative community settings as could be arranged for them. This,

then, would relieve the hospitals to care for more critical patients until such time as the patient surge could be absorbed.

In terms of care provision, the model assumes that the discharge orders of the attending hospital physician would serve as admission orders for the patient arriving at the ACS. In addition, it is assumed that the discharging hospital physician also would specify the conditions that would need to be met before safe discharge of the patient to the community from the ACS. An assumption is that all of this care would be within the scope of practice of registered nurses, public health nurses, and staff assigned to support this level of healthcare provision.

Training obtained prior to the release of an update for the Hospital Incident Command System (HICS) in May of 2014 (Cal-EMSA, 2014) provided insight into potential use of these pre-defined job positions and job descriptions for those needed in support of ACS operations. The organizational chart for HICS (Cal-EMSA, 2014) was incorporated into the ACS Staffing Matrix to afford planners the opportunity to determine which of the HICS job positions would be appropriate to the ACS activation contemplated. Most while not all HICS job positions are included in the ACS Staff Training Matrix. This blank form also serves as a template for indicating individuals assigned to positions within the HICS structure.

Each of the job positions has an accompanying Job Action Sheet available through HICS (http://www.emsa.ca.gov/hospital_incident_command_system_job_action_sheets_2014), and these can be accessed for detail regarding each of the positions assigned, providing guidance for the activities expected for that position and a list of HICS forms applicable

to the duties assigned. The forms encapsulating HICS organizational and operational documentation requirements are available through the HICS website (http://www.emsa.ca.gov/disaster_medical_services_division_hospital_incident_command_system_resources).

The next task was coupling of the HICS job positions to available training. Early in the process, a decision was made to limit the training suggestions to options readily available to most individuals, particularly staff located in California. The training offerings suggested are available primarily online and free of charge as opposed to classroom settings in order to maximize availability and reduce associated expenses. Training designated as required for some positions still requires a classroom element, but the amount of this type of training and the positions for which this training are required were limited to reflect emphasis on cost containment and maximal availability. Training availability was selected from:

FEMA (http://www.training.fema.gov/emicourses/);

University at Albany Public Health Center of Public Health Preparedness (http://www.ualbanycphp.org/);

California Office of Emergency Services (Cal OES) (http://www.calema.ca.gov/LandingPages/Pages/Training-and-Response.aspx);

FEMA Center for Domestic Preparedness in Anniston, Alabama (http://cdp.dhs.gov/);

and Medical Reserve Corps TRAIN (https://www.medicalreservecorps.gov/SearchFldr/TRAINResources).

The Cal OES and FEMA Center for Domestic Preparedness courses as well as California Health Alert Network training all require a classroom component, while the majority of the remaining courses are available online.

The HICS organizational structure combined with selected available training modules provided the basis for the ACS Staff Training Matrix. Coursework was selected as mandatory (M) or recommended (R) based on the requirements of the job listed in the HICS job descriptions (Cal-EMSA, 2014) compared with the contents of the training courses. For example, completion of ICS 100, which is an introductory ICS course, is mandated for all positions, since a working knowledge of Incident Command System structure is necessary for both operations and communications in emergency response settings.

Since supplies have been assembled and packaged designed to support an ACS for 24-hour operation and 50 patients for a period of two weeks, it was decided to base the staff training model on positions needed to support a 50-bed unit for a 12-hour shift. Creation a staff training model based on this type of "all hazards" approach incorporates flexibility to allow scaling of staffing efforts to best suit the actual scenario addressed and the number of patients anticipated to be served by that scenario.

The matrix developed was organized in a Microsoft Excel® format designed to provide planners with a flexible document that allows customization based on local requirements and any modifications needed to better tailor the latest training offerings to specific needs and targets defined by local operational areas. Completion of the ACS Staff Training Matrix was accomplished through addition of an introductory page including assumptions considered in development of the tool and a page with instructions

for navigating and use of the ACS Staff Training Matrix. Assumptions are included as part of the introductory material for the ACS Staff Training Matrix.

Training resources drawn from on-line training courses are available from FEMA, MRC Train, California Office of Emergency Services, Centers for Disease Control and Preparedness, NACCHO, Foundations of Public Health (Empire State Public Health Training), University at Albany School of Public Health Center of Public Health Preparedness, National Center for Disaster Medicine & Public Health, California Department of Public Health Emergency Preparedness Office, and local health departments. There are duplicate listings. Flexibility allows customization of training recommendations based on local requirements and availability of training modules.

Training modules were ranked as "mandatory" (M) or "recommended" (R) based on content offered. For example, for every position, one of the ICS 100 courses would be required, since basic understanding of the Incident Command System would be necessary for comprehension of communications standards anticipated for all staff. However, for ICS 400, this training is mandatory only for staff members expected to function in the Operations Chief and Medical Unit Director positions, while it is only recommended for other Operations Section staff members.

A training tracking form was developed and appended to the ACS Staff Training Matrix as a multifunctional document. It can be printed to serve as a form for staff to complete indicating personal contact information and training completed. The tracking form can be completed and maintained as a record for staff at facilities that do not have that capacity available in existing employee informational systems. Compilation of individual training tracking records allows the planner to cross-reference available

employees for optimal assignment to positions defined in the ACS Staff Training Matrix, and inclusion of 24/7 contact information for each employee facilitates mustering of personnel to fill positions identified. Additional development may be available through use of a software tool such as Microsoft Access® to automate much of this function, but this was not considered within the scope of this project beyond consideration of developmental elements to support this future possibility.

ACS Staff Training Matrix Validity and Reliability

Once the ACS Staff Training Matrix had been drafted, methods of establishing matrix validity and reliability became a consideration. Because of the dearth of literature establishing an evidence base for the recommendations encapsulated in the ACS Staff Training Matrix, it was decided that the best course for achieving initial validity and reliability would be review by subject matter experts (SMEs).

A list of potential SMEs had been identified previously and was modified to include only SMEs who had been contacted personally by the author previously, who had indicated interest in reviewing the ACS Staff Training Matrix as it was developed, and who had provided contact information to that end. This modification of the SME list was done to avoid potential conflict regarding use of contact information obtained as a result of the author's employment. It was acknowledged at that time the potential of limiting applicability of results, and this limitation was accepted rather than risk compromise of the study related to obtaining sources of SME contact information. It remains speculative if a wider distribution would have resulted in a significantly different version of the tool versus the ease of obtaining consensus regarding the result. The wider distribution as

part of the dissemination portion of the project will offer the opportunity to optimize further the functions of the ACS Staff Training Matrix.

SME Review of the ACS Staff Training Matrix

The questions to be asked of the SMEs were developed based on the objectives and anticipated outcomes for the ACS Staff Training Matrix. Questions were refined to minimize the response time required of the SMEs while maximizing benefit and effect on the outcomes to be achieved. The questions included and the responses of the SMEs are included in Appendix D.

It was determined that two to three rounds of SME review would be needed to achieve consensus regarding the staff training matrix contents. An information sheet/informed consent was developed, and a letter inclusive of SME instructions for review and questions to guide review was developed. The project then was submitted to the UNLV Office of Research Integrity for Institutional Review Board review, and the project was granted Exempt status on September 21, 2014 (Appendix B). While awaiting IRB review and prior to initial dissemination of SME solicitation, ongoing efforts were directed toward improvements in the staff training matrix format.

Once the IRB exemption was obtained, an initial e-mail contact was sent to each of ten identified subject matter experts (SMEs). Half of the 10 contacts responded in the affirmative regarding participation in the study; no response was received from other half. The five SMEs who responded were sent consent forms to be signed and returned, a copy of the draft ACS Staff Training Matrix, a participation information sheet, and a questionnaire (Appendix D). Of the five SMEs agreeing to participate in the study, four returned signed consent forms. The SME not returning a consent form submitted a

completed questionnaire, but the response was not considered in ACS Staff Training Matrix modifications, although it was noted that the responses closely paralleled those of other SMEs responding to the survey. This person was not contacted for the second round of SME review. One SME withdrew from the study due to time constraints.

Monitoring of the Project

Project review was carried out by the UNLV Institutional Review Board and was assigned Exempt status. Thereafter, members of the author's UNLV advisory committee provided oversight of work carried out by the author and offered comment and suggestions regarding project progress.

Data Collection and Analysis

Ten SMEs were invited to participate. Of the 10 subject matter experts invited to participate, five responded as willing to participate. These five SMEs were sent a copy of the draft ACS Staff Training Matrix, informed consent requiring signature, a questionnaire, and an information sheet regarding the study. Of the five SMEs agreeing to participate, four submitted comments, and of the four, three provided signed informed consent. A fourth SME signed informed consent but failed to submit comments despite extension of the submission deadline, and one SME who has signed consent withdrew from the study due to time constraints. SME responses to the questionnaire are included in Appendix D.

The comments of the SMEs taken as a whole indicated the need to decrease the number of mandatory courses and to increase grouping of duplicate courses covering a subject matter area. Addressing the comments of the SMEs was tackled first by grouping of the courses into subject matter areas. The goal in the groupings was to make the

duplications more obvious such that the mandated courses were not seen as overwhelming, making it easier for each operational area to customize the matrix while providing a variety of access points to similar or identical training courses.

In line with the recommendations of the SMEs, the number of mandatory courses was reduced for most positions by decreasing the rating of these courses from "mandatory" to "recommended" or by eliminating the need for completion of the course. Very few courses rated as "recommended" were eliminated.

The revised training matrix was sent out for a second review. The matrix was sent to all of the subject matter experts (SMEs) who had responded to the initial request for review by returning a signed participant consent form and who had submitted responses to the initial request (three SMEs). The second review was sent out noting that the reviewers did not need to return a response unless the SME had further comments regarding the revised matrix.

Two SMEs responded to the second review. One SME indicated satisfaction with the changes that were made but confusion regarding a flagged entry on the "Command" staff page. This was changed to clarify that flagged classes were those leading to a FEMA ISP leadership certificate. The second SME sent a revised copy of the staff training matrix with changes highlighted. These were changes to a few of the designations from "mandatory" to "recommended" based on position functions within an ACS environment differentiated from those required for a similar position in response to a more general emergency response activation or a public health activation (for example, a Public Information Officer's training needs opposed to an ACS Public Information

Officer training need). All of these recommendations were incorporated into the final training grid.

Based on the responses received and the few modifications suggested on the second round of review, a third round of SME review was determined not to be needed. The final recommendations were incorporated into the fifth version of the document (Appendix C).

Dissemination and Utilization of the Results

As non-academic portions of this project were undertaken through the auspices of CDPH, the author offered to present the results of the project at the statewide Workshop conducted in June of 2015, although this offer has not been accepted as of this writing. Also, an offer was made to present the project results to the current KCPHSD EP Coordinator but has not been accepted yet. An electronic version of the ACS Staff Training Matrix will be provided to Cal-EMSA in response to their website request for materials developed as a result of or based on HICS (Cal-EMSA, 2014).

An abstract of the project was submitted for consideration of presentation for the International Sigma Theta Tau Biennial Convention in November 2015 and has been accepted as a poster presentation and is pending possible acceptance as an oral presentation space permitting. Project outcomes and a copy of the ACS Staff Training Matrix in its current form will be sent to all individuals who were involved in the review portion of the project as subject matter experts along with the thanks of the author for their participation. The author has been contacted by individuals in the emergency preparedness community requesting more information regarding the ACS Staff Training Matrix, and these persons will receive a copy of the completed tool. Several other SMEs

were identified as a result of the project, and the author plans to contact these individuals to determine their interest in the results. Project dissemination is the main profit to be gained, and every effort will be made to make sure that dissemination is widespread at minimal to no cost for recipients.

A PowerPoint® has been developed and will become a basis for future presentations of the project. An abbreviated and targeted document to encapsulate the results in a substantially shorter article for periodical submission is under development, and efforts are underway to determine appropriate publications. Feedback received as a result of presentation opportunities will continue to inform development of the ACS Staff Training Matrix.

Future Development Needs

In keeping with the National Response Framework (FEMA, 2014), the next step for the ACS Staff Training Matrix will be evaluation. While evaluation by the SMEs informed project development and while dissemination response is anticipated to offer opportunity for further improvements, additional testing by application in an exercise or drill format or in a real event would be useful. Toward that end, specific elements need to be developed for exercise evaluation guides (EEGs) pertaining to use of the staff training matrix and its relation to ACS activation and operation. Inclusion of these elements in a variety of exercise formats and scenarios involving ACS activation then would lead to further development and refinement of the ACS Staff Training Matrix. Development of EEGs specific to ACS and ACS elements and exercise evaluation of the ACS Staff Training Matrix was beyond the scope of this project and was not an anticipated outcome. Comparison of outcomes between staff not trained and staff

receiving training commensurate with recommendations outlined in the ACS Staff Training Matrix would provide additional assessment informing evolution of these recommendations.

Summary

The ACS Staff Training Matrix was developed to fill a gap in disaster planning identified as the result of State of California review of emergency planning efforts undertaken by Kern County Public Health Services Department under the auspices of Hospital Preparedness Program (HPP) grant funding. In the process of literature review informing this planning effort, it was discovered that there was no definition of staffing needed for support of ACS functions or of training required or recommended for individuals potentially filling these positions. Toward that end, the ACS Staff Training Matrix was developed.

The ACS Staff Training Matrix is intended to guide planning efforts for appropriate levels of staff and staff training designed to support a 50-bed ACS for a 12-hour shift. The ACS Staff Training Matrix also helps guide planning for training of individuals who might be available and qualified through credentials to fill these job positions, which have been defined and established in an Incident Command System format through HICS (Cal-EMSA, 2014). The HICS format also includes job descriptions for each of these positions. Should planners identify shortages of personnel necessary to activate and operate an ACS, the positions combined with training requirements defined in the ACS Staff Training Matrix can be used to complete resource requests for appropriate personnel. Individual training records can be created based on the matrix requirements and the template created for training tracking provided, which

also serves as documentation of contact information for individuals for ease in mustering staff required.

The ACS Staff Training Matrix was reviewed by SMEs in nursing and emergency preparedness and revised based on their recommendations. Additional input will be incorporated as the project results are disseminated. In the future, development of exercise evaluation guide elements specific to ACS staffing and the ACS Staff Training Matrix can be included as part of exercises targeting surge response incorporating ACS activation. Resultant after-action results can be formulated into improvement plans enhancing ACS Staff Training Matrix utility and reliability for future response needs in a cycle of continuous quality improvement.

Appendix A – Timeline of Project Development

March 2013: Identification of gap in disaster preparedness

No staff training recommendations/requirements for positions to support medical personnel in establishment of an alternate care site (ACS).

April 2013 – March 2014: Literature review. Project definition. Project development.

Chapters written for introduction, literature review, theoretical perspectives, and project plan.

