

MEDICAL CARE FOR THE INJURED:

***THE EMERGENCY MEDICAL RESPONSE
TO THE APRIL 1992
LOS ANGELES CIVIL DISTURBANCE***

Gus Koehler, Ph.D.
Program Research Specialist
Emergency Medical Services Authority

Darlene Isbell, R.N.
Los Angeles County Emergency Medical Services Agency

Calvin Freeman
Administrative Deputy
Emergency Medical Services Authority

Daniel Smiley
Chief Deputy Director
Emergency Medical Services Authority

Joseph E. Morales, MD, MPA
Director
Emergency Medical Services Authority

March 1993

EXECUTIVE SUMMARY

The 1992 Los Angeles Civil Disturbance was the most devastating and largest such event in the United States this century. It began almost immediately following the announcement of the Rodney King trial verdict at 3:00 PM on Wednesday, April 29. The acquittal of four police officers charged with using unreasonable force in arresting Rodney King was the immediate cause of the disturbance. The resulting civil disturbance lasted for four days.

Overall, the local and state agencies and private organizations charged with meeting the medical needs of the victims responded rapidly and well. Prehospital providers were able to care for and transport a significant number of the injured. Hospitals were able to triage and care for all of the injured brought to them in a timely manner. On November 19, at the request of Emergency Medical Services Authority's Director, the Governor officially recognized Emergency Medical Technicians, public service agencies, private ambulance companies, and hospitals for heroic action taken by them and their employees to save lives and care for the injured.

This report presents preliminary data on the injuries and their causes, and examines the emergency medical (EMS) response to this medical disaster from Wednesday, April 29, through Saturday, May 2, 1992. The report uses data and reports available as of November 24, 1992, with some follow up material drawn from later dates. Interviews were conducted with fire service and private ambulance company administrators and staff directly involved in the incident. An effort was made to gather the opinions of all field responders with a survey. Hospital administrator and emergency department staff were also interviewed.

Injuries and Deaths

Initial hospital emergency department data indicates that 2,383 persons were injured between April 29 through May 3. Of these, 227 were admitted. Based on preliminary findings from a Centers for Disease Control study, hospital estimates of the number of injured directly related to the disturbance may be overstated by as much as 763 (32%). If this correction is appropriate, then hospitals treated between 1,620 and 2,383 patients whose injuries were directly caused by the civil disturbance. The Emergency Medical Services Authority estimates that prehospital care providers treated an estimated 179 to 238 injured persons in the field.

Fire Service and EMS responders sustained three or four serious injuries depending on the source of information. The Los Angeles Police Department, California National Guard, and other law enforcement agencies reported 66 injuries. The total count of injured above includes these injuries.

After careful examination of the causes of death, the Los Angeles County Medical Examiner determined that as of August 11, 51 deaths occurred during the Los Angeles Civil Disturbance.

EMS Emergency Telephone Calls

On a typical Wednesday, the Los Angeles Police Department's Public Service Answering Point receives 12,049 emergency calls and answers about 79% of them. The remainder go unanswered because the caller hangs up (abandons the call). This call volume is in sharp contrast to that of Wednesday, April 29, the first day of the civil disturbance. On that day 35,558 calls came in. This represented a 195% increase in call volume over a typical day. Answered calls increased by 157% percent, but there was also a 341% increase in unanswered calls. The greatest emergency call volume came in on Thursday; a 364% increase. Abandoned calls increased by 449% on that day. The abandoned call volume rate returned to normal by Friday. By Saturday, emergency call volume began to approach a more normal level resulting in more answered calls.

EMS Field Response

On a typical day the city receives from 700-1,000 EMS calls in a twenty-four hour period. Wednesday saw a substantial drop in patient transports even though the number of EMS calls increased that day. Approximately 745 transports were made by public and private ambulances originating in the area of the civil disturbance from Wednesday through Friday.

The emergency medical field response was integrated with Los Angeles City and County Fire Service operations at the community level. Rescue units and private ambulances were dispatched into the civil disturbance area with little, if any, law enforcement protection on Wednesday, the most violent day of the riot. Food, sleeping arrangements, and other staff support services were primitive at best. All of the responding agencies implemented their general disaster response plan.

Casualties were transported to the hospital by a number of methods. According to a CDC study, ambulances accounted for 33.9% of the transports, police cars 11.3%, and walk-ins for 12.9%. The percent of the injured who took themselves to the hospital or were transported by friends varies by source of data; 30.6% according to preliminary Centers for Disease Control data, compared to 60% to 70% reported by hospital emergency departments. A field morgue for dead bodies was not established.

Hospital Response

Twenty-eight hospitals cared for about 85% of the casualties. Some hospitals that are next to each other varied markedly in the number of casualties they received. Hospitals outside the immediate disaster area received significant numbers of casualties. It was difficult for the Los Angeles Emergency Medical Services Agency to control the distribution of casualties due to the large number of self-transports. Hospitals implemented their general external disaster plans.

The Emergency Medical Services Authority interviewed administrators at three of the hospitals that received a large number of casualties. All three experienced minor problems with obtaining medical supplies, food, and staff. None of these problems affected the ability to deliver care. The Emergency Medical Services Authority, and the Los Angeles Emergency Medical Services Agency successfully established a system to provide additional staff, and to deliver blood products to the hospitals. Hospital security was provided by hospital security employees for the most part. The California National Guard protected one hospital on Friday.

