

*Emergency management and disaster response in Hawaii:
The role of medical centers and the media*

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ABSTRACT

The research is an administrative case study based on an extensive review of Hawaii government documents and interviews with key personnel of the Hawaii Emergency Preparedness Committee (EPC), civil defense, and other relevant government officials. Interviews with key personnel at the major medical centers were also conducted as well as a survey of 80 percent of the local Hawaii-based TV news reporters. The study describes the interagency coordination at the federal, state, county, and community level to improve capability. Recommendations from the study included increased funding for family emergency preparedness and local community response teams and continuous training by emergency response coordinators to improve state and county disaster preparedness. The study also recommends collaboration with disaster-trained media reporters. The study concluded that, overall, Hawaii is adequately prepared in emergency response capability, particularly in the areas of medical services and interagency coordination, but coordination with the media reporting on disasters could be improved.

INTRODUCTION

The Oahu Civil Defense Agency (OCDA) is a department in the city and county of Honolulu and functions as the primary government agency for disaster response. The mayor acts as the CEO of OCDA. The mayor also has the power to declare a disaster. Disasters are county specific. Each county (i.e., Honolulu, Maui, Kauai, and Hawaii) individually determines what constitutes a disaster. For example, the island of Hawaii, may have volcano eruptions listed as a natural disaster, while Honolulu would not.

Disaster descriptions can also be localized to certain areas within a county and designated to the Local Emergency Planning Committee (LEPC). The LEPC is part of the city and county of Honolulu, as opposed to the state's Emergency Response Commission, which oversees the Hawaii State Civil Defense System. The state's primary responsibility is to provide leadership in rapid assistance during disasters with a full range of resources and effective partnerships. To advance this responsibility, the state of Hawaii hosted leaders from the public and private sectors to meet and develop innovative response strategies at the Inaugural Asia-Pacific Homeland Security Summit in Honolulu in November 2003.¹

THE EMERGENCY OPERATIONS PLAN

There are also federal requirements for each state to establish a community emergency response plan. The primary responsibility for compliance for the city of Honolulu is through the OCDA and their Emergency Operations Plan (EOP). The mayor must regularly report on the progress of various aspects of respective agencies such as the Environmental Protection Agency (EPA) and Occupational Safety and Health (OSHA). Both OSHA and the EPA have regulations to help protect workers with hazardous waste and emergency operations. The LEPC must develop a community emergency response plan (contingency plan) that contains emergency response methods and procedures to be followed by facility owners, police, hospitals, local emergency responders, and emergency medical personnel. The EPA generates the requirements and ensures that states implement emergency response planning programs. The state of Hawaii's Department of Labor and Industrial

Table 1. Disaster categories and types

Weather	Man-made	Transportation and communication	Medical	Major disturbance	Energy
Floods	Structure fire	Telephone system failure	Epidemic	Civil disturbance	Fuel shortage
Hurricanes	HAZMAT	Major road accidents	Mass poisoning	Subversion/sabotage	Major power failure
Earthquakes	Building collapse	Aircraft crash	Water supply contaminate	Labor unrest	
Brush or forest fire	Power failure		Major accidents	Bomb threats	
Volcano	Explosions				
Tidal wave	Terrorism				

Relations is one of only 25 state agencies to have an emergency response plan approved by OSHA.

All city departments follow the plans outlined in the city and county of Honolulu's EOP. For example, the OCDA has revised the plans for the Hazardous Materials/Weapons of Mass Destruction section in their EOP since the May 1999 emergency preparedness drill at Aloha Stadium. Once the EOP draft is approved by the mayor and city council, all county departments and coordinating county agencies follow suit. More recently, in May 2002, the Federal Emergency Management Agency (FEMA) conducted a full-scale HAZMAT field exercise at Campbell Industrial Park to test Honolulu's Hazardous Materials Response Plan. This exercise, named Operation Kalaeloa, involved over 2,000 participants including 13 of 18 of Oahu's hospitals and was a successful test of Hawaii's emergency response procedures and system.²

The OCDA facilitates communication, training, procedures, information, and responsibilities within the city and county of Honolulu and various private organizations. It also educates the public about emergency preparedness. Interviews with OCDA reveal that they are continuously reviewing, revising, and testing procedures outlined in the EOP. The administrator of

the OCDA works closely with and advises the mayor. The OCDA also has hundreds of volunteers.