March 2014: Project defended for committee members at University of Nevada Las Vegas (UNLV). Project scope redefined.

April 2014 – August 2014: Project redefined. Documents developed for UNLV project review. Chapters previously written revised based on project defense comments. ACS Staff Training Matrix developed and revised.

September 2014: Project exemption by UNLV IRB.

October 2014: Documents sent to subject matter experts (SME) for first round of review.

November 2014: ACS Staffing Training Matrix revised based on SME comments. Matrix sent back to SMEs for second round of review.

December 2014: Comments received from SMEs and incorporated into Matrix draft. ACS Staff Training Matrix finalized.

January 2014-March 2014: Revision of chapters previously written and composition of chapter regarding project implementation and results. Revision of project documentation based on APA, Nursing Department, and Graduate Department Standards. Preparation of final project documentation for review by UNLV committee. Preparation of a Microsoft PowerPoint® document regarding project for presentation to UNLV committee. Initial defense of project for UNLV committee.

March 2014: Additional revisions to project documentation based on comments from UNLV committee. Acceptance of project for presentation at Sigma Theta Tau Biennial International Convention in November 2015.

April 2014: Additional defense of project for UNLV committee. Acceptance by committee and UNLV Graduate School.

Appendix B – University of Nevada, Las Vegas Institutional Review Board Project Exemption

UNLV
UNIVERSITY OF NEVADA LAS VEGAS

EXEMPT RESEARCH STUDY
INFORMATION SHEET
Department of Nursing

Title of Study: **Partnering with the Community for Establishment of Alternate Care Sites**

Investigator(s): **Lori Candela, Associate Professor, EdD, APRN, FNP-BC, CNE; Jean Roberts, RN, MSN, PHN, CNL**

Purpose of the Study

You are invited to participate in a research study. The purpose of this study is to demonstrate use of the Hospital Incident Command System (HICS) in combination with available training modules, courses, etc., to define training, experience, and credentials (TEC) desirable in staffing of an alternate care site (ACS). This information will be captured in a matrix intended for use in staffing of an alternate care site, in specifying resources needed for preparation of a resource request for staffing of an ACS should an operational area lack sufficient personnel resources, and as a guide to training of personnel for staffing of an ACS.

Participants

You are being asked to participate in the study because you fit these criteria: You are an adult over 18 years of age and have been identified or self-identify as subject matter expert (SME) in disaster management and/or healthcare.

Procedures

If you volunteer to participate in this study, you will be asked to do the following: You will be invited to review and comment on the staffing matrix developed by the student investigator. You will be sent a copy of the matrix along with a set of 6 questions to guide your response and comments regarding the matrix. You may be contacted for clarification or more information based on your responses to the questionnaire. Revised copies of the matrix will be circulated for review and comment in further refining the document.

Benefits of Participation

There may not be direct benefits to you as a participant in this study. However, we hope to learn what HICS job descriptions best fit the alternate care site model chosen and what qualifications individuals should possess to best fill these positions during a disaster or emergency.

Risks of Participation

There are risks involved in all research studies. This study may include only minimal risks that include discomfort in answering one or more of the questions. You are free to decline to answer any questions to which you do not wish to respond.

Cost /Compensation

There is no financial cost to you to participate in this study. The study will take approximately 2-3 hours of your time. You will not be compensated for your time.

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EXEMPT RESEARCH STUDY
INFORMATION SHEET
Department of Nursing

Confidentiality

Your name will not be linked in any way to any information gathered in this study. All personal information regarding study participants related to this study will be stored on a password-protected computer in a locked office of the student investigator or in a locked file cabinet in the student investigator's office. All data will be destroyed 3 years after the completion of this study.

Voluntary Participation

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice. You are encouraged to ask questions about this study at the beginning or any time during the research study.

For questions or concerns about the study, you may contact Dr. Lori Candela at 702-895-2443 or Jean Roberts at (661) 326-8878.

For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted you may contact the UNLV Office of Research Integrity – Human Subjects at 702-895-2794, toll free at 877-895-2794, or via email at IRB@unlv.edu.

Participant Permission:

I have read the above information and agree to participate in this study. I have been able to ask questions about the research study. I am at least 18 years of age. A copy of this form has been given to me.

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Biomedical IRB
Notice of Excluded Activity

DATE: September 18, 2014

TO: **Dr. Lori Candela**, Nursing

FROM: Office of Research Integrity – Human Subjects

RE: Notification of IRB Action
Protocol Title: **Partnering with the Community for Establishment of Alternate Care Sites**
Protocol# 1409-4927M

This memorandum is notification that the project referenced above has been reviewed as indicated in Federal regulatory statutes 45CFR46.

The protocol has been reviewed and deemed excluded from IRB review. It is not in need of further review or approval by the IRB.

Any changes to the excluded activity may cause this project to require a different level of IRB review. Should any changes need to be made, please submit a Modification Form.

If you have questions or require any assistance, please contact the Office of Research Integrity – Human Subjects at IRB@unlv.edu or call 895-2794.

Office of Research Integrity – Human Subjects
4505 Maryland Parkway • Box 451047 • Las Vegas, Nevada 89154-1047
(702) 895-2794 • FAX: (702) 895-0805

Appendix C – ACS Staff Training Matrix

The Alternate Care Site Staffing Matrix * PLEASE READ FIRST ! *****

The Alternate Care Site (ACS) Staffing Matrix is intended to support adequate staffing of an ACS. The Matrix allows the ICS Management Team to review positions selected from the Hospital Incident Command System (HICS) to determine those necessary to staff the ACS, determine available staff who have training, experience, and credentials to staff these positions, and easily match the two to develop a staffing matrix to support the ACS. In addition, the staffing matrix can be utilized to consider training needs relative to available training and to track training of staff if there is no other system available to track training or this type of training. While the listing of training is not intended to be comprehensive, it also serves as a basis of identifying training gaps that need to be addressed in order to quickly and effectively staff an ACS. Should personnel needs be identified that cannot be filled through available personnel and use of the matrix, the matrix provides reference for preparation of resource requests to meet personnel needs. This information is presented in a flexible format that allows customization for operational area needs based on available training.

Assumptions for the ACS Staffing Matrix include:

1. Activation of the ACS has been requested to relieve patient surge at area hospitals.
2. Conditions at the hospitals and in the community limit availability of medical staff.
3. Patients with lower acuity who normally would be discharged home from the hospital with community support cannot be discharged from the hospital safely due to conditions secondary to the emergency or disaster causing the hospital surge.
4. These low-acuity patients could be cared for safely at a facility staffed with limited medical personnel while arrangements are made for transition of these patients to appropriate community settings.
5. Care of lower-acuity patients at the ACS would free hospital resources to care for higher-acuity patients.
6. Patients would receive medical care at the ACS based on the orders specified by physicians at the time of discharge from the hospital to the ACS.
7. Physician discharge orders also would specify conditions that would need to be met in order to safely discharge the patient from the ACS to a community setting.
8. Additional personnel would be necessary to support the medical personnel and allied health professionals providing direct care at the ACS.
9. The staffing matrix does not include staff providing direct care. The training, experience, and credentials of medical personnel and allied health professionals are specified by state and local regulations, which would continue to be followed as much as the emergency/disaster allows and as scope of practice is expanded by emergency declaration.
10. Lack of available direct-care staff and/or support staff would result in resource requests through emergency management resource channels.
11. The positions listed in the ACS Staffing Matrix are extracted from the most recent version of the Hospital Incident Command System (HICS). (http://www.emsa.ca.gov/disaster_medical_services_division_hospital_incident_command_system). Not all of the positions in HICS are included in the ACS Staffing Matrix, as the HICS positions are intended to address an "all-hazards" approach and therefore are more comprehensive than those needed for ACS staffing.
12. The ACS Staffing Matrix is intended to support a 50-bed site for a 12-hour shift. It is a flexible tool that can be scaled up or down depending on

bed occupancy.

13. The ACS Staffing Matrix is developed based on resources available in California. Training resources are drawn from on-line training courses available from FEMA, MRC Train, California Office of Emergency Services, Centers for Disease Control and Preparedness, NACCHO, Foundations of Public Health (Empire State Public Health Training), University at Albany School of Public Health Center of Public Health Preparedness, National Center for Disaster Medicine & Public Health, California Department of Public Health Emergency Preparedness Office, and local health departments. There are duplicate listings. Flexibility allows customization of training recommendations based on local requirements and availability of training modules.

Comments and suggestions are welcome. Please contact Jean Roberts @ execmedtrans@hotmail.com

Navigating the Alternate Care Site Staffing Matrix

Navigating the Matrix Document

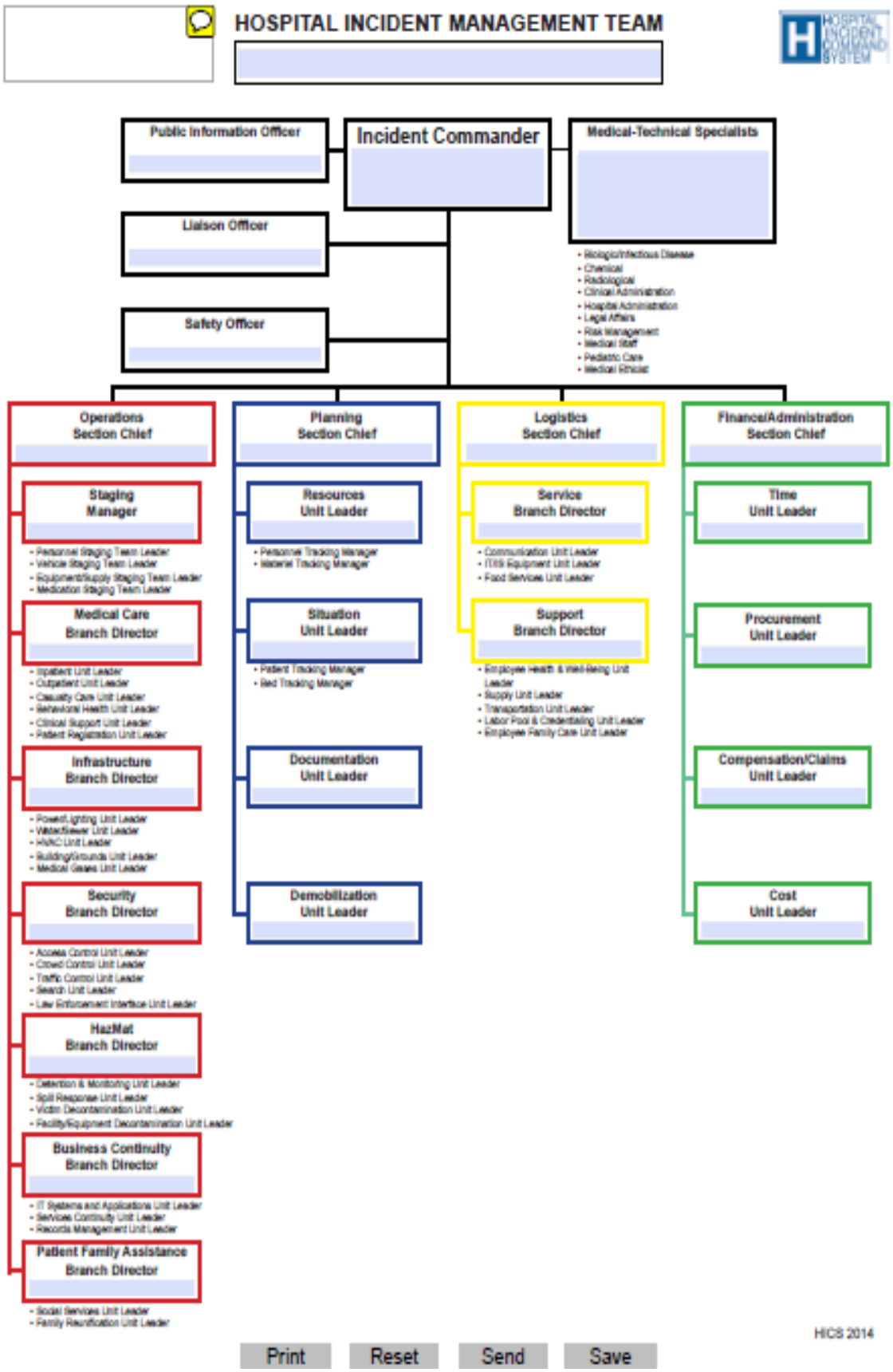
Familiarity with Excel spreadsheet functions will assist the user in optimal use of the ACS Staffing Matrix. For example, for optimal navigation of individual sheets, use the "Hide" and "Unhide" features (right click on a column (letter) or row (number) identifier) to retain column and row headers while scrolling through and navigating other areas of the spreadsheet.

Replication of the HICS organizational chart is included on one tab for reference. Medical emergency recovery elements are heavily staffed in the Operations Section, as would be anticipated in provision of direct care to patients. There are separate tabs for Command staff and each of the four sections usually associated with ICS organizational structures. Each section lists the same training modules but with indication if the training is **mandatory (M) or recommended (R)** for each position. Since some training is not needed for some sections, recommendations will vary from section to section. These recommendations can be customized to each operational area based on local requirements and training availability, although some training, such as ICS 100, is mandatory for all positions. As one would expect, the greater the responsibility assigned with the position, the more mandatory training is recommended.

The final tab is the Individual Training Tracker. This sheet lists all of the training courses noted in previous tabs but in a format for tracking training completed by individuals, previous experience in staffing each of the different job positions listed, and credentials accumulated as a result of training and experience. The sheet is formatted to collect individual contact information to serve as an easy reference once a person has been identified as qualified to staff a position and is recommended for activation.

All sheets are formatted for printing. The Individual Training Tracker is formatted for printing as a blank to act as a questionnaire for individuals to complete.