Factors Contributing to the Success of the Emergency Medical Response

The emergency medical response was successful because:

- Various city and the county fire services quickly established a highly localized and effective system of staging areas and managed the prehospital emergency medical response at the neighborhood level with logistical support from city and county fire service.
- Citizens living in the disaster area transported a significant portion of the injured to the hospital.
- Many of the patients who crowd the emergency department on a day to day basis did not come in for care.
- Hospitals were able to triage the injured, establish special minor wound care clinics, leaving the ER available for the more seriously injured, and had sufficient numbers of staff immediately available to staff this expanded service. Their efforts were supported by the Los Angeles County Emergency Medical Services Agency.
- Prehospital responders and hospitals did not run out of critical medical supplies.
- While neither prehospital nor hospital emergency medical care providers had specific plans for responding to a civil disturbance, they did have generic disaster plans which they had practiced.

Two additional factors, unrelated to the EMS system, also contributed to this success:

- The civil disturbance did not continue at a high level of violence for a long period of time; the first two days of the civil disturbance produced the most casualties, dropping significantly on Friday; and

- Hospitals were not directly attacked by large numbers of rioters, armed individuals or gangs making it impossible for the hospital to deliver services.

Key Recommendations for Improving the Response

Our key findings and recommendations are grouped together and listed in Chapter IX. The most important findings and recommendations for improving the ability of the emergency medical services system to rapidly and effectively respond to a civil disturbance are identified below. From our perspective, this system begins with a 9-1-1 call, and ends with care provided in a hospital emergency department. When a disaster occurs it expands beyond a particular county to include its neighbors and State agencies.

During this period of severe budgetary cuts and constraints, it may be very difficult to quickly implement all of the recommendations. Also, there may be easier and quicker ways to implement the report's findings than those recommended here.

The Emergency Call Answering System

- The number of caller abandoned 9-1-1 calls due to answering system overload, probably increased the number of public transports of the injured to the hospital. Efforts to expand the capabilities of the 9-1-1 answering service when a disaster occurs should receive high priority.
- The Spanish speaking emergency call line's abandoned call rate was even higher than that for 9-1-1 during the civil disturbance. This could indicate that this population is at greater risk of not having access to emergency medical resources when they are urgently needed than the rest of the LA basin's population. A management analysis study should be initiated by the appropriate agency to determine if staffing is appropriate, and that there are sufficient telephone lines. Telephone answering protocols should be reviewed to make certain that they are ethnically appropriate.

Prehospital Response

- Law enforcement protection must be immediately available so that EMS field responders can quickly gather, enter the disaster area, provide medical care in the field, and transport the injured. This should extend to protecting large clinics, and private ambulance dispatch and communications facilities.
- Law enforcement intelligence about the progress of the civil disturbance (direction, expected intensity, etc.) should be forwarded immediately to the Los Angeles Emergency Medical Services Agency so that they can coordinate transport of the injured with hospital bed availability.

- Field responders need to be rotated after about thirty dispatches, provided with nutritious food, and a quiet place to rest. This should reduce stress and improve the response.
- At least 60% of the injured, many with gun shot and other serious wounds, were transported by the public to hospitals. Basic public service announcements need to be prepared that are keyed to the telephone book first aid instructions, showing how to control bleeding and deal with shock. A second set of public announcements should show which hospitals the public should transport the most injured to.
- Large community clinics should be integrated into the response. They would be able to provide care to victims who do not have life threatening injuries.
- All prehospital public and private agencies should prepare a civil disturbance response annex for their disaster plans.

Hospital Response

- Law enforcement protection should be provided to hospitals as soon after a civil disturbance begins as possible.
- Hospitals need to be able to anticipate medical supply and personnel short falls so that the Los Angeles Emergency Medical Services Agencies has time to meet their needs. This includes understanding and using the established system for obtaining this aid.
- A civil disturbance annex should be added to each hospital's external disaster plan.

Los Angeles Emergency Medical Services Agency

- A Civil Disturbance Annex should be added to their disaster response plan. Civil disturbances are very infrequent. The lessons learned from this one should be preserved.
- The Los Angeles Emergency Medical Services Agency needs to continue its work with the appropriate professional groups to further clarify how medical supplies, and surgical and other specialty care providers will be obtained and delivered to hospitals when a disaster occurs.

Reimbursement for Prehospital and Hospital Care

- A mechanism for reimbursing disaster related operating costs and uncompensated care provided by private hospitals and ambulance companies needs to be developed by the Los Angeles Emergency Medical Services Agency, with the assistance of the Emergency Medical Services Authority, and the Office of Emergency Services, and put into place before the next State declared medical emergency occurs.

Newspaper reports, and conversations with field and hospital emergency responders indicate that another civil disturbance could occur in the near future following various civil disturbance related court decisions. All of the responding agencies should work together with the City and County to make certain that they are prepared for such an event.