THE EMERGENCY OPERATING CENTER

The Emergency Operating Center (EOC) is designed to coordinate emergency response including establishing operational policy, providing logistical and resource support, and enabling communications. Specifically, the EOC houses the communications system for the emergency broadcast system and a meeting area for the city and county of Honolulu's disaster committee to meet. During a real disaster or training exercise, the city and county's disaster committee gathers around a table equipped with a telephone at each seat. The mayor sits at one end of the table and the OCDA administrator at the other. Other representatives from various city and county of Honolulu departments occupy the rest of the table (e.g., fire, police, public works). The EOC also houses the communications and radio devices for Emergency Medical Services (EMS): hospitals, police, fire, utility companies; and federal, state, and other county agencies.

COMMUNITY EMERGENCY RESPONSE TEAM

FEMA, recognizing the importance of preparing citizens for a wide range of potential disasters,

expanded the Community Emergency Response Team (CERT) from primarily fire to medical and eventually all hazards, natural and man-made. The disaster categories and types are shown in Table 1.

FEMA supports CERT by conducting or sponsoring Train-the-Trainer sessions (TTT) for members of the fire, medical, and emergency management community. These trained members of the community can provide immediate assistance to victims in their area, organize spontaneous volunteers who have not had the training, and collect disaster intelligence that will assist professional responders with prioritization and allocation of resources following a disaster. According to the OCDA operations and planning director, many teams of Hawaii residents have participated in the various CERT training sessions since 1997. More importantly, neighborhoods that have CERT-trained teams have not only been made more aware of how to respond to disasters but have been more effective and efficient in their response to actual emergencies.

Communities that actively participate in the project are provided assistance to develop strategies to become more disaster resistant. The overall strategy involves coordination and a local partnership of government and business to reduce the human and financial cost of disasters. In Hawaii, the County of Maui and Hawaii County were selected by FEMA's Project Impact and are part of a growing list of specially designated "disaster resistant communities."

THE ROLE OF THE MEDICAL CENTERS

With 560 beds, the Queen's Medical Center (QMC) is the largest voluntary hospital and main trauma center in Hawaii. Founded in 1859 by Hawaiian royalty, it offers a comprehensive range of primary and specialized care services and plays a major role in the overall response to natural disasters and other emergencies in the state of Hawaii. The QMC currently has over 1,000 physicians on its staff, a total of 3,500 employees, and an annual budget of \$1 billion. The QMC's trauma facility has been verified as a level two trauma center by the Committee on Trauma of the American College of Surgeons, the national accrediting agency for trauma services.³

As a level two trauma center, certain essential services must be made available to the public. These include:⁴

- 24-hour immediate coverage by general surgeons and specialists in orthopedic and neurosurgery, anesthesiology, emergency medicine, radiology, and critical care;
- tertiary care needs, such as cardiac surgery, hemodialysis, and microvascular surgery, may be referred to a level one trauma center;
- an ongoing commitment to trauma prevention and to the continuing education of trauma team members; and
- continuous efforts to improve the quality and effectiveness of trauma care through a comprehensive quality assessment program.

At the hospital level, the QMC has its own emergency preparedness committee, which is responsible for developing and maintaining a system of emergency codes. When the appropriate code is activated (i.e., when an actual disaster or emergency has already occurred), a command center is created and headed by the administrative disaster officer at the medical center. When an event occurs, the QMC focuses primarily on:

- the number and types of victims coming into the hospital;
- internal problems at the hospital, including the possibility of risk through damage, contamination, etc.;
- optimizing patient outcomes; and
- assessing and improving risk management for similar incidents in the future.

The QMC has developed a comprehensive emergency safety manual, which contains detailed procedures for every unit of the hospital and for each kind of emergency. Currently, employees must respond to a monthly hospital-wide drill that uses a randomly selected emergency code. The results of the drills are reviewed by all three subcommittees and incorporated into the emergency preparedness recommendations they make to the board of trustees. According to Gary Dias, QMC's Security Director, the trauma center is prepared for the victims, and patients receive treatment as soon as they arrive. Internally, the hospital's emergency preparedness plan is activated and everything usually goes as planned.

From an overall assessment by the author, the major factors contributing to QMC's excellent track record when handling emergencies can be identified as:

- continuous evaluation and improvement of the *Emergency Preparedness Safety Manual*;
- the high priority QMC places on continuous disaster preparedness training for all of its employees;
- competency of staff and especially the Trauma Services Unit; and
- the highly effective coordination QMC has developed with outside agencies.