Comments and suggestions are welcome. Please contact Jean Roberts @ execmedtrans@hotmail.com


HOSPITAL INCIDENT MANAGEMENT TEAM
Public Information Officer
Incident Commander
Medical-Technical Specialists
Liaison Officer
Safety Officer
Operations Section Chief
Staging Manager
Medical Care Branch Director
Infrastructure Branch Director
Security Branch Director
HazMat Branch Director
Business Continuity Branch Director
Patient Family Assistance Branch Director
Planning Section Chief
Resources Unit Leader
Situation Unit Leader
Documentation Unit Leader
Demobilization Unit Leader
Logistics Section Chief
Service Branch Director
Support Branch Director
Finance/Administration Section Chief
Time Unit Leader
Procurement Unit Leader
Compensation/Claims Unit Leader
Cost Unit Leader
HICS 2014
Print
Reset
Send
Save

A	B	C	D	E	F	G	H
Command Staff			HICS job positions for ACS				
			Incident Commander	Public Information Officer (PIO)	Liaison Officer	Safety Officer	Medical/Technical Specialist / Infectious Disease / Chemical / Radiological / Administration (Clinic/Hospital) / Legal Affairs / Risk Management / Medical Staff / Pediatrics / Ethicist /
Training Module #	*Training Module Title*	Module Location					
	California Health Alert Network (CAHAN) Alerting Level	Contact LHD EP	M	M	M	M	M
	California Emergency Operations Manual (EOM) / MHOAC Training	Contact LHD EP	M	M	M	M	R
IS 100.b	Intro to ICS	FEMA ISP	M	M	M	M	M
IS 100.HCb	Intro to ICS for Healthcare/Hospitals	FEMA ISP	M	M	M	M	M
	HICS	contact local health department Emergency preparedness	M	M	M	M	M
	Emergency Preparedness Training for Hospital Clinicians	Albany	R			R	R
IS 200.b	ICS for Single Resources and Initial Action Incidents	FEMA ISP	M	M	M	M	M
IS-200.HCa	Applying ICS to Healthcare Organizations	FEMA ISP	M	M	M	M	M
IS-700.a	NIMS: An Introduction	FEMA ISP	M	M	M	M	M
IS-800.b	National Response Framework: An Introduction	FEMA ISP	M	M	M	M	M
ICS 300	Intermediate ICS for Expanding Incidents	CalOES	M	R	R	M	R
ICS 400	Advanced ICS	CalOES	M	R	R	R	R
L950	NIMS ICS All Hazards Incident Commander	CalOES	R				

Command Staff			HICS job positions for ACS				
			Incident Commander	Public Information Officer (PIO)	Liaison Officer	Safety Officer	Medical/Technical Specialist / Infectious Disease / Chemical / Radiological / Administration (Clinic/Hospital) / Legal Affairs / Risk Management / Medical Staff / Pediatrics / Ethicist /
IS-29	PIO Awareness	FEMA ISP		M	M		
MGT 318	Public Information in All Hazards Incidents	CalOES	M	M	M		
PER 304	Social Media for Disaster Response & Recovery	CalOES		R	R		
APIOHHE	Advanced PIO: Health & Hospital Emergencies	FEMA Center for Domestic Preparedness (Anniston, AL)		R	R		
IS-702.a	NIMS: Public Information Systems			M	M		
1042337	Introduction to Risk Communication	MRC Train	R	M	M	R	R
1040832	Risk Communication: Advanced Track	MRC Train	R	M	M	R	R
1046401	Risk Communications (Basics of PH Awareness)	MRC Train	R	M	M	R	R
G290	Crisis Communications	CalOES		R	R		
1046310	Crisis & Emergency Risk Communication Course (CERC)	MRC Train	R	M	M	R	R
IS-242.b	Effective Communication	FEMA ISP	M#	M	M	M	M
IS-250.a	ESF 15 External Affairs: A New Approach in Emergency Communication & Info Distribution	FEMA ISP	R				
webcast April 10, 2008	Alternative Marketing & Messaging to Prepare Vulnerable Populations	Albany		R	R		
webcast November 8, 2007	Risk Communication & Psychosocial issues in Radiation Events	Albany	R	R	R		R
IS-42	Social Media in Emergency Management	FEMA ISP		M	M		

Command Staff			HICS job positions for ACS				
			Incident Commander	Public Information Officer (PIO)	Liaison Officer	Safety Officer	Medical/Technical Specialist / Infectious Disease / Chemical / Radiological / Administration (Clinic/Hospital) / Legal Affairs / Risk Management / Medical Staff / Pediatrics / Ethicist /
IS-230.d	Fundamentals of Emergency Management	FEMA ISP	M#				
IS-235.b	Emergency Planning	FEMA ISP	M#				
IS-240.b	Leadership & Influence	FEMA ISP	M#				
1029866	Crisis Leadership: Leadership at the Speed of Light	MRC Train	R	R	R	R	R
1047089	Disaster 101: An immersive emergency preparedness and crisis leadership Workshop	MRC Train	R	R	R	R	R
HCL	Healthcare leadership for Mass Casualty Incidents	CDP	R				
	What Followers Want from Leaders	CDC Train	R				
	Curriculum Recommendations for Disaster Healthcare Professionals	National Center for Disaster Medicine & Public Health	R				R
IS-241.b	Decision Making & Problem Solving	FEMA ISP	M#				M
IS-244.b	Developing & Managing Volunteers	FEMA ISP	M#				
1040830	Working with Health and Medical Volunteers	MRC Train	R	R	R	R	R
1046407	Working with Community Partners	MRC Train	R	R	M	R	R
IS-288	The Role of Voluntary Agencies in Emergency Management	FEMA ISP	R				
IS-315	CERT Supplemental Training: ICS	FEMA ISP	R				
IS-317	Introduction to CERT	FEMA ISP	R				
MGT 439	Pediatric Disaster Response and Emergency Preparedness	CalOES	M	R	R	R	M
IS-366	Planning for the Needs for Children in Disasters	FEMA ISP	R				
1047369	Psychosocial Impacts of Disasters on Children	MRC Train	R	R	R	R	M

Command Staff			HICS job positions for ACS				
			Incident Commander	Public Information Officer (PIO)	Liaison Officer	Safety Officer	Medical/Technical Specialist / Infectious Disease / Chemical / Radiological / Administration (Clinic/Hospital) / Legal Affairs / Risk Management / Medical Staff / Pediatrics / Ethicist /
IS-230.d	Fundamentals of Emergency Management	FEMA ISP	M#				
IS-235.b	Emergency Planning	FEMA ISP	M#				
IS-240.b	Leadership & Influence	FEMA ISP	M#				
1029866	Crisis Leadership: Leadership at the Speed of Light	MRC Train	R	R	R	R	R
1047089	Disaster 101: An immersive emergency preparedness and crisis leadership Workshop	MRC Train	R	R	R	R	R
HCL	Healthcare leadership for Mass Casualty Incidents	CDP	R				
	What Followers Want from Leaders	CDC Train	R				
	Curriculum Recommendations for Disaster Healthcare Professionals	National Center for Disaster Medicine & Public Health	R				R
IS-241.b	Decision Making & Problem Solving	FEMA ISP	M#				M
IS-244.b	Developing & Managing Volunteers	FEMA ISP	M#				
1040830	Working with Health and Medical Volunteers	MRC Train	R	R	R	R	R
1046407	Working with Community Partners	MRC Train	R	R	M	R	R
IS-288	The Role of Voluntary Agencies in Emergency Management	FEMA ISP	R				
IS-315	CERT Supplemental Training: ICS	FEMA ISP	R				
IS-317	Introduction to CERT	FEMA ISP	R				
MGT 439	Pediatric Disaster Response and Emergency Preparedness	CalOES	M	R	R	R	M
IS-366	Planning for the Needs for Children in Disasters	FEMA ISP	R				
1047369	Psychosocial Impacts of Disasters on Children	MRC Train	R	R	R	R	M

Command Staff			HICS job positions for ACS				
			Incident Commander	Public Information Officer (PIO)	Liaison Officer	Safety Officer	Medical/Technical Specialist / Infectious Disease / Chemical / Radiological / Administration (Clinic/Hospital) / Legal Affairs / Risk Management / Medical Staff / Pediatrics / Ethicist /
1029725	ABCs of Pandemic Influenza	MRC Train	R	R	R	R	R
P3	Pandemic Planning and Preparedness	CDP	R				
	Preparedness & Community Response to Pandemics	Albany	R			R	R
	An Introduction to Infectious Diseases	CDC Train	R	R	R	R	R
	How Do Viral Epidemics Emerge?	CDC Train	R	R	R	R	R
	Emerging Infectious Diseases	CDC Train	R	R	R	R	R
1042727	Transportation of Infectious Substances	MRC Train	R	R	R	M	R
1042281	Isolation and Quarantine	MRC Train	M	M	M	M	M
1037542	Basic Epidemiology	MRC Train	R	R	R	R	R
	Terrorism, Preparedness, & Public Health: An Introduction	Albany	R			R	R
	Detecting Bioterror (Forensic Epidemiology)	Albany	R			R	R
1030369	Recognition & Management of Bioterrorist Agents: An Overview	MRC Train	R	R	R	M	M
UACPHP-200	Introduction to Environmental Health Microbiology and Communicable Disease Control	Foundations of Public Health (Empire State Public Health Training)	R			R	R
1029859	Chemical Terrorism: Introduction & Classification / Chemical Weapons: Basic Concepts	MRC Train	R	R	R	R	M
1029861	Chemical Weapons: Protection Basics	MRC Train	R	R	R	M	M
1029860	Chemical Weapons: Detection Basics	MRC Train	R	R	R	M	M
EMO	Emergency Medical Operations for CBRNE Incidents	CDP	R				

Command Staff			HICS job positions for ACS				
			Incident Commander	Public Information Officer (PIO)	Liaison Officer	Safety Officer	Medical/Technical Specialist / Infectious Disease / Chemical / Radiological / Administration (Clinic/Hospital) / Legal Affairs / Risk Management / Medical Staff / Pediatrics / Ethicist /
MGT 348	Medical Preparedness & Response to Bombing Incidents	CalOES	M			M	M
1048614	HAZMAT for Healthcare Providers: Awareness Level	MRC Train	M	M	M	M	M
1048621	HAZMAT for Healthcare Providers: Operations Level	MRC Train	M	R	R	R	R
1048051	Introduction to Mental Health Preparedness	MRC Train	M	M	M	M	M
1042053	Responding to a Crisis: Managing Emotions & Stress	MRC Train	R	R	R	R	R
1042290	Stress Recognition & Management During Disaster Response	MRC Train	R	R	R	R	R
1030050	Self-Care for Disaster Responders	MRC Train	R	R	R	R	R
IS-551	Devolution Planning	FEMA ISP	M				
IS-808	ESF#8: Public Health & Medical Services	FEMA ISP	R	R	R	R	R
IS-2900	National Disaster Recovery Framework Overview	FEMA ISP	R	R	R	R	R
IS-276	Benefit-Cost Analysis (BCA) Fundamentals	FEMA ISP	R				
1042283	Liability & Immunity in Public Health Emergencies	MRC Train	M	R	R	R	M
	Public Health & the Law: An Emergency Preparedness Training Kit	NACCHO	R				R
# Courses in the FEMA ISP Professional Development Series							

		HICS Job Positions for ICS - *Operations Section*															
			Operations Chief	Staging Manager	Personnel Staging Team Leader	Vehicle Staging Team Leader	Equipment /Supply Staging Team Leader	Medication Staging Team Leader	Medical Care Branch Director	Inpatient Unit Leader	Behavioral Health Unit Leader	Clinical Support Unit Leader	Patient Registration Unit Leader	Infrastructure Branch Director	Power Lighting Unit Leader	Water Sewer Unit Leader	HVAC Unit Leader
Training Module #	*Training Module Title*	Module Location															
	California Health Alert Network (CAHAN) Alerting Level	Contact LHD EP	M	R	R	R	R	R	M	R	R	R	R	M	R	R	R
	California Emergency Operations Manual (EOM) / MHOAC Training	Contact LHD EP	M	R	R	R	R	R	R	R	R	R	R	R	R	R	R
IS 100.b	Intro to ICS	FEMA ISP	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
IS 100.HCb	Intro to ICS for Healthcare/Hospitals	FEMA ISP	M	R	R	R	R	R	R	R	R	R	R	R	R	R	R
IS 200.b	ICS for Single Resources and Initial Action Incidents	FEMA ISP	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
IS-200.HCa	Applying ICS to Healthcare Organizations	FEMA ISP	M	R	R	R	R	R	R	R	R	R	R	R	R	R	R
	HICS	contact local health department Emergency preparedness	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
IS-700.a	NIMS: An Introduction	FEMA ISP	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
IS-800.b	National Response Framework: An Introduction	FEMA ISP	R														
ICS 300	Intermediate ICS for Expanding Incidents	CalOES	M	R	M	R	M	R	M	R	R	R	R	R	R	R	R
ICS 400	Advanced ICS	CalOES	M	R	R	R	R		M	R	R	R	R	R			
IS-201	Forms Used for Incident Action Plan Development	FEMA ISP	M	R	R	R	M	R	M	R	R	M	M	M	R	R	R
IS-27	Orientation to FEMA Logistics	FEMA ISP	R														
IS 120.a	Introduction to Exercises	FEMA ISP	M	M	R	R	R		M	R	R	R		M	R	R	R
1042337	Introduction to Risk Communication	MRC Train	R						R		R						
1040832	Risk Communication: Advanced Track	MRC Train	R						R		R						
1046401	Risk Communications (Basics of PH Awareness)	MRC Train	R						R		R						

		HICS Job Positions for ICS - *Operations Section*															
			Operations Chief	Staging Manager	Personnel Staging Team Leader	Vehicle Staging Team Leader	Equipment /Supply Staging Team Leader	Medication Staging Team Leader	Medical Care Branch Director	Inpatient Unit Leader	Behavioral Health Unit Leader	Clinical Support Unit Leader	Patient Registration Unit Leader	Infrastructure Branch Director	Power Lighting Unit Leader	Water Sewer Unit Leader	HVAC Unit Leader
1046310	Crisis & Emergency Risk Communication Course (CERC)	MRC Train	R						R								
G290	Crisis Communications	CalOES	R		R				R	R	R						
IS-42	Social Media in Emergency Management	FEMA ISP	M	M	M	M	M	R	M		M	M	M	M	R	R	R
PER 304	Social Media for Disaster Response & Recovery	CalOES	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1044945	Packing Your Digital Go Bag: Essential Disaster Health Information on Your Mobile Device	MRC Train	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
IS-242.b	Effective Communication	FEMA ISP	M	R	R	R	R	R	M	R	M	R	M	M			
webcast November 8, 2007	Risk Communication & Psychosocial Issues in Radiation Events	Albany	R		R				R	R	R	R					
MGT 318	Public Information in All Hazards Incidents	CalOES	R						R								
	Terrorism, Preparedness, & Public Health: An Introduction	Albany	R														
UACPHP-200	Introduction to Environmental Health Microbiology and Communicable Disease Control	Foundations of Public Health (Empire State Public Health Training)	R					R	M	M		R		R	R	R	R
	Preparedness & Community Response to Pandemics	Albany	R					R	R	R	R	R	R				
	Emergency Preparedness Training for Hospital Clinicians	Albany	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
	Detecting Bioterror (Forensic Epidemiology)	Albany	R						R	R	R			R		R	R
IS 33.14	Initial Ethics Orientation	FEMA ISP	M	R	R		R	R	M	M	M	M	R	R			
1042278	Ethics in Public Health Emergencies	MRC Train	R					R	R	R	R	R					