ACKNOWLEDGEMENTS

The Authors would like to acknowledge and thank the following individuals for reviewing and commenting on sections of the final draft of the report that described their operations. Their constructive comments and expertise are greatly appreciated. Of course the authors remain responsible for any misinterpretations of fact or policy.

Doug Brown, Goodhew Ambulance Company.

Alan R. Cowen, Chief Paramedic Commander, Bureau of Emergency Medical Services, Los Angeles City Fire Department.

Susan Hayward, Paramedic Coordinator, Inglewood Fire Department.

Frank Maas, Saint Francis Medical Center.

Edward J. Renford, Hospital Administrator, Martin Luther King, Jr./Charles R. Drew Medical Center.

Kathleen Tierney, Ph.D., Disaster Research Center, University of Delaware.

William J. Zeason, Operations Chief, Los Angeles County Fire Service.

Irv White, Carol Van Ness, and Penny Moore, Emergency Medical Services Authority.

IX. FINDINGS AND RECOMMENDATIONS

The reports findings and recommendations are arranged by chapter.

A. The Injured and Their Injuries

The findings and recommendations listed below are policy and program related. Data on injuries or deaths, and their cause, is not summarized. Studies are being undertaken or are recommended to provide definitive data. Sections in this report on prehospital and hospital care contain additional recommendations that cover field medical care and patient transport.

Finding 1:

Civil disturbance data available for this study appears to confound non-civil disturbance related with disturbance hospital data.

Recommendation 1:

The CDC and LADHS hospital records study should be completed. The proposed methodology should fully address how many people came to hospitals with civil disturbance related injuries compared to those coming with typical emergency department complaints.

Finding 2:

There is little if any data on morbidity and mortality caused by the loss or serious reduction in community health care services.

Recommendation 2:

The CDC epidemiology study should include an element that investigates the level of morbidity and mortality, if any, associated with the loss of community health care services.

Finding 3:

There are strong parallels between this event, the 1965 Watts Riots, and other similar disturbances. It would seem that many of the underlying factors that cause them are known. What is not known is why the policies recommended to reduce the chances of their reoccurring failed to stop this one. Were the recommendations inappropriate, ignored, impossible to implement, too costly, or unrelated to their goal? Are there additional factors unique to this event and our times that need to be addressed?

Recommendation 3:

The CDC epidemiology study should thoroughly investigate the relevance of the earlier studies for understanding what happened in South Central Los Angeles, and update them with additional findings. The study should extend to a policy evaluation to determine what did or did not work in efforts to prevent such disturbances. It should also look into the possible contribution of the Federal Emergency Management Agency to raising community tensions after the civil disturbance due to the denial of disaster aid to 50% to 60% of the victims (Los Angeles Times, January 11, 1993).

Finding 4:

Police did not use chemical crowd control and other non-lethal violence to stop the civil disturbance.

Recommendation 4:

A review should be made of LAPD crowd control methods and strategies to determine if chemical crowd control and other non-lethal methods could have ended the event sooner, and reduced looting and violent acts. Police Chief Willie L. Williams has in fact begun such a review (Sacramento Bee, January 12, 1993a).

Finding 5:

When compared to the 1965 Watts Riots, there were significantly fewer deaths attributable to law enforcement.

Recommendation 5:

The CDC epidemiological study should determine the reason for this difference.

Finding 6:

Curfews are effective when law enforcement personnel are available to enforce them. The time that the curfew is imposed is also important. Waiting until sundown could result in additional injuries and deaths.

Recommendation 6:

Law enforcement should have plans in place for the rapid mobilization of personnel as a curfew is imposed. This fact should be widely disseminated to the public. A curfew should be implemented as soon as sufficient law enforcement personnel are available, consistent with the judgment that a significant level of violence and looting will occur without it.

Finding 7:

Media coverage may have played the role of contagion, in the sense that people who were ready to loot or riot were more motivated to do so when they saw that there was little law enforcement. It may have also frightened people who were not inclined to loot to do so when they saw that their grocery store was vulnerable. On the other hand, it also played a critical role in providing information about the event to citizens who wished to avoid getting caught up in the violence, and for response planning.

Recommendation 7:

There should be expanded positive media coverage of ethnic community activities, including Anglos living there, that are not gang or drug bust related. Emphasis should be placed on how these communities relate to and are part of the larger community (Kerner, 1968).

B. *The Public Emergency Call System***Finding 8:**

The dramatic increase in abandoned calls probably resulted in more self-transport of the injured to the hospital.

Recommendation 8:

The State Department of General Services and the Office of Emergency Services have been developing plans for expanding PSAP operations during a disaster. They have been working closely with the City of Los Angeles on this project. The suitability of these plans for responding to a civil disturbance should be evaluated. If the plans are inappropriate, other cost effective alternatives should be investigated.

If data are available on who abandoned a call, a study should be initiated to determine if true emergencies existed and how people handled them.

Finding 9:

The Spanish speaking emergency call line's abandoned call rate was even higher than that for 9-1-1 during the civil disturbance. It is also considerably higher day-to-day. The greater abandoned call rates could indicate that this population is at greater risk of not having access to emergency medical resources when they are urgently needed than the rest of the LA basin's population.