HEALTHCARE ASSOCIATION OF HAWAII

It has been proposed that emergency management is both proactive and reactive, and this realization applies to QMC in its efforts to coordinate with outside agencies.⁵ The primary means by which QMC achieves its coordination is through the Healthcare Association of Hawaii (HAH).

HAH is a nonprofit organization representing the state of Hawaii's acute care hospitals and two-thirds of the long-term care beds with a total of 41 facilities. HAH also represents community-based providers and many supporting organizations that provide services

and supplies to the industry. This includes the HAH Emergency Preparedness Committee (EPC), which is responsible for providing hospital services in support of the state civil defense system as cited in Hawaii's Disaster Relief Act⁶ and various federal, state, and county emergency response plans. The chair of the EPC is appointed by the CEO of HAH. Members are appointed by the CEO of their respective healthcare organization. The EPC coordinated "Island Crisis," a full-scale chemical terrorism response drill in May 1999. Fourteen hospitals participated of which five facilities demonstrated an ability to provide emergency casualty decontamination.

The Honolulu based EPC is unique in the nation. Its strength is the ability to bring all key stakeholders involved in healthcare emergency response into one well-aligned and well-coordinated system. Improvement opportunities include the need to further incorporate nonhospital organizations into the network more effectively and improve the professional development of hospital emergency coordinators. For example, a key player with EPC is Toby Clairmont, Vice President of Kaiser Permanente Medical Center in the state of Hawaii. During peacetime, he chairs the EPC and during wartime, when an emergency threatens or has occurred, he serves as the special staff officer for the Honolulu EOC coordinating all hospitals in the state of Hawaii. According to Vice President Clairmont, who has worked over 250 emergencies in the last 25 years ranging from multifamily structural fires to hurricanes, three critical factors in successfully responding to emergencies are 1) family emergency preparedness, 2) local community emergency response teams, and 3) well-trained organizational coordinators.

HAH includes among its affiliate members other organizations which support coordination in emergency response efforts such as Hawaii Air Ambulance and International Life Support, Inc. Moreover, a Web site was developed by the Emergency Preparedness Program (EPP) of HAH.⁷ It is designed to provide information and data management services to healthcare facility emergency managers in the state of Hawaii. These organizations include the American Red Cross, Hawaii State Civil Defense, OCDA, and

hotels, which are also members of Honolulu's disaster committee at the city and county levels of Honolulu's EOC. This coordination extends to the neighbor islands. For example, in June 2001, the West Hawaii branch of the American Red Cross provided disaster response training to community-based volunteers in Kona.⁸

Other organizations in the Network are Kaiser Medical Center, Kuakini Medical Center, St. Francis Medical Center, QMC, Tripler Army Medical Center, and the Blood Bank of Hawaii. It should be noted that the Blood Bank of Hawaii plays a vital role and designates 10 percent of all donated blood to disaster victims suffering from trauma.

THE ROLE OF THE MEDIA IN DISASTER RESPONSE

The impact of the media on emergency management is a topic of great concern during all phases of a disaster but is particularly critical during the important final phase of disaster preparedness and the initial phase of disaster response. Media reports help shape perceptions about how to prepare and respond to disasters, especially in the immediate post-impact stage of the disaster.

To obtain first-hand data on the role of the media during the critical phases of final disaster preparedness and initial disaster response, a survey of the TV news reporters (including the news anchors of the four major Hawaii-based TV stations) were surveyed during the month of November 2003. Forty reporters who responded to the survey represented approximately 80 percent of the reporters who report on disaster-related news stories in Hawaii. The TV reporters were asked the following three questions:

1. Following a major disaster, do you feel the news media is more interested in actual damage or human-related type stories?
2. In the rush to get the headline story, do you think the news media omits critical facts that could or might help other individuals?
3. When selecting the story line after a disaster has already occurred, do you think

the news media is responsible for broadcasting information provided by emergency management sources?

Results of the survey indicated that there exists variations in media reporting patterns on disasters and that this variation is due primarily to the type of disaster, interview incidence, "news hole" space, and time.

Apparently, it is more likely for exaggerations, omissions, and distortions to occur in the reporting of natural disasters as opposed to technologically related disasters. Technological disasters that are exaggerated are usually those that involve chemical spills, nuclear radiation, and transportation accidents (e.g., plane, ship, and train crashes).