		HICS Job Positions for ICS - *Operations Section*															
			Operations Chief	Staging Manager	Personnel Staging Team Leader	Vehicle Staging Team Leader	Equipment /Supply Staging Team Leader	Medication Staging Team Leader	Medical Care Branch Director	Inpatient Unit Leader	Behavioral Health Unit Leader	Clinical Support Unit Leader	Patient Registration Unit Leader	Infrastructure Branch Director	Power Lighting Unit Leader	Water Sewer Unit Leader	HVAC Unit Leader
1042347	Ethics and Public Health: How Public Health Reacts Ethically in a Disaster	MRC Train	R						R	R	R						
webcast June 12, 2008	Adapting Standards of Care Under Extreme Conditions	University at Albany School of Public Health Center of Public Health Preparedness	R					R	R	R	R						
IS-35.14	FEMA Safety Orientation 2014	FEMA ISP	M	M	M	M	M	M	M	M	R	R	R	M	M	M	M
IS-454	Fundamentals of Rick Management	FEMA ISP	M	M	R	R	R	M	M	R	M	R	R	M	R	R	R
IS-37	Managerial Safety & Health	FEMA ISP	M	R	R				M		M	M		M			
1033768	New Strategies for Reducing Responder Rick	MRC Train	R		R			R	R	R	R	R	R	R			
1046406	Occupational Health for Public Health Responders	MRC Train	R	R	R	R	R	R	R	R		R		R	R	R	R
1046400	Responder Health & Safety	MRC Train	M		M				M	R	R	R		M			
1029987	PPE	MRC Train	M		M		M		M	M		R		M		R	R
IS 106.14	Workplace Violence Awareness Training 2014	FEMA ISP	M	R	M	M	M	M	M	M	M	R	R	M	M	M	M
IS-907	Active Shooter: What You Can Do	FEMA ISP	M	R	R	R	R	R	M	M	M	R	R	M	R	R	R
IS-230.d	Fundamentals of Emergency Management	FEMA ISP	R						R					R			
IS-235.b	Emergency Planning	FEMA ISP	R						R					R			
IS-240.b	Leadership & Influence	FEMA ISP	M						M	R	M			R			
1047089	Disaster 101: An immersive emergency preparedness and crisis leadership Workshop	MRC Train	R														
1029866	Crisis Leadership: Leadership at the Speed of Light	MRC Train	R						R	R	R						
	What Followers Want from Leaders	CDC Train	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R

		HICS Job Positions for ICS - *Operations Section*															
			Operations Chief	Staging Manager	Personnel Staging Team Leader	Vehicle Staging Team Leader	Equipment /Supply Staging Team Leader	Medication Staging Team Leader	Medical Care Branch Director	Inpatient Unit Leader	Behavioral Health Unit Leader	Clinical Support Unit Leader	Patient Registration Unit Leader	Infrastructure Branch Director	Power Lighting Unit Leader	Water Sewer Unit Leader	HVAC Unit Leader
IS-241.b	Decision Making & Problem Solving	FEMA ISP	M						M		R	R	R	R			
HCL	Healthcare leadership for Mass Casualty Incidents	CDP	R						R								
HERT	Hospital Emergency Response Training for Mass Casualty Incidents	CDP	R						R								
IS-405	Overview of Mass Care/Emergency Assistance	FEMA ISP	M	R	R	R	R	R	M	M	M	M	M	M			
	Special Medical Needs Shelters	Albany	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
IS-244.b	Developing & Managing Volunteers	FEMA ISP	M	R	M	R	R	R	M	M	M	R	M	M	R	R	R
1040830	Working with Health and Medical Volunteers	MRC Train	R	R	M		M		M	M	M	M	M				
IS-288	The Role of Voluntary Agencies in Emergency Management	FEMA ISP	M		M		M	M	M	R	M		M	R			
IS-366	Planning for the Needs for Children in Disasters	FEMA ISP	M		M		R	M	M	M	M	R	M	R			
MGT 439	Pediatric Disaster Response and Emergency Preparedness	CalOES	R						M	M	M	M	M				
1047369	Psychosocial Impacts of Disasters on Children	MRC Train	R						R	R	M	R	R				
	Psychosocial Impact of Disasters on Children	NCDMPH	R						R	R	R	R	R				
1047388	Radiation Disaster Issues in Children: An Approach to the Patient	MRC Train	R	R	R		R		R	R	R	R	R	R		R	R
	Radiation Disaster Issues in Children: An Approach to the Patient	NCDMPH	R					R	R	R	R	R	R				
	Tracking & Reunification of Children in Disasters: A Lesson & Reference for Health Professionals	NCDMPH	R						R	R	R	R	R				

		HICS Job Positions for ICS - *Operations Section*															
			Operations Chief	Staging Manager	Personnel Staging Team Leader	Vehicle Staging Team Leader	Equipment /Supply Staging Team Leader	Medication Staging Team Leader	Medical Care Branch Director	Inpatient Unit Leader	Behavioral Health Unit Leader	Clinical Support Unit Leader	Patient Registration Unit Leader	Infrastructure Branch Director	Power Lighting Unit Leader	Water Sewer Unit Leader	HVAC Unit Leader
IS-368	Including People with Disabilities & Others with Access and Functional Needs in Disaster Operations	FEMA ISP	M		M		M	M	M	M	M	R	R	M			
1042176	Functional and Access Needs: Preparedness & Recovery Issues	MRC Train	R	R	R		R	R	M	M	M	M	M	M		R	R
L197	Integrating Access and Functional Needs into Emergency Planning	CalOES	R	R	R		R	R	R	R	R	R	R	R		R	R
webcast May 8, 2008	Addressing At-Risk Populations in Emergency Preparedness Planning	Albany	R					R	R	R	R	R	R	R		R	R
1042279	Vulnerable Populations in an Emergency	MRC Train	M					R	M	M	M	R	R	R	R	R	R
1046407	Working with Community Partners	MRC Train	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
IS-403	Introduction to Individual Assistance	FEMA ISP	R										R				
IS-551	Devolution Planning	FEMA ISP	M	M	M	M	M	R	M	R	M	R	R	R	R	R	R
IS-808	ESF#8: Public Health & Medical Services	FEMA ISP	R						R								
IS-2900	National Disaster Recovery Framework Overview	FEMA ISP	R						R								
1029725	ABCs of Pandemic Influenza	MRC Train	R					R	R	R	R	R		R		R	R
P3	Pandemic Planning and Preparedness	CDP	R						R								
	How Do Viral Epidemics Emerge?	CDC Train	R						R	R	R	R	R	R		R	R
	Emerging Infectious Diseases	CDC Train	R					R	R	R	R	R				R	
	An Introduction to Infectious Diseases	CDC Train	R	R	R	R	R	R	M	M	R	R	R	R		R	R
1042727	Transportation of Infectious Substances	MRC Train	R	R	R	M	M	R	R	R		R		M		M	M
1037542	Basic Epidemiology	MRC Train	R					R	M	M		R	R	R		R	R
1042281	Isolation and Quarantine	MRC Train	M		M		M		M	M		M	M	M		M	M

		HICS Job Positions for ICS - *Operations Section*															
			Operations Chief	Staging Manager	Personnel Staging Team Leader	Vehicle Staging Team Leader	Equipment /Supply Staging Team Leader	Medication Staging Team Leader	Medical Care Branch Director	Inpatient Unit Leader	Behavioral Health Unit Leader	Clinical Support Unit Leader	Patient Registration Unit Leader	Infrastructure Branch Director	Power Lighting Unit Leader	Water Sewer Unit Leader	HVAC Unit Leader
1030369	Recognition & Management of Bioterrorist Agents: An Overview	MRC Train	R			R	R		R	R	R	R		R	R	R	R
1029859	Chemical Terrorism: Introduction & Classification / Chemical Weapons: Basic Concepts	MRC Train	M					R	M	R	R	R		R		R	R
1029861	Chemical Weapons: Protection Basics	MRC Train	M		R	R	R	R	M	M	R	M	R	M		R	R
1029860	Chemical Weapons: Detection Basics	MRC Train	R											R		R	R
EMO	Emergency Medical Operations for CBRNE Incidents	CDP	R						R		R			R			
MGT 348	Medical Preparedness & Response to Bombing Incidents	CalOES	R					R	M	R	R						
1048614	HAZMAT for Healthcare Providers: Awareness Level	MRC Train	M	R	R	R	R	R	M	M	R	M	R	M	M	M	M
1048621	HAZMAT for Healthcare Providers: Operations Level	MRC Train	M	R	R	R	R	R	M	M	R	R	R	M	M	M	M
1048051	Introduction to Mental Health Preparedness	MRC Train	R		R				R	R	M	R					
1042053	Responding to a Crisis: Managing Emotions & Stress	MRC Train	R		R				R	R	M						
1030050	Self-Care for Disaster Responders	MRC Train	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1042290	Stress Recognition & Management During Disaster Response	MRC Train	R						R	R	M		R				
IS-276	Benefit-Cost Analysis (BCA) Fundamentals	FEMA ISP	R											R			
1042283	Liability & Immunity in Public Health Emergencies	MRC Train	R		R			R	R	R	R	R		R			
	Public Health & the Law: An Emergency Preparedness Training Kit	NACCHO	R						R								

		HICS Job Positions													
			Building / Grounds Unit Leader	Medical Gases Unit Leader	Security Branch Director	Access Control Unit Leader	Traffic Control Unit Leader	Hazmat Branch Director	Business Continuity Branch Director	IT Systems & Communications Unit Leader	Services Continuity Unit Leader	Records Management Unit Leader	Patient Family Assistance Branch Director	Family Reunification Unit Leader	Social Services Unit Leader
Training Module #	*Training Module Title*	Module Location													
	California Health Alert Network (CAHAN) Alerting Level	Contact LHD EP	R	R	M	R	R	R	R	R	R	R	R	R	R
	California Emergency Operations Manual (EOM) / MHOAC Training	Contact LHD EP	R	R	R	R	R	R	R	R	R	R	R	R	R
IS 100.b	Intro to ICS	FEMA ISP	M	M	M	M	M	M	M	M	M	M	M	M	M
IS 100.HCb	Intro to ICS for Healthcare/Hospitals	FEMA ISP	R	R	R	R	R	R	R	R	R	R	R	R	R
IS 200.b	ICS for Single Resources and Initial Action Incidents	FEMA ISP	M	M	M	M	M	M	M	M	M	M	M	M	M
IS-200.HCa	Applying ICS to Healthcare Organizations	FEMA ISP	R	R	R	R	R	R	R	R	R	R	R	R	R
	HICS	contact local health department Emergency preparedness	M	M	M	M	M	M	M	M	M	M	M	M	M
IS-700.a	NIMS: An Introduction	FEMA ISP	M	M	M	M	M	M	M	M	M	M	M	M	M
IS-800.b	National Response Framework: An Introduction	FEMA ISP						R	R						
ICS 300	Intermediate ICS for Expanding Incidents	CalOES	R	R	M	R	R	M	R	M	M	M	R	R	M
ICS 400	Advanced ICS	CalOES			M	R		M	R	R	R	R	R	R	R
IS-201	Forms Used for Incident Action Plan Development	FEMA ISP	R	R	R	R	R	M	M	M	R	M	M	M	M
IS-27	Orientation to FEMA Logistics	FEMA ISP													
IS 120.a	Introduction to Exercises	FEMA ISP	R	R	M	R	R	M	M	M	R	M	R	R	R
1042337	Introduction to Risk Communication	MRC Train						R		R	R		R		
1040832	Risk Communication: Advanced Track	MRC Train			R			R					R	R	R
1046401	Risk Communications (Basics of PH Awareness)	MRC Train			R			R					R	R	R

		HICS Job Positions													
			Building / Grounds Unit Leader	Medical Gases Unit Leader	Security Branch Director	Access Control Unit Leader	Traffic Control Unit Leader	Hazmat Branch Director	Business Continuity Branch Director	IT Systems & Communications Unit Leader	Services Continuity Unit Leader	Records Management Unit Leader	Patient Family Assistance Branch Director	Family Reunification Unit Leader	Social Services Unit Leader
1046310	Crisis & Emergency Risk Communication Course (CERC)	MRC Train			M			M	R	M	R		M	M	M
G290	Crisis Communications	CalOES			R			R		R			R	R	R
IS-42	Social Media in Emergency Management	FEMA ISP	R	R	M	M	M	M	R	M	M		M	M	M
PER 304	Social Media for Disaster Response & Recovery	CalOES	R	R	R	R	R	R	R	R	R	R	R	R	R
1044945	Packing Your Digital Go Bag: Essential Disaster Health Information on Your Mobile Device	MRC Train	R	R	R	R	R	R	R	R	R	R	R	R	R
IS-242.b	Effective Communication	FEMA ISP			M	R		M	M	M	M	R	M	M	M
webcast November 8, 2007	Risk Communication & Psychosocial issues in Radiation Events	Albany			R	R		R		R	R		R	R	R
MGT 318	Public Information in All Hazards Incidents	CalOES			R					R	R	R	R	R	R
	Terrorism, Preparedness, & Public Health: An Introduction	Albany			R										
UACPHP-200	Introduction to Environmental Health Microbiology and Communicable Disease Control	Foundations of Public Health (Empire State Public Health Training)	R	R	R			R							
	Preparedness & Community Response to Pandemics	Albany						R	R		R	R	R	R	R
	Emergency Preparedness Training for Hospital Clinicians	Albany	R	R	R	R	R	R	R	R	R	R	R	R	R
	Detecting Bioterror (Forensic Epidemiology)	Albany	R	R	R	R	R	R							
IS 33.14	Initial Ethics Orientation	FEMA ISP			R	R		R		R	R		R	R	R
1042278	Ethics in Public Health Emergencies	MRC Train						R	R				M	M	M

		HICS Job Positions													
			Building / Grounds Unit Leader	Medical Gases Unit Leader	Security Branch Director	Access Control Unit Leader	Traffic Control Unit Leader	Hazmat Branch Director	Business Continuity Branch Director	IT Systems & Communications Unit Leader	Services Continuity Unit Leader	Records Management Unit Leader	Patient Family Assistance Branch Director	Family Reunification Unit Leader	Social Services Unit Leader
IS-241.b	Decision Making & Problem Solving	FEMA ISP			R			M	R	R	R		R	R	R
HCL	Healthcare leadership for Mass Casualty Incidents	CDP													
HERT	Hospital Emergency Response Training for Mass Casualty Incidents	CDP													
IS-405	Overview of Mass Care/Emergency Assistance	FEMA ISP	M		M	M	R	M	M	M	M	M	M	M	M
	Special Medical Needs Shelters	Albany	R	R	R	R	R	R	R	R	R	R	R	R	R
IS-244.b	Developing & Managing Volunteers	FEMA ISP	R	R	M	M	M	M	M	R	R	M	R	R	M
1040830	Working with Health and Medical Volunteers	MRC Train			M	R	R	R			R	R	R	R	M
IS-288	The Role of Voluntary Agencies in Emergency Management	FEMA ISP			R	R		R	R		M	R	M	M	M
IS-366	Planning for the Needs for Children in Disasters	FEMA ISP		M	M	M		R					M	M	M
MGT 439	Pediatric Disaster Response and Emergency Preparedness	CalOES			R			R					M	M	M
1047369	Psychosocial Impacts of Disasters on Children	MRC Train											M	M	M
	Psychosocial Impact of Disasters on Children	NCDMPH			R			R					R	R	R
1047388	Radiation Disaster Issues in Children: An Approach to the Patient	MRC Train	R		R	R	R	R			R				
	Radiation Disaster Issues in Children: An Approach to the Patient	NCDMPH						R					R	R	R
	Tracking & Reunification of Children in Disasters: A Lesson & Reference for Health Professionals	NCDMPH			R	R		R		R	R	R	R	R	R