Recommendation 9:

The discrepancy between the two emergency call systems that, it is assumed, receive similar emergency calls, indicates that there may be a problem with the Spanish speaking emergency call PSAP. A management analysis study should be initiated by the appropriate agency to determine if staffing is appropriate, and that there are sufficient telephone lines. Telephone answering protocols should be reviewed to make certain that they are ethnically appropriate.

Finding 10:

Emergency dispatchers continued to triage calls but did not provide pre-arrival instructions.

Recommendation 10:

Given the tremendous volume of calls and the number of abandoned ones, this is probably an appropriate strategy. However, the public still needs to know how to provide first aid for gunshot wounds, lacerations, and other injuries. This issue is dealt with in the field response section of the report.

C. *The Emergency Medical Services Field Response*

Additional recommendations concerning communication failure protocols are included in the hospital response section of this report.

1. *Managing the Response***Finding 11:**

None of the responding agencies had planned for the possibility of a civil disturbance following the Rodney King trial verdict. It appears that none had a plan specifically geared to responding to a civil disturbance. Generally, the fire service's capability to rapidly establish a response structure using Incident Command System (ICS) compensated for this lack.

Recommendation 11:

This recommendation should be seen as part of the planning recommendations made in the LAEMSA response section. While each disaster is unique, there are lessons that can be applied to a generic type of disaster, civil disturbances for example. It is abundantly clear that the findings, and lessons learned from the Kerner Commission and the Governor's Commission on the 1965 Los Angeles Riots apply here as well. An annex should be added to generic response plans that identifies unique issues and policy decisions that must be made early for responding to a civil disturbance.

Finding 12:

ICS event planning, even if done immediately after a major event occurs, can successfully manage the response for an organization such as the Los Angeles City Fire Department. The rapid development of a planning group able to quickly set priorities for the overall response works.

Recommendation 12:

Implement Petris Bill recommendations requiring ICS training for all Operational Areas.

Finding 13:

A civil disturbance creates a multitude of rapidly evolving, violent local incidents over a wide area if law enforcement cannot quickly control them. These incidents are very response resource intensive. The delegation of authority to a few geographically well defined staging areas to set response priorities based on local conditions and information has been an established practice of the Los Angeles City Fire Department for at least ten years. It worked brilliantly here. It minimized duplicate responses and saved resources. Agency command posts set overall priorities, coordinated support efforts, and served as resource brokers. It is very unlikely that this event could have been micro-managed from the top.

Recommendation 13:

The ability to rapidly establish very localized, geographically well defined, satellite command posts and staging areas should be formally written into EMS response plans utilizing the present incident command system terminology and organization. Variations in the requirements for such efforts based on the type of disaster -- earthquake, civil disturbance, hazardous materials, floods, etc. -- should be pre-identified.

Finding 14:

Law enforcement protection was inadequate, leading to significant field response delays. Intelligence about the likelihood that a civil disturbance would occur either was not developed or was not shared with the fire service or EMS community.

Recommendation 14:

The unified command structure proposed in Recommendation 2 should include appropriate direct liaison with law enforcement to ensure that intelligence is shared and priority given to protecting the life of responders and their equipment.

Finding 15:

Each EMS field responding organization, be it a city fire service, county fire service, private ambulance company, or LAEMSA, established its own command post and shared information with the others. Fire service mutual aid seemed to be the primary means for obtaining additional EMS personnel. Private ambulance resources could have been better integrated into the response. LAEMSA does not track field resources, leaving it up to the fire service to perform this function. While EMS field resources were not overwhelmed, a larger event with more casualties could result in coordination problems.

Recommendation 15:

The existing EMS disaster response plan worked for this event. A larger event may require more intensive coordination efforts, particularly if additional EMTs beyond what the fire service mutual aid system can provide are needed. Fire service agencies that have contracts with private ambulance companies should clarify what their role is when a disaster occurs. The existing plan should be coordinated with law enforcement and the National Guard so that satellite EMS command posts can be quickly established and protected. All of these plans should be tested and exercised using many different scenarios emphasizing rapid planning, and creative and coordinated effective solutions. Unfortunately, the complexities of the Los Angeles EMS system are so great that it may be difficult, if not impractical, to fully implement this recommendation.

2. *EMS Dispatch***Finding 16:**

Several private ambulance company dispatch sites were left unprotected during the civil disturbance. This necessitated a severe disruption of their response.

Recommendation 16:

EMS plans should require that law enforcement protection be automatically assigned according to priorities preset by LAEMSA and the local fire service and other governing agencies to protect private ambulance dispatch and other critical resources within or close to a civil disturbance.

Finding 17:

Private and public ambulances continued to be dispatched without protection into the disaster area after the civil disturbance had reached a dangerous level placing the EMTs and their equipment at risk. A significant number of dispatches involved injuries that a person trained in first aid could have cared for. Most injuries are not trauma injuries or even life

threatening. This raises the issue of how reasonable it is to risk EMT's lives to perform rescues involving minor or non-life threatening injuries during a civil disturbance.

Recommendation 17:

Consideration should be given to developing priority dispatch guidelines to filter calls such that only clearly life saving calls are responded to by public and private EMTs during a civil disturbance. The trade off between fewer calls being answered and better use of resources should be examined. If possible, a pool of law enforcement responders, including the National Guard, should be available for escort. Dispatch assignments should be delegated to satellite EOC Incident Commanders at the earliest possible moment so that adequate law enforcement protection is available.