It seems that what is referred to as "soft" news reporting occurs most with natural disasters, when there are available victims for interviews who have a high human interest to viewers. According to most of the respondents in these cases, the only constraint is time required to get the story in for the next TV broadcast slot and the "news hole" space, which prioritizes the time and/or space available or allotted for the story. According to the respondents, the more time for the story, the more likely "soft" news aspects of the disaster will be reported. The less time allotted, the more likely only the hard news facts of the natural disaster will be reported, such as the recorded wind velocity, number of inches of rain per hour, water levels at the shoreline, amount of property damage, and the number of injuries and deaths.

Generally, most of the respondents to the survey felt that they reported on both the actual damage and the human-interest type stories but tended to report more extensively on the human-interest stories.

Typical comments by respondents were:

Any good story would contain both elements. First and foremost, people make stories. If there's a landslide out in the middle of nowhere, who cares. If there's a landslide in someone's backyard, that's news. If I were to write a story on a major disaster, I would focus my story on the

people affected. I would then work the actual damage facts into the story.

TV news these days gets its style and direction from media consultants who are interested in how “real” people are affected by the horrible things that happen in this world. They will sacrifice the details and facts of an event to devote airtime to how people are affected by it.

When asked if the news media omits critical facts that could help individuals in their rush to get the headline story, most respondents admit that critical facts are sometimes omitted or reported incorrectly. However, respondents also noted that while time is a primary factor in critical facts being omitted or distorted, this is never done knowingly, and follow-up stories usually correct previous errors. Also, there was a general consensus that this is more of a problem for the TV news reporters than the print media.

Typical comments by respondents were:

In the rush to put stuff on air in general—whether meeting a 5PM deadline or being first with the story—mistakes are made at times. We try hard not to make mistakes, which is why we have a checks and balances system. Each script is read by several levels of managers before going on air. I don't believe any critical facts would be knowingly omitted.

When things happen close to a deadline, whether it be for television or print, there is always a rush to get the story out, which could lead to mistakes. If there is a mistake, it should be corrected as soon as possible in the following newscast or newspaper edition.

In response to the final question as to whether the news media should be responsible to broadcast and/or print information provided by emergency management sources, most respondents said it should not

be required to do so but should do it as a public service. Typical comments by two of the respondents are presented below.

The news media should not be required to display any information but should do so as a public service to its viewers. In the case of earthquakes and floods that affect so many citizens, people rely on their favorite TV stations and their everyday newscasters to provide FEMA and shelter numbers. Newspaper and TV and radio stations send a field reporter to the centers for a story and get interviews as matter of procedure.

Well, it depends. If there is information I think could help the viewer, I will include it. For example, when we had our last hurricane threat, I interviewed the Civil Defense guy. As part of the story, I showed viewers where in the phone book they could get information should they have to evacuate their home. I think, generally speaking, if the information provides a necessary service, include it. Remember, though, you only have a certain amount of time for your story—about two minutes. That means you have to weigh the importance of the resource information against other information you want to provide. It's a judgment call.

CONCLUSIONS AND RECOMMENDATIONS

Based on the research undertaken, the author recommends that improvements by state and county agencies could also be made with an increased focus and funding for family emergency preparedness, local community response teams, and increased continuous training of emergency response coordinators in collaboration with the major medical and media organizations.

Improvement could also be made in the area of OCDA sponsored drills. Based on the results of the various interviews with agency personnel, some

glitches still exist in the alarm drill held each month for Oahu. Apparently, some parts of the alert system network are not always instantaneously connected as they should be. While the yearly drills and actual disaster simulation response are usually carried out very well, improvements could be made by having the key players take their designated places in the EOC. Apparently, some of the key players have been attending as observers and not participants.

Overall, it appears that Hawaii is adequately prepared in emergency response capability, particularly in the areas of medical services and interagency coordination, but coordination with the media reporting on disasters could be improved.

Finally, emergency management and disaster response in Hawaii should be maintained as a high priority by the leaders in the state of Hawaii. As noted by Secretary of Homeland Security Tom Ridge in his remarks at the Asia-Pacific Homeland Security Summit in Honolulu, "St. Thomas Aquinas said three things are necessary for the salvation of man: to know what he ought to believe, to know what he ought to

desire, and to know what he ought to do. We knew minutes after the second plane hit the World Trade Center what we would need to do—that is, make the fullest protection of our people the highest charge of our nation."⁹

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