		HICS Job Positions													
			Building / Grounds Unit Leader	Medical Gases Unit Leader	Security Branch Director	Access Control Unit Leader	Traffic Control Unit Leader	Hazmat Branch Director	Business Continuity Branch Director	IT Systems & Communications Unit Leader	Services Continuity Unit Leader	Records Management Unit Leader	Patient Family Assistance Branch Director	Family Reunification Unit Leader	Social Services Unit Leader
IS-368	Including People with Disabilities & Others with Access and Functional Needs in Disaster Operations	FEMA ISP	M	M	M	M	M	R			R		M	R	M
1042176	Functional and Access Needs: Preparedness & Recovery Issues	MRC Train	R	R	R	R	R	R	R	R	R		M	R	M
L197	Integrating Access and Functional Needs into Emergency Planning	CalOES	R	R	R	R	R	R		R	R		R	R	R
webcast May 8, 2008	Addressing At-Risk Populations in Emergency Preparedness Planning	Albany	R	R	R	R	R	R			R		R	R	R
1042279	Vulnerable Populations in an Emergency	MRC Train	R	R	R	R	R	R			R		R	R	M
1046407	Working with Community Partners	MRC Train	R	R	R	R	R	R	R	R	R		R	R	M
IS-403	Introduction to Individual Assistance	FEMA ISP							M		M	R	M	R	M
IS-551	Devolution Planning	FEMA ISP	R		R			M	M	R	M	M	M	M	M
IS-808	ESF#8: Public Health & Medical Services	FEMA ISP													
IS-2900	National Disaster Recovery Framework Overview	FEMA ISP						R	R						
1029725	ABCs of Pandemic Influenza	MRC Train	R	R				R					R		R
P3	Pandemic Planning and Preparedness	CDP													
	How Do Viral Epidemics Emerge?	CDC Train	R	R	R	R	R	R	R	R	R	R	R	R	R
	Emerging Infectious Diseases	CDC Train	R	R	R	R		R			R		R	R	R
	An Introduction to Infectious Diseases	CDC Train	R	M	R	R	R	R	R	R	R	R	R	R	R
1042727	Transportation of Infectious Substances	MRC Train	M		M	M	M	M			R				
1037542	Basic Epidemiology	MRC Train	R	R				R					R		R
1042281	Isolation and Quarantine	MRC Train	M	M	M	M	R	M	R	R	M		R	R	R

		HICS Job Positions													
			Building / Grounds Unit Leader	Medical Gases Unit Leader	Security Branch Director	Access Control Unit Leader	Traffic Control Unit Leader	Hazmat Branch Director	Business Continuity Branch Director	IT Systems & Communications Unit Leader	Services Continuity Unit Leader	Records Management Unit Leader	Patient Family Assistance Branch Director	Family Reunification Unit Leader	Social Services Unit Leader
1030369	Recognition & Management of Bioterrorist Agents: An Overview	MRC Train	R	R	R	R	R	R		R	R				
1029859	Chemical Terrorism: Introduction & Classification / Chemical Weapons: Basic Concepts	MRC Train	R	R	R	R		M			R		R	R	R
1029861	Chemical Weapons: Protection Basics	MRC Train	R	R	M	R	R	M	R		R		R	R	R
1029860	Chemical Weapons: Detection Basics	MRC Train	R		R	R		M							
EMO	Emergency Medical Operations for CBRNE Incidents	CDP			R			R					R		
MGT 348	Medical Preparedness & Response to Bombing Incidents	CalOES			M	R	R	M		R	R		R	R	R
1048614	HAZMAT for Healthcare Providers: Awareness Level	MRC Train	M	R	M	M	M	M	R	R	M	R	R	R	R
1048621	HAZMAT for Healthcare Providers: Operations Level	MRC Train	M	R	M	M	M	M	R	R	R	R	R	R	R
1048051	Introduction to Mental Health Preparedness	MRC Train											M	M	R
1042053	Responding to a Crisis: Managing Emotions & Stress	MRC Train			R								M	M	R
1030050	Self-Care for Disaster Responders	MRC Train	R	R	R	R	R	R							
1042290	Stress Recognition & Management During Disaster Response	MRC Train							R				R	R	R
IS-276	Benefit-Cost Analysis (BCA) Fundamentals	FEMA ISP			R			M	M	R					
1042283	Liability & Immunity in Public Health Emergencies	MRC Train			R				R	R	R	R	R	R	R
	Public Health & the Law: An Emergency Preparedness Training Kit	NACCHO													

	HICS job positions for ACS Logistics Staff		Logistics Section Chief	Service Branch Director	Communications Unit Leader	IT Equipment Unit Leader	Food Service Unit Leader	Support Branch Director	Employee Health & Well-Being Director	Supply Unit Leader	Transportation Unit Leader	Labor Pool / Credentials Unit Leader	Employee Family Care Unit Leader
Training Module #	***Training Module Title***	**Module Location**											
	California Health Alert Network (CAHAN) Alerting Level	Contact LHD EP	M	M	M	M	M	M	M	M	M	M	M
	California Emergency Operations Manual (EOM) / MHOAC Training	Contact LHD EP	M	M	M	M	M	M	M	M	M	M	M
IS 100.b	Intro to ICS	FEMA ISP	M	M	M	M	M	M	M	M	M	M	M
IS 100.HCb	Intro to ICS for Healthcare/Hospitals	FEMA ISP	M	R	R	R	R	R	R	R	R	R	R
	HICS	contact local health department Emergency preparedness	R	R	R	R	R	R	R	R	R	R	R
IS 200.b	ICS for Single Resources and Initial Action Incidents	FEMA ISP	M	M	M	M	M	M	M	M	M	M	M
IS-200.HCa	Applying ICS to Healthcare Organizations	FEMA ISP	M	R	R	R	R	R	R	R	R	R	R
IS-700.a	NIMS: An Introduction	FEMA ISP	M	M	M	M	M	M	M	M	M	M	M
IS-800.b	National Response Framework: An Introduction	FEMA ISP	M	M	M	M	M	M	M	M	M	M	M
ICS 300	Intermediate ICS for Expanding Incidents	CalOES	M	R	M	R	R	R	R	M	M	M	R
ICS 400	Advanced ICS	CalOES	M	R	R	R	R	R	R	R	R	R	R
	Curriculum Recommendations for Disaster Healthcare Professionals	National Center for Disaster Medicine & Public Health	R	R	R	R	R	R	R	R	R	R	R
IS-27	Orientation to FEMA Logistics	FEMA ISP	M	R	R	R	R	R	R	R	R	R	R
IS-29	PIO Awareness	FEMA ISP	R										
MGT 318	Public Information in All Hazards Incidents	CalOES	R	M	M	M			M				

	HICS job positions for ACS Logistics Staff		Logistics Section Chief	Service Branch Director	Communications Unit Leader	IT Equipment Unit Leader	Food Service Unit Leader	Support Branch Director	Employee Health & Well-Being Director	Supply Unit Leader	Transportation Unit Leader	Labor Pool / Credentials Unit Leader	Employee Family Care Unit Leader
IS-42	Social Media in Emergency Management	FEMA ISP	R	R	M	M	R	R	R	R	R	R	R
IS-702.a	NIMS: Public Information Systems		R	R	M	R			R			R	R
1042337	Introduction to Risk Communication	MRC Train	R	R	R	R		R	R				R
G290	Crisis Communications	CalOES	R	R	M	M		R	R				
1046310	Crisis & Emergency Risk Communication Course (CERC)	MRC Train	M	R	M	M	R	R	R	R	R	M	M
1040832	Risk Communication: Advanced Track	MRC Train	R		R	R						R	R
1046401	Risk Communications (Basics of PH Awareness)	MRC Train	M	R	M	M	R	R	R	R	R	M	M
webcast November 8, 2007	Risk Communication & Psychosocial issues in Radiation Events	Albany	R	R	M			R	M			R	M
IS-242.b	Effective Communication	FEMA ISP	R	R	M	R	R	R	M	R	R	R	M
IS-250.a	ESF 15 External Affairs: A New Approach in Emergency Communication & Info Distribution	FEMA ISP	R	R	M	M							
webcast April 10, 2008	Alternative Marketing & Messaging to Prepare Vulnerable Populations	Albany	R	R	M			R	M			M	M
1044945	Packing Your Digital Go Bag: Essential Disaster Health Information on Your Mobile Device	MRC Train	R	R	M	M	R	R	R	R	R	R	R
PER 304	Social Media for Disaster Response & Recovery	CalOES	R	R	M	M	R	R	M			R	M
1046407	Working with Community Partners	MRC Train	M	M	M	R	M	M	M	M	M	M	M
IS 33.14	Initial Ethics Orientation	FEMA ISP	R						R			R	R

	HICS job positions for ACS Logistics Staff		Logistics Section Chief	Service Branch Director	Communications Unit Leader	IT Equipment Unit Leader	Food Service Unit Leader	Support Branch Director	Employee Health & Well-Being Director	Supply Unit Leader	Transportation Unit Leader	Labor Pool / Credentials Unit Leader	Employee Family Care Unit Leader
1042278	Ethics in Public Health Emergencies	MRC Train	R	R	R		R	R	M			R	M
1042347	Ethics and Public Health: How Public Health Reacts Ethically in a Disaster	MRC Train	M	M	M			M	M			R	M
webcast June 12, 2008	Adapting Standards of Care Under Extreme Conditions	University at Albany School of Public Health Center of Public Health Preparedness	R	R	R			R	M				
IS-35.14	FEMA Safety Orientation 2014	FEMA ISP	R	R			R				R	R	
IS-454	Fundamentals of Risk Management	FEMA ISP	M	R	R	R	R	M	M	R	R	M	R
IS-37	Managerial Safety & Health	FEMA ISP	M	R			R	R	M		R	M	R
1033768	New Strategies for Reducing Responder Risk	MRC Train	R	R	R	R	R	R	M			R	R
1046406	Occupational Health for Public Health Responders	MRC Train	R	R			R	R	M		R	M	R
1029987	PPE	MRC Train	M	M	M	M	M	M	M	M	M	M	M
1046400	Responder Health & Safety	MRC Train	M	M			M	M	M			M	R
IS 106.14	Workplace Violence Awareness Training 2014	FEMA ISP	M	R	R	M	M	M	M	R	M	M	M
IS-907	Active Shooter: What You Can Do	FEMA ISP	M	M	M	M	M	M	M	R	M	M	M
IS 120.a	Introduction to Exercises	FEMA ISP	R										
IS-201	Forms Used for Incident Action Plan Development	FEMA ISP	M	M	M	R	R	R	R	M	M	M	R
IS-230.d	Fundamentals of Emergency Management	FEMA ISP	R	R	R	R		R		R		R	R
IS-235.b	Emergency Planning	FEMA ISP	R										
IS-240.b	Leadership & Influence	FEMA ISP	R					R	R			R	R

	HICS job positions for ACS Logistics Staff		Logistics Section Chief	Service Branch Director	Communications Unit Leader	IT Equipment Unit Leader	Food Service Unit Leader	Support Branch Director	Employee Health & Well-Being Director	Supply Unit Leader	Transportation Unit Leader	Labor Pool / Credentials Unit Leader	Employee Family Care Unit Leader
1047089	Disaster 101: An immersive emergency preparedness and crisis leadership Workshop	MRC Train	R		R			R	M			R	M
1029866	Crisis Leadership: Leadership at the Speed of Light	MRC Train	R	R	R	R		R	M			R	R
	What Followers Want from Leaders	CDC Train	R	R	R	R	R	R	R	R	R	R	R
IS-241.b	Decision Making & Problem Solving	FEMA ISP	R	R	R	R	R	R	R	R	R	R	R
IS-244.b	Developing & Managing Volunteers	FEMA ISP	M	R	R	R	M	M	M	R	R	M	M
1040830	Working with Health and Medical Volunteers	MRC Train	M	M	R	R	M	M	M			M	M
IS-288	The Role of Voluntary Agencies in Emergency Management	FEMA ISP	M	M	R		R	M	M	M	M	M	M
HCL	Healthcare leadership for Mass Casualty Incidents	CDP	R	R	R			R	M			R	R
IS-366	Planning for the Needs for Children in Disasters	FEMA ISP	R		R		R	R	R			R	R
1047369	Psychosocial Impacts of Disasters on Children	MRC Train							R				M
1047388	Radiation Disaster Issues in Children: An Approach to the Patient	MRC Train	R	R				R	R			R	R
	Tracking & Reunification of Children in Disasters: A Lesson & Reference for Health Professionals	NCDMPH	R	R	R	R		R	M				M
	Radiation Disaster Issues in Children: An Approach to the Patient	NCDMPH	R	R				R	R				R
	Psychosocial Impact of Disasters on Children	NCDMPH	R	R	R			R	M				M