3. EMS Care in the Field

Finding 18:

Citizens transported from 40% to 70% of the injured to the hospital. Many were severely injured and had not received much first aid before they arrived. This made it very difficult for LAEMSA to manage the distribution of patients between hospitals.

Recommendation 18:

LAEMSA should consider developing two public service announcements. One should provide basic first aid messages based on first aid instructions in the front of the telephone book, about how to deal with a gunshot wound or a stabbing and how to stop bleeding. These messages should be done in a way that minimizes any increase in the public's level of stress and anxiety. The second message should show a simple map clearly identifying the closest hospitals to where the most injuries seem to be occurring. Citizens should be directed to take the people who are seriously injured there. Persons with non-life threatening should not go to the closest hospital. Both of these messages, including the maps could be sent to TV and radio stations via OES' EBS network. Meanwhile, as convergence takes place at these particular hospitals, ambulances could be directed along safe routes to other hospitals that are not expected to be impacted as greatly.

If funding is available, the fire service should consider expanding their Citizen Emergency Response Teams Program. More and better trained people would be immediately available to help the injured.

Finding 19:

Field morgues were not established at satellite command posts. Bodies were inappropriately stored at these locations. LA DHS is responsible for coordinating the activities of the

Medical Examiner and can direct this office to establish temporary morgues (LA DHS, 1984).

Recommendation 19:

Civil disturbance response plans, and other disaster plans, such as those of the County Medical Examiner, should include a section on the proper identification, retrieval, handling and storage of bodies, including establishing a field morgue. These activities should be coordinated with field responders in other agencies such as the Los Angeles City and County Fire Departments, either directly or through the county EOC. They should be part of planning for satellite EOC operations. (See LAEMSA findings and recommendations.)

Finding 20:

Coordination and assignment of law enforcement resources appears to have varied from staging area to staging area in the field and by law enforcement agency.

Recommendation 20:

Police personnel should be directly assigned to local command posts during civil disturbances. EMS field response exercises should include all of the agencies involved, including law enforcement, the National Guard and the Federal military, so that working relationships, priority setting, and other mechanisms of interaction can be worked out and practiced.

Finding 21:

EMTs were often at personal risk in the field as they attempted to evaluate and stabilize a patient.

Recommendation 21:

Every effort should be made to quickly evaluate the patient and load them into the ambulance, completing stabilization on the way to the hospital. The responders should get in and out of the area as rapidly as possible. Consideration should be given to utilizing fire service BLS providers as escorts for each ALS ambulance.

Consideration should be given to training EMTs in how to work under hostile conditions, such as close to a hostile crowd, so that they can quickly complete their tasks. This might include stress management, what to do when guns or knives are brandished, and how to effectively address a hostile family member or citizen.

Finding 22:

The circumstances of a civil disturbance make it impossible to effectively investigate and write up an unwitnessed full cardiac arrest.

Recommendation 22:

EMSA should consider a policy that unwitnessed full arrests should not be written up.

4. *Support Services for EMTs in the Field*

Finding 23:

There were problems with the quality and availability of food. Rest and personal hygiene arrangements were basic at best. This raises important questions about the ability of public and private responding agencies to effectively care for their field responders when a major, long term disaster such as an earthquake occurs. Exhaustion, hunger and other problems may severely reduce the field response capability within a few days.

Recommendation 23:

Greater attention should be paid to the logistics portion of the disaster response plan, including that for establishing satellite command posts, dealing with feeding, sheltering, and personal hygiene needs of EMS responders. The agencies involved in these efforts should be specifically identified and written into the plan. Their resources should be immediately mobilized when a disaster of a significant size occurs. Some of this material might be stockpiled at designated staging areas.

Finding 24:

Law enforcement eventually convoyed EMTs to staging areas when shifts changed Thursday afternoon, relatively late in the response.

Recommendation 24:

Plans and arrangements should be made with law enforcement and the National Guard to convoy EMTs into staging areas during the early stages of the response. This could be accomplished by quickly assigning law enforcement officers to fire service and other field command posts when the disturbance is just starting. Specially trained National Guard troops could be quickly mustered and dispatched.

Finding 25:

CISD was not provided in the field.

Recommendation 25:

The ability to provide CISD in the field during an incident, and its effectiveness, should be evaluated and implemented if found to be helpful and possible to effectively implement. Current opinion is that most prefer post event debriefing.

Finding 26:

More information about safe routes for ambulances, hospital status, and the condition of friends and relatives is needed by EMTs.

Recommendation 26:

A route safety group should be established as part of the ICS structure (Plans Section, Situation Status) to track the condition of roads in and out of the disaster area. This information should be frequently updated and shared with satellite command posts, private ambulance companies, LA EMSA, and hospitals in the area. A telephone tree could be used to confirm that EMT family members are safe.

Finding 27:

Some EMS responders did not receive body armor until late in the event. It was impossible to distinguish EMS responders in the field from law enforcement and fire service personnel.