	HICS job positions for ACS Logistics Staff		Logistics Section Chief	Service Branch Director	Communications Unit Leader	IT Equipment Unit Leader	Food Service Unit Leader	Support Branch Director	Employee Health & Well-Being Director	Supply Unit Leader	Transportation Unit Leader	Labor Pool / Credentials Unit Leader	Employee Family Care Unit Leader
IS-368	Including People with Disabilities & Others with Access and Functional Needs in Disaster Operations	FEMA ISP	M	M	M	M	M	M	M	R	M	M	M
1042176	Functional and Access Needs: Preparedness & Recovery Issues	MRC Train	M	M	M	M	M	M	M	M	M	M	M
1042279	Vulnerable Populations in an Emergency	MRC Train	R	M	M	R	M	M	M			R	M
L197	Integrating Access and Functional Needs into Emergency Planning	CalOES	M	M	M	M	M	M	M	R	R	M	M
webcast May 8, 2008	Addressing At-Risk Populations in Emergency Preparedness Planning	Albany	M	M	M	M	M	M	M		R	M	M
IS-403	Introduction to Individual Assistance	FEMA ISP	R	R				M	M				M
IS-405	Overview of Mass Care/Emergency Assistance	FEMA ISP	R	M	F	F	M	M	M	F	F	M	M
	Special Medical Needs Shelters	Albany	R	R	R	R	R	R	R	R	R	R	R
IS-808	ESF#8: Public Health & Medical Services	FEMA ISP	R	R	R	R	R	R	R	R	R	R	R
IS-2900	National Disaster Recovery Framework Overview	FEMA ISP	R	R	R	R	R	R	R	R	R	R	R
IS-551	Devolution Planning	FEMA ISP	M	M	M	M	M	M	M	M	M	M	M
1029725	ABCs of Pandemic Influenza	MRC Train	R	R	R	R	R	R	R	R	R	R	R
	How Do Viral Epidemics Emerge?	CDC Train	R	R	R	R	R	R	M	R	R	R	R
	Emerging Infectious Diseases	CDC Train	R	R	R	R	R	R	R	R	R	R	R
	An Introduction to Infectious Diseases	CDC Train	R	R	R	R	M	R	M	R	R	R	R
P3	Pandemic Planning and Preparedness	CDP	R	R	R	R	R	R	R	R	R	R	R
	Preparedness & Community Response to Pandemics	Albany	R	R	R	R	R	R	R	R	R	R	R

	HICS job positions for ACS Logistics Staff		Logistics Section Chief	Service Branch Director	Communications Unit Leader	IT Equipment Unit Leader	Food Service Unit Leader	Support Branch Director	Employee Health & Well-Being Director	Supply Unit Leader	Transportation Unit Leader	Labor Pool / Credentials Unit Leader	Employee Family Care Unit Leader
	Emergency Preparedness Training for Hospital Clinicians	Albany	R	R	R	R	R	R	R	R	R	R	R
1037542	Basic Epidemiology	MRC Train	R	R		R	M	R	M	R	R	M	M
1042281	Isolation and Quarantine	MRC Train	M	M	M	R	M	M	M			M	M
	Detecting Bioterror (Forensic Epidemiology)	Albany	R	R	R	R	M	R	M	R	R	M	R
1030369	Recognition & Management of Bioterrorist Agents: An Overview	MRC Train	M	M			R	R	M			M	
1042727	Transportation of Infectious Substances	MRC Train	M	M			M	M			M	M	
EMO	Emergency Medical Operations for CBRNE Incidents	CDP	R	R	R	R		R	M	R	R	M	R
HERT	Hospital Emergency Response Training for Mass Casualty Incidents	CDP	M	R	M	M	R	M	M	M	M	M	,\M
	Terrorism, Preparedness, & Public Health: An Introduction	Albany	R	R	R	R	R	R	R	R	R	R	R
MGT 348	Medical Preparedness & Response to Bombing Incidents	CalOES	R	R	R	R		R	M		R	R	R
1029859	Chemical Terrorism: Introduction & Classification / Chemical Weapons: Basic Concepts	MRC Train	R	R	R	R	R	R	R	R	R	R	R
1029861	Chemical Weapons: Protection Basics	MRC Train	M	R	R	R	M	M	M	M	M	M	M
1029860	Chemical Weapons: Detection Basics	MRC Train	M	R			R	M	M		R		
1048614	HAZMAT for Healthcare Providers: Awareness Level	MRC Train	M	M	M	M	M	M	M	M	M	M	M
1048621	HAZMAT for Healthcare Providers: Operations Level	MRC Train	M	M				R	R	M	R	R	R
1048051	Introduction to Mental Health Preparedness	MRC Train	R					R	M				M

	HICS job positions for ACS Logistics Staff		Logistics Section Chief	Service Branch Director	Communications Unit Leader	IT Equipment Unit Leader	Food Service Unit Leader	Support Branch Director	Employee Health & Well-Being Director	Supply Unit Leader	Transportation Unit Leader	Labor Pool / Credentials Unit Leader	Employee Family Care Unit Leader
1042053	Responding to a Crisis: Managing Emotions & Stress	MRC Train	R	R	R	R	R	R	M	R	R	M	M
1030050	Self-Care for Disaster Responders	MRC Train	R	R	R	R	R	R	R	R	R	R	R
1042290	Stress Recognition & Management During Disaster Response	MRC Train	R	R	R	R	R	R	M	R	R	M	M
IS-276	Benefit-Cost Analysis (BCA) Fundamentals	FEMA ISP	R					R		R			
1042283	Liability & Immunity in Public Health Emergencies	MRC Train	M	R	M	M		M	M		M	M	M
	Experience												

	HICS job positions for ACS -- Planning Staff		Planning Section Chief	Resources Unit Leader	Personnel Tracking Manag	Materiel Tracking Manage	Situation Unit Leader	Patient Tracking Manager	Bed Tracking Manager	Documentation Unit Leade	Demobilization Unit Leade
Training Module #	*Training Module Title*	Module Location									
	California Health Alert Network (CAHAN) Alerting Level	Contact LHD EP	R	R	R	R	R	R	R	R	R
	California Emergency Operations Manual (EOM) / MHOAC Training	Contact LHD EP	R	R	R	R	R	R	R	R	R
IS 100.b	Intro to ICS	FEMA ISP	M	M	M	M	M	M	M	M	M
IS 100.HCb	Intro to ICS for Healthcare/Hospitals	FEMA ISP	M	M	M	M	M	M	M	M	M
	HICS	contact local health department Emergency preparedness	M	M	M	M	M	M	M	M	M
IS 200.b	ICS for Single Resources and Initial Action Incidents	FEMA ISP	M	M	M	M	M	M	M	M	M
IS-200.HCa	Applying ICS to Healthcare Organizations	FEMA ISP	M	M	M	M	M	M	M	M	M
IS-700.a	NIMS: An Introduction	FEMA ISP	M	M	M	M	M	M	M	M	M
IS-800.b	National Response Framework: An Introduction	FEMA ISP	R	R	R	R	R	R	R	R	R
ICS 300	Intermediate ICS for Expanding Incidents	CalOES	M	R	R	R	M	R	R	M	M
ICS 400	Advanced ICS	CalOES	M	R	R	R	R	R	R	M	M

	HICS job positions for ACS -- Planning Staff		Planning Section Chief	Resources Unit Leader	Personnel Tracking Manag	Materiel Tracking Manage	Situation Unit Leader	Patient Tracking Manager	Bed Tracking Manager	Documentation Unit Leade	Demobilization Unit Lead
IS-201	Forms Used for Incident Action Plan Development	FEMA ISP	M	M	M	M	M	M	M	M	M
IS-235.b	Emergency Planning	FEMA ISP	M	R	R	R	R	R	R	R	R
IS-551	Devolution Planning	FEMA ISP	M	M	M	M	R	M	M		M
IS 120.a	Introduction to Exercises	FEMA ISP	M	M	M	M	M	R	R	M	M
IS-230.d	Fundamentals of Emergency Management	FEMA ISP	M	R	R	R	R	R	R	R	R
	Curriculum Recommendations for Disaster Healthcare Professionals	National Center for Disaster Medicine & Public Health	R	R	R	R	R	R	R	R	R
IS-242.b	Effective Communication	FEMA ISP	R	R	R	R	R	R	R	R	R
IS-42	Social Media in Emergency Management	FEMA ISP	R	M	M	M	M	M	M	M	R
IS-250.a	ESF 15 External Affairs: A New Approach in Emergency Communication & Info Distribution	FEMA ISP	R	R	R	R	M	R	R	R	R
IS-702.a	NIMS: Public Information Systems		R	R			R				
1046310	Crisis & Emergency Risk Communication Course (CERC)	MRC Train	R				M				R
1042337	Introduction to Risk Communication	MRC Train	M	M	M	M	M	M	M		M
1040832	Risk Communication: Advanced Track	MRC Train	R	R	R	R	M				R
1046401	Risk Communications (Basics of PH Awareness)	MRC Train	R	R	R	R	R	R	R	R	R

	HICS job positions for ACS -- Planning Staff		Planning Section Chief	Resources Unit Leader	Personnel Tracking Mana	Materiel Tracking Manage	Situation Unit Leader	Patient Tracking Manager	Bed Tracking Manager	Documentation Unit Lead	Demobilization Unit Lead
G290	Crisis Communications	CalOES	R	R	R	R	M	R	R		R
PER 304	Social Media for Disaster Response & Recovery	CalOES	R	R	R	R	M	R	R		M
MGT 318	Public Information in All Hazards Incidents	CalOES	R				M				
1044945	Packing Your Digital Go Bag: Essential Disaster Health Information on Your Mobile Device	MRC Train	R	R	R	R	M	R	R	R	R
webcast April 10, 2008	Alternative Marketing & Messaging to Prepare Vulnerable Populations	Albany					M				R
webcast November 8, 2007	Risk Communication & Psychosocial issues in Radiation Events	Albany	R				R				R
IS 33.14	Initial Ethics Orientation	FEMA ISP	M	R							
1042278	Ethics in Public Health Emergencies	MRC Train	M	R	R		R	R	R		R
1042347	Ethics and Public Health: How Public Health Reacts Ethically in a Disaster	MRC Train	M	R	R	R	R	R	R		R
webcast June 12, 2008	Adapting Standards of Care Under Extreme Conditions	Albany	M	R	R		M	M	M		
IS-35.14	FEMA Safety Orientation 2014	FEMA ISP	R								R
IS-37	Managerial Safety & Health	FEMA ISP	M								
IS-454	Fundamentals of Risk Management	FEMA ISP	M		R	R	M	R	R		R
1033768	New Strategies for Reducing Responder Risk	MRC Train	M		R		R	R	R		R
1046406	Occupational Health for Public Health Responders	MRC Train	M		M		M	M	M		M

	HICS job positions for ACS -- Planning Staff		Planning Section Chief	Resources Unit Leader	Personnel Tracking Manag	Materiel Tracking Manage	Situation Unit Leader	Patient Tracking Manager	Bed Tracking Manager	Documentation Unit Leade	Demobilization Unit Lead
1046400	Responder Health & Safety	MRC Train	M		M		R	M	R		M
1029987	PPE	MRC Train	M	M	M	M	M	M	M	M	M
IS 106.14	Workplace Violence Awareness Training 2014	FEMA ISP	M	M	M	R	M	R	R	R	R
IS-907	Active Shooter: What You Can Do	FEMA ISP	M	M	M	M	M	M	M	M	M
IS-240.b	Leadership & Influence	FEMA ISP	M	R	R	R	R	R	R	R	R
1029866	Crisis Leadership: Leadership at the Speed of Light	MRC Train	M	R	R	R	R	R	R		R
	What Followers Want from Leaders	CDC Train	M								R
1047089	Disaster 101: An immersive emergency preparedness and crisis leadership Workshop	MRC Train	M	R		R	R				
IS-241.b	Decision Making & Problem Solving	FEMA ISP	M	R	R	R	R	R	R	R	R
IS-403	Introduction to Individual Assistance	FEMA ISP		M			R				R
IS-405	Overview of Mass Care/Emergency Assistance	FEMA ISP	M	M	M	M	M	M	M	M	M
	Special Medical Needs Shelters	Albany	M	R	R	R	M	M	M		R
IS-244.b	Developing & Managing Volunteers	FEMA ISP	M	R	M	R	R	R	R	R	R
IS-288	The Role of Voluntary Agencies in Emergency Management	FEMA ISP	R	R	M	R	R	R	R	R	M
1040830	Working with Health and Medical Volunteers	MRC Train	M	R	M	R	M	R	R	R	M
1046407	Working with Community Partners	MRC Train	M	R	R	R	M	R	R		M
IS-36	Multihazard Planning for Childcare	FEMA ISP	M	R							
IS-366	Planning for the Needs for Children in Disasters	FEMA ISP	M	M	M			M	M		

	HICS job positions for ACS -- Planning Staff		Planning Section Chief	Resources Unit Leader	Personnel Tracking Manag	Materiel Tracking Manage	Situation Unit Leader	Patient Tracking Manager	Bed Tracking Manager	Documentation Unit Leade	Demobilization Unit Leade
1047388	Radiation Disaster Issues in Children: An Approach to the Patient	MRC Train	R	R		R	R	R	R		R
MGT 439	Pediatric Disaster Response and Emergency Preparedness	CalOES	M	R	R	R	M	M	M		R
	Tracking & Reunification of Children in Disasters: A Lesson & Reference for Health Professionals	NCDMPH	M				R	M			R
	Radiation Disaster Issues in Children: An Approach to the Patient	NCDMPH	R					R	R		
	Psychosocial Impact of Disasters on Children	NCDMPH	R				R				R
1047369	Psychosocial Impacts of Disasters on Children	MRC Train	M	R	R		M	R	R		R
IS-368	Including People with Disabilities & Others with Access and Functional Needs in Disaster Operations	FEMA ISP	M	M	M	R	R	M	M		R
webcast May 8, 2008	Addressing At-Risk Populations in Emergency Preparedness Planning	Albany	M	R	R	R	M	M	M		R
1042176	Functional and Access Needs: Preparedness & Recovery Issues	MRC Train	M	M	R	R	M	M	M		R
1042279	Vulnerable Populations In an Emergency	MRC Train	M	R	M	R	M	R	R		M
L197	Integrating Access and Functional Needs into Emergency Planning	CalOES	M	R	R	R	M	M	M		M
HCL	Healthcare leadership for Mass Casualty Incidents	CDP	R	R	R	R	R	R	R	R	R

	HICS job positions for ACS -- Planning Staff		Planning Section Chief	Resources Unit Leader	Personnel Tracking Mana	Materiel Tracking Manage	Situation Unit Leader	Patient Tracking Manager	Bed Tracking Manager	Documentation Unit Lead	Demobilization Unit Lead
HERT	Hospital Emergency Response Training for Mass Casualty Incidents	CDP	R	R	R	R	R	R	R	R	R
	How Do Viral Epidemics Emerge?	CDC Train	R	R	R	R	R	M	M	R	R
	Emerging Infectious Diseases	CDC Train	R	R	R	R	M	R	R	R	R
	An Introduction to Infectious Diseases	CDC Train	R	R	R	R	M	M	M	R	R
1029725	ABCs of Pandemic Influenza	MRC Train	M	R	R	R	M	M	M		R
P3	Pandemic Planning and Preparedness	CDP	R	R	R	R	R	R	R	R	R
1037542	Basic Epidemiology	MRC Train	M	M	M	M	M	M	M	R	M
1042281	Isolation and Quarantine	MRC Train	M	M	M	M	M	M	M		M
1042727	Transportation of Infectious Substances	MRC Train	M	M		M	M				M
UACPHP-200	Introduction to Environmental Health Microbiology and Communicable Disease Control	Foundations of Public Health (Empire State Public Health Training)	M	R	R	R	M	M	M		
	Preparedness & Community Response to Pandemics	Albany	R	R	R	R	M	R	R		R
	Emergency Preparedness Training for Hospital Clinicians	Albany	R	R	R	R	R	R	R	R	R
	Detecting Bioterror (Forensic Epidemiology)	Albany	R	R	R	R	M	R	R		R
MGT 348	Medical Preparedness & Response to Bombing Incidents	CalOES	M	R	R	R	M	R	R	R	M

	HICS job positions for ACS -- Planning Staff		Planning Section Chief	Resources Unit Leader	Personnel Tracking Manag	Materiel Tracking Manage	Situation Unit Leader	Patient Tracking Manager	Bed Tracking Manager	Documentation Unit Leade	Demobilization Unit Lead
EMO	Emergency Medical Operations for CBRNE Incidents	CDP	M	R			M				M
	Terrorism, Preparedness, & Public Health: An Introduction	Albany	R		R		R	R	R		R
1029859	Chemical Terrorism: Introduction & Classification / Chemical Weapons: Basic Concepts	MRC Train	M	R	R	R	M	R	R	R	R
1029861	Chemical Weapons: Protection Basics	MRC Train	M	M	M	M	M	R	R		M
1048614	HAZMAT for Healthcare Providers: Awareness Level	MRC Train	M	M	M	M	R	R	R	R	R
1048621	HAZMAT for Healthcare Providers: Operations Level	MRC Train	M	M	R	M	R	R	R	R	
1029860	Chemical Weapons: Detection Basics	MRC Train	R	R		R	M	R	R		R
1030369	Recognition & Management of Bioterrorist Agents: An Overview	MRC Train	M	R	R	R	M				R
1048051	Introduction to Mental Health Preparedness	MRC Train	R		R		R	R	R		M
1042053	Responding to a Crisis: Managing Emotions & Stress	MRC Train	R	R	R	R	R	R	R	R	R
1030050	Self-Care for Disaster Responders	MRC Train	R	R	R	R	R	R	R	R	R
1042290	Stress Recognition & Management During Disaster Response	MRC Train	R	R	M	R	M	R	R		M
IS-27	Orientation to FEMA Logistics	FEMA ISP	R	M	R	M					M
IS-276	Benefit-Cost Analysis (BCA) Fundamentals	FEMA ISP	M	M							

	HICS job positions for ACS -- Planning Staff		Planning Section Chief	Resources Unit Leader	Personnel Tracking Manag	Materiel Tracking Manage	Situation Unit Leader	Patient Tracking Manager	Bed Tracking Manager	Documentation Unit Leade	Demobilization Unit Leade
IS-808	ESF#8: Public Health & Medical Services	FEMA ISP	R	R	R	R	R	R	R	R	R
IS-2900	National Disaster Recovery Framework Overview	FEMA ISP	R	R	R	R	R	R	R	R	R
1042283	Liability & Immunity in Public Health Emergencies	MRC Train	M								
L950	NIMS ICS All Hazards Incident Commander	CalOES	R								
	Public Health & the Law: An Emergency Preparedness Training Kit	NACCHO	M								

HICS job positions for ACS -- Finance Section			Finance / Administration Section Chief	Time Unit Leader	Procurement Unit Leader	Compensation / Claims Unit Leader	Cost Unit Leader
Training Module #	*Training Module Title*	Module Location					
	California Health Alert Network (CAHAN) Alerting Level	Contact LHD EP	R	R	R	R	R
	California Emergency Operations Manual (EOM) / MHOAC Training	Contact LHD EP	R	R	R	R	R
IS 100.b	Intro to ICS	FEMA ISP	M	M	M	M	M
IS 100.HCb	Intro to ICS for Healthcare/Hospitals	FEMA ISP	M	R	R	R	R
IS 200.b	ICS for Single Resources and Initial Action Incidents	FEMA ISP	M	M	M	M	M
IS-200.HCa	Applying ICS to Healthcare Organizations	FEMA ISP	R	R	R	R	R
	HICS	contact local health department Emergency preparedness	M	M	M	M	M
IS-700.a	NIMS: An Introduction	FEMA ISP	M	M	M	M	M
IS-800.b	National Response Framework: An Introduction	FEMA ISP	R	R	R	R	R
IS-201	Forms Used for Incident Action Plan Development	FEMA ISP	M	M	M	M	M
ICS 300	Intermediate ICS for Expanding Incidents	CalOES	R	R	R	R	R

HICS job positions for ACS -- Finance Section			Finance / Administration Section Chief	Time Unit Leader	Procurement Unit Leader	Compensation / Claims Unit Leader	Cost Unit Leader
ICS 400	Advanced ICS	CalOES	R	R	R	R	R
IS 120.a	Introduction to Exercises	FEMA ISP	R	R	R	R	R
IS-276	Benefit-Cost Analysis (BCA) Fundamentals	FEMA ISP	M	M	M	M	M
IS-551	Devolution Planning	FEMA ISP	M	R	R	M	R
1042283	Liability & Immunity in Public Health Emergencies	MRC Train	M			M	
IS-242.b	Effective Communication	FEMA ISP	R	R	R	R	R
IS-250.a	ESF 15 External Affairs: A New Approach in Emergency Communication & Info Distribution	FEMA ISP	R				
1046401	Risk Communications (Basics of PH Awareness)	MRC Train	R			M	
1044945	Packing Your Digital Go Bag: Essential Disaster Health Information on Your Mobile Device	MRC Train	R	R	R	R	R
G290	Crisis Communications	CalOES	R		R	R	R
PER 304	Social Media for Disaster Response & Recovery	CalOES	R	R	R	R	R
MGT 318	Public Information in All Hazards Incidents	CalOES	R				
webcast April 10, 2008	Alternative Marketing & Messaging to Prepare Vulnerable Populations	Albany	R				

HICS job positions for ACS -- Finance Section			Finance / Administration Section Chief	Time Unit Leader	Procurement Unit Leader	Compensation / Claims Unit Leader	Cost Unit Leader
IS-42	Social Media in Emergency Management	FEMA ISP	R		R		
webcast November 8, 2007	Risk Communication & Psychosocial issues in Radiation Events	Albany				R	
IS 33.14	Initial Ethics Orientation	FEMA ISP	M	R	R	R	R
1042278	Ethics in Public Health Emergencies	MRC Train	R	R	R	M	R
1042347	Ethics and Public Health: How Public Health Reacts Ethically in a Disaster	MRC Train	M			M	
webcast June 12, 2008	Adapting Standards of Care Under Extreme Conditions	University at Albany School of Public Health Center of Public Health Preparedness	M	R	R	M	R
IS-35.14	FEMA Safety Orientation 2014	FEMA ISP	R		R	R	R
IS-37	Managerial Safety & Health	FEMA ISP	M			M	
IS-454	Fundamentals of Risk Management	FEMA ISP	M	R	R	M	R
1033768	New Strategies for Reducing Responder Risk	MRC Train	R	R		M	
1046406	Occupational Health for Public Health Responders	MRC Train	R	R	R	M	R
1029987	PPE	MRC Train	M	M	M	M	M

HICS job positions for ACS -- Finance Section			Finance / Administration Section Chief	Time Unit Leader	Procurement Unit Leader	Compensation / Claims Unit Leader	Cost Unit Leader
1046400	Responder Health & Safety	MRC Train	R			M	
IS-230.d	Fundamentals of Emergency Management	FEMA ISP	R				
IS-235.b	Emergency Planning	FEMA ISP	R				
IS-240.b	Leadership & Influence	FEMA ISP	R				
IS-241.b	Decision Making & Problem Solving	FEMA ISP	M				
1047089	Disaster 101: An immersive emergency preparedness and crisis leadership Workshop	MRC Train	R				
1029866	Crisis Leadership: Leadership at the Speed of Light	MRC Train	R			R	
	What Followers Want from Leaders	CDC Train	M				
	Curriculum Recommendations for Disaster Healthcare Professionals	National Center for Disaster Medicine & Public Health	R	R	R	R	R
IS 106.14	Workplace Violence Awareness Training 2014	FEMA ISP	M	R	R	R	R
IS-907	Active Shooter: What You Can Do	FEMA ISP	R	R	R	R	R
IS-405	Overview of Mass Care/Emergency Assistance	FEMA ISP	M	R	R	R	R
	Special Medical Needs Shelters	Albany	M	M	M	M	M

HICS job positions for ACS -- Finance Section			Finance / Administration Section Chief	Time Unit Leader	Procurement Unit Leader	Compensation / Claims Unit Leader	Cost Unit Leader
IS-403	Introduction to Individual Assistance	FEMA ISP	M	R	R	M	R
HCL	Healthcare leadership for Mass Casualty Incidents	CDP	R				
HERT	Hospital Emergency Response Training for Mass Casualty Incidents	CDP	M	M	M	M	M
IS-244.b	Developing & Managing Volunteers	FEMA ISP	M	M		M	
IS-288	The Role of Voluntary Agencies in Emergency Management	FEMA ISP	R	R	R	R	R
1040830	Working with Health and Medical Volunteers	MRC Train	R	R	R	R	R
1046407	Working with Community Partners	MRC Train	R	R	R	R	R
IS-366	Planning for the Needs for Children in Disasters	FEMA ISP	M				
1047369	Psychosocial Impacts of Disasters on Children	MRC Train				R	
1047388	Radiation Disaster Issues in Children: An Approach to the Patient	MRC Train	R			M	
MGT 439	Pediatric Disaster Response and Emergency Preparedness	CalOES	R		R	R	

HICS job positions for ACS -- Finance Section			Finance / Administration Section Chief	Time Unit Leader	Procurement Unit Leader	Compensation / Claims Unit Leader	Cost Unit Leader
IS-368	Including People with Disabilities & Others with Access and Functional Needs in Disaster Operations	FEMA ISP	R	R	R	R	R
1042176	Functional and Access Needs: Preparedness & Recovery Issues	MRC Train	M	M	R	M	
1042279	Vulnerable Populations In an Emergency	MRC Train	R	R	R	R	R
L197	Integrating Access and Functional Needs into Emergency Planning	CalOES	R	R	R	R	R
webcast May 8, 2008	Addressing At-Risk Populations in Emergency Preparedness Planning	Albany	M	R	R	M	R
1029725	ABCs of Pandemic Influenza	MRC Train	R	R	R	R	R
1037542	Basic Epidemiology	MRC Train	R	R	R	R	R
1042281	Isolation and Quarantine	MRC Train	R	R	R	R	R
1030369	Recognition & Management of Bioterrorist Agents: An Overview	MRC Train	R		R		
MGT 348	Medical Preparedness & Response to Bombing Incidents	CalOES	R	R	R	R	R
EMO	Emergency Medical Operations for CBRNE Incidents	CDP	R	R	R	R	R

HICS job positions for ACS -- Finance Section			Finance / Administration Section Chief	Time Unit Leader	Procurement Unit Leader	Compensation / Claims Unit Leader	Cost Unit Leader
P3	Pandemic Planning and Preparedness	CDP	M	R	R	R	R
1042727	Transportation of Infectious Substances	MRC Train	R		R		
UACPHP-200	Introduction to Environmental Health Microbiology and Communicable Disease Control	Foundations of Public Health (Empire State Public Health Training)	R	R	R	M	R
	Terrorism, Preparedness, & Public Health: An Introduction	Albany	R	R	R	R	R
	Preparedness & Community Response to Pandemics	Albany	R	R	R	R	R
	Emergency Preparedness Training for Hospital Clinicians	Albany	R	R	R	R	R
	Detecting Bioterror (Forensic Epidemiology)	Albany		R	R	R	R
	How Do Viral Epidemics Emerge?	CDC Train	R	R	R	M	R
	Emerging Infectious Diseases	CDC Train	R	R	R	R	R
	An Introduction to Infectious Diseases	CDC Train	R	R	R	R	R
1029859	Chemical Terrorism: Introduction & Classification / Chemical Weapons: Basic Concepts	MRC Train	R	R	R	R	R

HICS job positions for ACS -- Finance Section			Finance / Administration Section Chief	Time Unit Leader	Procurement Unit Leader	Compensation / Claims Unit Leader	Cost Unit Leader
1029860	Chemical Weapons: Detection Basics	MRC Train	R		R		
1029861	Chemical Weapons: Protection Basics	MRC Train	R	R	R	R	R
1048614	HAZMAT for Healthcare Providers: Awareness Level	MRC Train	R	R	R	R	R
1042053	Responding to a Crisis: Managing Emotions & Stress	MRC Train	R			R	
1030050	Self-Care for Disaster Responders	MRC Train	R	R	R	R	R
1042290	Stress Recognition & Management During Disaster Response	MRC Train	M				
IS-808	ESF#8: Public Health & Medical Services	FEMA ISP	R	R	R	R	R
IS-2900	National Disaster Recovery Framework Overview	FEMA ISP	M	M	M	M	M
	Public Health & the Law: An Emergency Preparedness Training Kit	NACCHO	M			M	

Individual Training Tracker for ACS Staffing Matrix		Please Print
Name		
Current Job Position		
Work Phone		
Work e-mail		
Mailing Address Street		
Mailing Address City, Zip (auto-fill)		
Emergency Contact		
Preferred phone contact #		
Text? Y/N		
Preferred e-mail contact		
Credentials (credential, expiration date, issuer):		
Training Completed (enter month/year if known):		
Training Module #	***Training Module Title***	
	California Health Alert Network (CAHAN) Alerting Level	
	California Emergency Operations Manual (EOM) / MHOAC Training	
IS-27	Orientation to FEMA Logistics	
IS-29	PIO Awareness	
IS 33.14	Initial Ethics Orientation	
IS-35.14	FEMA Safety Orientation 2014	
IS-36	Multihazard Planning for Childcare	
IS-37	Managerial Safety & Health	
IS-42	Social Media in Emergency Management	
IS 100.b	Intro to ICS	
IS 100.HCb	Intro to ICS for Healthcare/Hospitals	
IS 106.14	Workplace Violence Awareness Training 2014	
IS 120.a	Introduction to Exercises	
IS 200.b	ICS for Single Resources and Initial Action Incidents	
IS-200.HCa	Applying ICS to Healthcare Organizations	
IS-201	Forms Used for Incident Action Plan Development	
IS-230.d	Fundamentals of Emergency Management	
IS-235.b	Emergency Planning	
IS-240.b	Leadership & Influence	
IS-241.b	Decision Making & Problem Solving	
IS-242.b	Effective Communication	
IS-244.b	Developing & Managing Volunteers	