Recommendation 27:

All EMS responders should receive body armor at the earliest possible time. Consideration should be given to providing a unique universal identifying vest (red cross on white background for example) to all EMS field responders (see following recommendation). Also, EMS responders should consider removing identifying insignia that could be confused with police or other potential targets.

Finding 28:

Community support for the role of the EMT during a civil disturbance contributes directly to its success. Perhaps it is similar to that played by a battlefield medic or ambulance driver where both sides can identify them by their unique identifier and see them as humanitarian and non-combatant.

Recommendation 28:

Consider developing a public information campaign that emphasizes the community support and life saving role of the EMT. The message should include identification of a unique identifier that is worn by EMS responders in the field.

5. Reimbursement of Private Ambulance Companies

Finding 29:

Private ambulance companies have not been allowed to request reimbursement from OES and FEMA for the cost of caring for the injured.

Recommendation 29:

Private ambulance companies should be allowed to recover costs of caring for and transporting the injured who have no insurance or other means of payment other than county funds. Efforts by LAEMSA, HCSC, EMSA, and FEMA should include private ambulance reimbursement along with hospital reimbursement issues.

D. Hospital and Emergency Department Response

Finding 30:

The existing hospital emergency department and trauma system were able to absorb the injuries and casualties that came to the hospital for care during the civil disturbance.

Recommendation 30:

A follow up epidemiology study and evaluation of medical records is needed to determine if there was excessive morbidity and mortality among patients who could not leave their homes due to the disturbance, their lack of mobility, or closure of a community service or program (visiting nurses or in-home care for example). Department of Health Services, Office of Emergency Preparedness and Injury Control, and Los Angeles County Department of Health Services should conduct such a study with EMSA as co-researcher.

Finding 31:

While hospitals were able to successfully organize themselves to respond to the civil disturbance, it appears that an element for responding to civil disturbances was not part of their external disaster plans.

Recommendation 31:

The Hospital Council of Southern California should consider a project similar to the one that produced the "Hospital Earthquake Preparedness Guidelines" to recommend guidelines for planning for civil disturbances (HCSC, 1991). A similar effort could be started by the EMS Authority or the State Department of Health Services for community clinics. The model plan developed by Salud Para La Gente could be updated with this material (Salud, 1991).

Suggestions made by the New York State Department of Health in 1969 (NYDH, 1969) and information from other sources should be consulted (Hospitals, 1968b). The EMS Authority should also consider updating "Hospital Emergency Incident Command System," to include a reference to planning for civil disturbances.

1. Communications

Finding 32:

The number of unexpected emergency department self transports, combined with suspension of the requirement to communicate with the receiving hospital probably increased confusion.

Recommendation 32:

Paramedic to receiving hospital communications should not be completely suspended during a civil disturbance. One option might be to require ambulances to give some sort of an identifier, the status of the patient, and estimated time of arrival. Another could be to have the ambulance communicate this information to Medical Alert Center which in turn assigns their destination and notifies the hospital. In any case, they should continue to be allowed to use standing orders.

Finding 33:

Emergency department staff cannot provide patient care and report statistical data to the county. This results in an unavoidable conflict that must be resolved in favor of treating injured patients.

Recommendation 33:

This is a difficult problem that may have to be resolved at each hospital. One solution might be to assign a competent staff person such as a ward clerk from another section of the hospital to the emergency department, who is trained to manage the ReddiNet and report the required data. A second option is to move the radio to the Incident Commanders operations room. Auxiliary antenna connections and emergency power would have to be made available. This would make radio communications available to those who need them, and separate data collection and transmission from the ER.

Finding 34:

For some hospitals, telephone communications between hospital administrators and the LAEMSA EOC were partially functional depending on how well the telephone system worked.

Recommendation 34:

LAEMSA should consider encouraging these hospitals to participate in the HEAR or ReddiNet systems.

2. *Staff*

Finding 35:

Hospitals had to provide food, a place to sleep, and personal hygiene facilities to some portion of their staff who had to stay at the hospital.

Recommendation 35:

Hospital disaster plans should include a component for sheltering and feeding a significant portion of their staff and perhaps, their family.

Finding 36:

Hospitals may be perceived by community residents as a source of food and shelter.

Recommendation 36:

Consideration should be given to feeding treated ambulatory patients and special populations (elderly, pregnant women, etc.) close to the hospital. During a civil disturbance consideration should be given to identifying an area suitable for sheltering ambulatory patients that is away from the emergency department and special clinics.

3. *Supplies*

Finding 37:

Hospitals experienced problems obtaining supplies during the civil disturbance.

Recommendation 37:

Contracts with vendors should include a paragraph stating that they will make deliveries during a civil disturbance. The hospital should arrange with their own security or with LAEMSA for police protection of supply transports. Consideration should also be given to the Southern California Hospital Council's recommendation that: "Hospitals need to look beyond their traditional resources, including DHS, to plan for disasters. the [Multi Hospital Task Force] will look at offering a vendor organization such as Purchase Connection as a contingent resource (HCSC, 1992)." The role of LAEMSA should be clarified: are they an arbiter, helper or provider of supplies of last resort?

4. *Hospital Based Emergency Care*

Finding 38:

While general surgeons, physicians, nurses, and other hospital staff were readily available and did respond, specialists, such as vascular and neurosurgeons, did not appear to be available. For example, in two reported cases a vascular surgeon could not be located.