Individual Training Tracker for ACS Staffing Matrix		Please Print
Name		
IS-250.a	ESF 15 External Affairs: A New Approach in Emergency Communication & Info Distribution	
IS-276	Benefit-Cost Analysis (BCA) Fundamentals	
IS-288	The Role of Voluntary Agencies in Emergency Management	
IS-315	CERT Supplemental Training: ICS	
IS-317	Introduction to CERT	
IS-366	Planning for the Needs for Children in Disasters	
IS-368	Including People with Disabilities & Others with Access and Functional Needs in Disaster Operations	
IS-403	Introduction to Individual Assistance	
IS-405	Overview of Mass Care/Emergency Assistance	
IS-454	Fundamentals of Risk Management	
IS-551	Devolution Planning	
IS-700.a	NIMS: An Introduction	
IS-702.a	NIMS: Public Information Systems	
IS-800.b	National Response Framework: An Introduction	
IS-808	ESF#8: Public Health & Medical Services	
IS-907	Active Shooter: What You Can Do	
IS-2900	National Disaster Recovery Framework Overview	
1029725	ABCs of Pandemic Influenza	
1037542	Basic Epidemiology	
1029859	Chemical Terrorism: Introduction & Classification / Chemical Weapons: Basic Concepts	
1029861	Chemical Weapons: Protection Basics	
1046310	Crisis & Emergency Risk Communication Course (CERC)	
1047089	Disaster 101: An immersive emergency preparedness and crisis leadership Workshop	
1042278	Ethics in Public Health Emergencies	
1042176	Functional and Access Needs: Preparedness & Recovery Issues	
1048614	HAZMAT for Healthcare Providers: Awareness Level	
1048621	HAZMAT for Healthcare Providers: Operations Level	
1048051	Introduction to Mental Health Preparedness	
1042337	Introduction to Risk Communication	

Individual Training Tracker for ACS Staffing Matrix		Please Print
Name		
1042281	Isolation and Quarantine	
1033768	New Strategies for Reducing Responder Risk	
1046406	Occupational Health for Public Health Responders	
1029987	PPE	
1047369	Psychosocial Impacts of Disasters on Children	
1046400	Responder Health & Safety	
1042053	Responding to a Crisis: Managing Emotions & Stress	
1040832	Risk Communication: Advanced Track	
1046401	Risk Communications (Basics of PH Awareness)	
1030050	Self-Care for Disaster Responders	
1042290	Stress Recognition & Management During Disaster Response	
1042279	Vulnerable Populations in an Emergency	
1046407	Working with Community Partners	
1040830	Working with Health and Medical Volunteers	
1042727	Transportation of Infectious Substances	
1029860	Chemical Weapons: Detection Basics	
1029866	Crisis Leadership: Leadership at the Speed of Light	
1042347	Ethics and Public Health: How Public Health Reacts Ethically in a Disaster	
1042283	Liability & Immunity in Public Health Emergencies	
1030369	Recognition & Management of Bioterrorist Agents: An Overview	
1044945	Packing Your Digital Go Bag: Essential Disaster Health Information on Your Mobile Device	
1047388	Radiation Disaster Issues in Children: An Approach to the Patient	
L197	Integrating Access and Functional Needs into Emergency Planning	
L950	NIMS ICS All Hazards Incident Commander	
L954	NIMS ICS All Hazards Safety Officer	
G290	Crisis Communications	
PER 304	Social Media for Disaster Response & Recovery	
ICS 300	Intermediate ICS for Expanding Incidents	
ICS 400	Advanced ICS	
MGT 318	Public Information in All Hazards Incidents	
MGT 348	Medical Preparedness & Response to Bombing Incidents	

Individual Training Tracker for ACS Staffing Matrix		Please Print
Name		
MGT 439	Pediatric Disaster Response and Emergency Preparedness	
APIOHHE	Advanced PIO: Health & Hospital Emergencies	
EMO	Emergency Medical Operations for CBRNE Incidents	
HCL	Healthcare leadership for Mass Casualty Incidents	
HERT	Hospital Emergency Response Training for Mass Casualty Incidents	
P3	Pandemic Planning and Preparedness	
	Public Health & the Law: An Emergency Preparedness Training Kit	
UACPHP-200	Introduction to Environmental Health Microbiology and Communicable Disease Control	
webcast June 12, 2008	Adapting Standards of Care Under Extreme Conditions	
webcast May 8, 2008	Addressing At-Risk Populations in Emergency Preparedness Planning	
webcast April 10, 2008	Alternative Marketing & Messaging to Prepare Vulnerable Populations	
webcast November 8, 2007	Risk Communication & Psychosocial issues in Radiation Events	
	Terrorism, Preparedness, & Public Health: An Introduction	
	Preparedness & Community Response to Pandemics	
	Emergency Preparedness Training for Hospital Clinicians	
	Detecting Bioterror (Forensic Epidemiology)	
	Special Medical Needs Shelters	
	HICS	
	How Do Viral Epidemics Emerge?	
	Emerging Infectious Diseases	
	An Introduction to Infectious Diseases	
	What Followers Want from Leaders	
	Curriculum Recommendations for Disaster Healthcare Professionals	
	Tracking & Reunification of Children in Disasters: A Lesson & Reference for Health Professionals	

Individual Training Tracker for ACS Staffing Matrix		Please Print
Name		
	Radiation Disaster Issues in Children: An Approach to the Patient	
	Psychosocial Impact of Disasters on Children	
Experience		(event / date / comments)
	Command Staff	
Incident Commander		
Public Information Officer (PIO)		
Liaison Officer		
Safety Officer		
Medical Specialist		
	Field of Study:	
	Infectious Disease	
	Other	
	Pediatrics	
	Ethicist	
Technical Specialist		
	Field of Study:	
	Chemical	
	Radiological	
	Legal Affairs	
	Risk Management	
	Operations	
Operations Chief		
Staging Manager		
Personnel Staging Team Leader		
Vehicle Staging Team Leader		
Equipment /Supply Staging Team Leader		
Medication Staging Team Leader		
Medical Care Branch Director		
Inpatient Unit Leader		
Behavioral Health Unit Leader		
Clinical Support Unit Leader		
Patient Registration Unit Leader		
Infrastructure Branch Director		
Power Lighting Unit Leader		
Water Sewer Unit Leader		
HVAC Unit Leader		
Building / Grounds Unit Leader		
Medical Gases Unit Leader		
Security Branch Director		
Access Control Unit Leader		
Traffic Control Unit Leader		
Hazmat Branch Director		

Individual Training Tracker for ACS Staffing Matrix		Please Print
Name		
Business Continuity Branch Director		
IT Systems & Communications Unit Leader		
Services Continuity Unit Leader		
Records Management Unit Leader		
Patient Family Assistance Branch Director		
Family Reunification Unit Leader		
Social Services Unit Leader		
	Logistics	
Logistics Section Chief		
Service Branch Director		
Communications Unit Leader		
IT Equipment Unit Leader		
Food Service Unit Leader		
Support Branch Director		
Employee Health & Well-Being Director		
Supply Unit Leader		
Transportation Unit Leader		
Labor Pool / Credentials Unit Leader		
Employee Family Care Unit Leader		
	Planning	
Planning Section Chief		
Resources Unit Leader		
Personnel Tracking Manager		
Materiel Tracking Manager		
Situation Unit Leader		
Patient Tracking Manager		
Bed Tracking Manager		
Documentation Unit Leader		
Demobilization Unit Leader		
	Finance	
Finance / Administration Section Chief		
Time Unit Leader		
Procurement Unit Leader		
Compensation / Claims Unit Leader		
Cost Unit Leader		
		ICS Staffing Matrix - Jean Roberts 2013

Appendix D: Subject Matter Expert Questionnaire and Responses

Questions

1. Are the job positions defined adequate to staff and operate an ACS for two to six weeks?

   ___Yes

   ___No

   If not, please describe what additional job positions are needed:

2. What job positions can be eliminated or consolidated?

3. For each job position, is the set of training, experience, and credentials (TEC) adequate to ensure the position is filled by a qualified individual?

   ___Yes

   ___No

   If not, please describe what additional TEC is needed:

4. Does any of the TEC defined require deletion or modification?

   ___Yes

   ___No

   If yes, please describe:

5. Does the differentiation between “suggested” TEC and “required” TEC need to be changed for any job position?

   ___Yes

   ___No

   If yes, please describe:

6. Please use this area to provide any additional suggestions you have regarding the matrix.

Subject Matter Expert Responses (Round 1)

SME #1 answered the questions as follows:

1. Yes.
2. Left blank.
3. Yes.
4. No.
5. No.
6. "The matrix is very flexible and can be easily adapted or customized to any alternative site."

SME #2 did not use the format provided to offer comment. However, SME #2 indicated that "There seems to be some overlap or duplicate types of training courses listed in the matrix," and offered comprehensive comments regarding refinements that might clarify and simplify the duplicate offerings for those employing the matrix.

SME #3 answered the questions as follows:

1. Yes.
2. "Too many leaders in Operations identified for a 50 bed ACS plus 24 hr staffing. The assumptions should allow the Branch Director to assume the duties of the Unit leader. "
3. Yes.
4. Yes. "Unable to determine the reference for the asterisks under the Mandatory category. For Command, IS106.14 should not be mandatory since

most managers and supervisors are already required to have workplace violence training. Suggest IS250.a, 120.a, 230.d-244.b be changed to R as these are routine for managers. IS276-317 could be eliminated as they are not critical to ACS operation. Special circumstances such as active shooter, bombing, pandemic, PH law, EH and HazMat could be eliminated for the same reason. If these situations occur there will be specialists available in these areas. Adapting Standards of Care should be mandatory as this will be a very likely scenario as resources become scarce. This may be addressed in the ethics courses as well. Personally I don't think FEMA logistics is all that critical during the event as long as extensive documentation is emphasized. Advanced ICS is probably only important for responders in the field, not so much for ACS operation. Benefit/Cost Analysis is important in planning and evaluation but not for the event. "

5. Yes. In my opinion there are too many M courses which will very likely become a barrier for completion of the most critical courses."

6. "I think it would help to group the trainings with similar or overlapping topics by color coding them. It would also assist leaders in course selection if the length of the course was included. I see this as being overwhelming for a busy health professional so anything you can do to simplify the selection process would make it more user friendly. It is great to have all the available training available in one resource. I really like your approach and particularly the tracking option. "

While the comments of the fourth SME could not be used because informed consent was not submitted, it should be noted that those comments closely paralleled some of the comments of SMEs #2 and #3.

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EDUCATION

DNP, University of Nevada, Las Vegas (graduation anticipated in May 2015)
MSN, California State University, Bakersfield, 2009
BSN, California State University, Bakersfield, 2008 (cum laude)
BA in English, California State University, Long Beach, 1981
AS in Human Biology, Bakersfield College, 2006
AAS in Police Science, Ft. Steilacoom Community (now Pierce) College, Tacoma, WA, 1977

CREDENTIALS / CERTIFICATIONS

California Board of Registered Nursing License 720840
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WORK EXPERIENCE

Kern County Department of Public Health, December 2009 to present. Public Health Nurse II (promoted from PHNI 03/2012). Public Health Nurse I (12/2009-03/2012). Currently assigned as a Nurse Case Manager with California Children's Services. Former positions: Supervisor of Emergency Preparedness (disaster response planning and related training and duties, supervision of six-person support staff, including Medical Reserve Corps Coordinator, inventory management and control, PHEP, HPP, and Pan Flu grant coordination, SNS Coordinator). District Nurse at Delano District Office. Chair and charter member, Provider Charting Committee (implementation project for computer software documentation program utilizing Omaha system). Education Liaison between department and facilities sending nursing students for completion of community health rotation. Member of MVCCP IT Work Group, Asthma Wellness Coordinator. Pilot study of a pediatric asthma wellness program as part of ELCAAP grant. Principal grant-writer on three grants (California Breathing and RAMP Legacy grants), participating writer in HRSA Patient Navigator Grant and other grant applications. Duties also have included combination immunization clinics, home visits with new mothers and high-risk infants, clients with communicable and chronic diseases, and other clients of public health services. Membership in various community collaborative and coalition organizations as a health department representative including Asthma Coalition of Kern County and Chair of the Rosedale Collaborative of Kern County Network for Children.

Member of Kern County Anesthesiology RFP Committee as one of two health department representatives and as sole health department representative on Kern County Mental Health RFP Committee. Participant in the 2014-15 Statewide Grant Workplan Development Committee as Region V representative.

Mercy Hospitals of Bakersfield, January 2009 to December 2009. Registered Nurse, working in the Intensive Care Units (ICU) of both Mercy Truxtun and Mercy Southwest Hospitals. Duties include care of patients hospitalized in the ICU environment.

Kern County Department of Public Health, February 2008 to November 2008. Junior Public Health Nurse, promoted to Public Health Nurse I in March 2008. Duties included home visits with new mothers and high-risk infants, clients with communicable disease, and other clients of public health services.

Self-employed, medical transcriber, from June of 1985 to October 31, 2013, with particular experience in workers compensation, orthopedics, pain management, outpatient surgery, periodontics, oncology, hematology, psychiatry/psychology, chiropractic, neurosurgery, rheumatology, ophthalmology, and podiatry.

Self-employed, bail agent, from 1991 to 1997 (licensed by State of California Department of Insurance).

Technical Writer/Administrative Marketing Support (Operations Supervisor), Custom Computer Services, Bakersfield, CA 93301 from September 1985 to September 1987. Duties included computer operation, development of user-level documentation, and assisting in a variety of administrative marketing tasks, including maintenance and programming of marketing data base, telemarketing, marketing publications.

Computer Services Coordinator, St. Mary Medical Center, Long Beach, CA 90801 from May 1984 to May 1985. Duties included coordination of computer services with user needs through feasibility studies; programming customized data bases and reports with report writer; training of in-house personnel in software applications; troubleshooting hardware and software failures; installation of software modifications; disk and tape copy; software upgrade installation; manual writing, preparation, and distribution; editing and preparing technical papers for staff. Promoted from Secretary II (October 1982 to May 1984). Promoted from Secretary I (August 1982 to October 1982). Publications included an in-house computer user newsletter and a self-training manual for the CT*OS word processing system (copyright 1984).

Instructor, California State University, Long Beach 90840 from September 1984 to May 1985 as part of the Teaching Master of Arts Candidate Program. Taught one class each semester of English 100, Composition.

Additional work experience: Records Clerk I (jail booking clerk); Financial Service Technician (welfare worker); United States Army; state police dispatcher; secretary; clerk typist; word processing instructor.

HONORS AND ACTIVITIES. President's and Dean's Lists throughout college. National Dean's List 1980-81, 1981-82. Charter member, Iota Pi Chapter of Sigma Tau Delta (National English Honors Society). Association of California Nurse Leaders, 2008-present (Events and Professional Practice Committees Member). Sigma Theta Tau, 2009-present (Events Committee Member). Kern County Public Health Nurse of the Year Nominee 2012.