Recommendation 38:

A review of hospital records for civil disturbance related patients with trauma injuries should be made to determine if they received appropriate surgical care. If the problem cases reported to us are verified, then consideration should be given to requiring surgical and other critical medical specialists, as a requirement for obtaining privileges at any hospital, to be readily available to provide emergency care in their specialty when a local disaster affecting a hospital that they have privileges at is declared. If they have privileges at more than one hospital, then the one expecting to receive or receiving the most seriously injured casualties should have first call on their skills.

Alternatively, a critical specialist physician assignment plan could be developed by the Los Angeles County Medical Association, and other specialty associations. The plan could identify specialists who are available to go to hospitals to provide care.

Until this problem is resolved, LAEMSA should be immediately informed when surgical and other critical specialists are not available.

Finding 39:

Hospital staff established suturing, ambulatory care, and other specialty care clinics. Patients were triaged to these clinics according to their injury. This is consistent with standard hospital disaster plan protocols.

Recommendation 39:

Hospital disaster planners should continue to preplan for the creation of emergency care clinic(s) consistent with the injury profile of an expected disaster. They should distinguish between minor injuries to be treated at a clinic and major injuries to be cared for in the ER.

This concept should be extended to preplanning for other likely disasters. For example, when a medical hazardous materials incident occurs, minor injuries caused by inhalation, eye and skin exposures could be treated at special clinics. This would leave the emergency department available for more serious exposures and trauma care.

Finding 40:

LAEMSA used County ambulances and other vehicles to transport blood and medical care providers through the disaster area to hospitals.

Recommendation 40:

LAEMSA should consider formalizing the use of County Department of Health Services vehicles for disaster response including, for example, transporting medical supplies and personnel in the disaster area. During a civil disturbance a law enforcement officer could be placed on board or a patrol car assigned to convoy the transport.

Finding 41:

In many cases treated patients were reluctant to leave the hospital to return home during the civil disturbance. They were afraid of being injured again. In some cases taxi cabs were willing to transport them.

Recommendation 41:

LAEMSA should consider entering into an agreement with local ethnic minority and other taxi cab companies to provide emergency transport for treated patients from hospitals to their homes if they elect to return and conditions are sufficiently safe. Reimbursement should be set at level consistent with the risk.

Alternatively, Red Cross could be asked to set up a temporary shelter at or close to the hospital.

Finding 42:

This study did not examine the condition of the community's primary health care system or look at other community services such as in-home care, dialysis, community clinics or the availability of private physicians during and following the civil disturbance. However, it appears that this system collapsed and was not available to provide primary care or to treat minor injuries during the event or immediately following it. The lack of these services may have increased the pressure on hospital emergency departments.

Recommendation 42:

LA DHS should consider conducting a study of the problems faced by primary care providers and other community based systems during the South Central Los Angeles civil disturbance.

5. *Security*

Finding 43:

Hospitals depended on their own and for the most part unarmed security force to protect them. Armed police officers were not assigned to protect the facilities. California National Guard protected one hospital, reducing staff anxiety.

Recommendation 43:

Consideration should be given to establishing a law enforcement rapid response team with local police or even with a contract security agency. Alternatively, a CNG rapid response force staffed by military police could be immediately deployed to protect hospitals when a civil disturbance occurs. Hospitals would be required to provide food, sleeping, and toilet facilities to these added security personnel. It should be noted that special training may be necessary including an orientation to the hospital and how to calm agitated people so that violent incidents can be avoided.

Finding 44:

Safe routes to and from hospitals for hospital staff and delivery trucks were not identified by law enforcement.

Recommendation 44:

The County EOC Law Enforcement Branch, should identify and establish safe and secure routes to and from hospitals within the disaster area and make this information known to LAEMSA who, in turn, should forward the information to the hospitals. (This may not always be feasible, particularly when field conditions are rapidly changing.)

6. *Community Relations*

Finding 45:

Good community relations help to improve the security of a hospital during the civil disturbance.

Recommendation 45:

Hospitals should participate in new County and City efforts to train community residents. Hospital Council of Southern California (HCSC) should coordinate these efforts with hospitals close to or in Central Los Angeles to establish health care manpower development programs funded by new Federal monies.

7. *Payment for Caring for Civil Disturbance Related Injured*

Finding 46:

Hospitals have not been allowed to request reimbursement from OES and FEMA for the cost of caring for the injured.

Recommendation 46:

Hospitals should be allowed to recover costs of caring for the injured who have no insurance or other means of payment other than county funds. Efforts by LAEMSA, HCSC, EMSA, and FEMA should be continued to resolve this problem.

E. *Los Angeles County Emergency Medical Services Agency's Response*

1. *Planning and Managing the Response*

Finding 47:

Tensions continue to be high in South Central Los Angeles. The trial of those charged with beating Reginald Denney, and the Federal trial of the officers accused of denying Rodney King his civil rights are being watched closely. The Webster Report warns that it could happen again if there is a ruling that is perceived to be unjust by the community.

Recommendation 47:

LAEMSA should be involved with Los Angeles City and County efforts to prepare for a possible civil disturbance following the Federal trial of the officers involved in beating Rodney King, or following the trial of the persons charged with beating Reginald Denney.

Finding 48:

The EMS response was generally consistent with the "Medical Annex" of the county's emergency plan. LAEMSA has developed and tested a medical disaster response plan. Numerous hospital and field response exercises have been held. Each of these factors contributed to the rapidity of the medical response to this civil disturbance.

Recommendation 48:

Training and exercises should continue to have a high priority. The emphasis should continue to be on flexibility and problem solving.

Finding 49:

It is difficult to predict exactly when a civil disturbance will begin, how long it will last, the number of injuries, and the extent of the damage. Intelligence about the occurrence of such events, their location and possible injuries should be shared.

Recommendation 49:

LAEMSA should consider taking a proactive stance when civil disturbances seem likely to occur. The agency should request confidential information about likely location, time, and level of violence from law enforcement and fire service agencies.

2. *Distribution of Casualties*

Finding 50:

LAEMSA EOC may not have known about County Sheriff or County Fire Department intelligence about the geographic direction that the civil disturbance was likely to take as it was occurring. This made it difficult to distribute casualties among hospitals.

Recommendation 50:

Law enforcement and fire service agencies should immediately forward intelligence developed about the seriousness and probable geographic direction of the civil disturbance to LAEMSA's County EOC representative. Consideration should be given to establishing radio links with EMS command posts in the area to gain intelligence about injuries. This information could be used to alert hospitals, shift ambulance and other resources providers, and to prepare public service announcements (see Appendix C for a proposed tracking system).

3. *EMS Resources and Mutual Aid*

Finding 51:

A method for rapidly obtaining EMS field and hospital supplies from county public and private resources has not been developed. A regional medical mutual aid system has not been fully developed, planned for, and tested.

Recommendation 51:

LAEMSA should develop a logistics system that includes means for rapidly obtaining EMS field and hospital supplies, including prescription drugs for the public, and means for delivering them where they are needed. Private medical supply companies located in the county may be willing to establish a resources coordination committee. The existing LADHS

Patient Transport System could be used for transport. The current Regional Disaster Medical/Health coordinator position should be revitalized resulting in the development of workable mutual aid agreements. The existing Regional Disaster Medical/Health mutual aid agreements in OES Region 6 could serve as a model. Once these agreements are reached they should be fully tested. Another alternative is to work closely with Southern California Hospital Council to develop a mutually acceptable method for obtaining resources.

Finding 52:

Hospitals and other agencies experienced difficulties transporting personnel to their respective operations.

Recommendation 52:

The "Medical Annex" clearly assigns the responsibility for transporting medical personnel to DHS' Patient Transport Service. This service should be integrated into the civil disturbance response plan, including provisions for their immediate protection.

Finding 53:

Clinics, community health centers, freestanding emergency clinics and other existing community resources that could have treated casualties were not polled to determine their status or capabilities.

Recommendation 53:

A method should be developed for quickly polling clinics, health centers, freestanding emergency clinics and other existing community resources to determine their status and response capabilities. While they may not have been available for this event, significant numbers of casualties will converge for care for other types of events as was experienced during the Loma Prieta earthquake.

4. *Communications*

Finding 54:

LAEMSA should work closely with HCSC to update the system to allow sufficient data collection flexibility for reporting critical data for any disaster. (See the hospital response portion of the report for further recommendations.)

Recommendation 54:

Existing hospital data reporting systems are not flexible enough to collect other than earthquake related information.

5. *LAEMSA Emergency Operations Center*

Finding 55:

The existing LADHS EOC appears to be inadequate in terms of space, equipment, communications, status boards, and other essentials to provide the necessary support for staff seeking to manage a medical response to a major disaster.

Recommendation 55:

Existing recommendations for upgrading the LADHS EOC should be reviewed based on this event, and implemented.

F. *Emergency Medical Services Authority Response and Operations*

Finding 56:

As noted above, the chances for another civil disturbance occurring are high enough to start preliminary planning.

Recommendation 56:

EMSA should begin its own preliminary planning, working closely with LAEMSA and OES, to respond to another civil disturbance.

Finding 57:

EMSA's response plans do not include a civil disturbance annex.

Recommendation 57:

EMSA should develop a civil disturbance annex.

Finding 58:

OES did not invite EMSA to participate in civil disturbance preplanning efforts.

Recommendation 58

OES should invite EMSA to participate in pre-event planning when significant numbers of casualties may be expected.

Finding 59:

EMSA did not have sufficient information to determine the likely direction and intensity of the civil disturbance. Such information was being gathered and processed by the Fire Services and Law Enforcement Divisions at the State Operations Center.

Recommendation 59:

Intelligence assessments developed by law enforcement and fire service agencies that bear on the probable geographical direction and likely number of casualties should be shared with the EMS Authority.

Finding 60:

EMSA needs the capability of working out of a variety of personnel and supply coordination sites. The agency was fortunate to find county and other state staff sufficiently familiar with EMS Authority procedures to staff the EOC at Los Alamitos.

Recommendation 60:

The EMS Authority should train local EMS personnel to augment EMSA staff and impacted county personnel.