Little Hoover Commission Hearing on California's Public Health System –
EMS Authority's Role in Public Health Preparedness
Disaster Preparedness
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Testimony by Jeff Rubin, Chief, Disaster Medical Services Division
California Emergency Medical Services Authority

Mr. Chairman, I am Jeff Rubin, Chief of the Disaster Medical Services Division of the California Emergency Medical Services Authority. I am here to discuss issues related to the "Emergency Medical Services (EMS) Role in Public Health Preparedness" raised in your invitation to our office to testify before you. Before I answer the specific questions raised by your Commission, I wish to provide to you a brief overview of the Emergency Medical Services Authority's broad role and responsibilities. As you are aware from previous testimony before you, the Emergency Medical Services Authority is mandated in its authorizing legislation and in State Office of Emergency Services (OES) Administrative Order to prepare for and, if necessary, manage the State's medical response to disaster. In addition, the Authority is responsible for developing effective standardized local and regional EMS systems throughout California. This is accomplished through statewide leadership in policy and regulation development and standards guidance. The actual implementation of this statewide approach is carried out under the medical and administrative coordination of 32 single and multi-county local EMS systems covering the 58 counties.

The mission of the EMS Authority and the local EMS Agencies, by extension, is to ensure quality patient care by administering an effective, statewide system of coordinated emergency medical care, injury prevention, and disaster medical response. To achieve this mission, emergency medical plans are implemented which provide for the personnel, facilities, and equipment for the effective and coordinated delivery in an EMS area of medical care services under emergency conditions. Dispatch centers, ambulances and hospitals constitute the resource

base of EMS. In a disaster, that EMS base system is augmented by Disaster Medical Assistance Teams (DMATs) and other field medical resources. The EMS organizational foundation encompasses training, coordination of interdependent resources, mutual aid, communications, the Incident Command System (ICS) and the State's Standardized Emergency Management System (SEMS). EMS exists as both a public health and a public safety program. From the public health standpoint, EMS provides emergency health care services and medical direction. EMS provides first responder and public safety support to local government. With roots in both areas and existing at their intersection, EMS has a unique view of our efforts to date in public health preparedness, the topic of your discussion today.

The EMS Authority has long believed that a successful emergency preparedness program for natural, technological and human-caused disasters must, at its heart; focus on the needs of people. The emergency health and human services needs of the public following both the recent hurricanes in the Southeast as well as the terrorist attacks in 2001 all point to the need to continually strive to develop, test and implement response and recovery plans with the consumer in mind. The actualization of those plans lies in the services that the consumer receives at the time of the event and in the following days and weeks. These services need to be carried out by trained responders and organized volunteers serving as health care providers, response coordinators, and required support personnel.

Joint Drills among Public Health and Traditional First Responders

The process of preparing the medical and health work force for their emergency response and recovery roles is ongoing. Today's public health, EMS and health care providers will not necessarily be the same individuals on the job ten or twenty years from now. Therefore, we believe that programs put in place to train and exercise these individuals must become part of each organization's

framework and the duties required included in the basic job description of all personnel.

Further, while training and exercising of individual organizations/agencies is critical, the definition of a disaster requires that individual plans and policies be linked with many other diverse entities. This is necessary to carry out the myriad of services that will be needed to address the public's immediate medical needs, restore the health care infrastructure (as required) and provide basic public and environmental health services. We believe this connection is especially important to develop before an event, and that the plans and policies be refined through exercising and drills.

The EMS Authority along with its local EMS Agency partners, have a long history of reaching out to the public health, as well as the private health care community to jointly prepare for emergencies. These activities are linked with those of local and State emergency management agencies (Offices of Emergency Services) which provide the overall direction in hazard identification, emergency plan development and testing. In recent years with the Y2K millennium role-over we have seen increased threats of terrorism and a concurrent recognition of the importance of the public health community's response to such an event. In response, joint agency planning and exercise activities have increased dramatically statewide.

The Departments of Defense, Justice and Health and Human Services has provided training as well as tabletop and field exercise opportunities to over two dozen cities and counties throughout California through funding provided from the Nunn-Lugar-Domenici Program Domestic Preparedness Cities Program. Public health, hospital, EMS, and fire and law first responders have jointly tested their and refined their plans through scenario driven chemical and biological events both in Emergency Operations Centers (EOCs) as well as under actual field conditions. Many other counties that did not receive these monies attended

the trainings, updated their own response plans, held drills and continue to do so as we speak.

The EMS Authority exercises its departmental operational response capacities through state field exercises as well. The seven (six general medical, one mental health) volunteer DMATs in concert with the EMS Authority's Management Support Team (MST) regularly train with the California Air and Army National Guard to hone patient triage, treatment and aero medical evacuation skills under austere disaster conditions. The EMS Authority in collaboration with Department of Health Services, California National Guard, and local public health and local EMS agencies planned the most recent exercise titled "Rough and Ready 2002". Over 500 exercise participants including seven California DMATs, National Guard, local fire services, law enforcement and ambulance providers responded to a mock terrorist attack involving chemical and biological weapons and an explosive device. As part of the response, DMATs practiced mass prophylaxis for the hundreds of responders exposed to the biological agent.

Local and state emergency plans are tested on actual events, such as the wave of anthrax hoaxes in 2001-2002, which provide on-going refinement to defined roles, communication interfaces, mutual aid systems, etc.

Training and Practice Needs for Public Health and Emergency Health Professionals

The EMS Authority has taken a leadership role in the exercising of linkages amongst the many entities comprising the disaster medical and health system through its annual Statewide Medical and Health Disaster Exercise. This event, now in its fourth year, provides the opportunity for all hospitals and governmental medical/health and emergency management agencies to exercise together. In the first year of the event, over 400 hospitals, 100 public and private field response providers and 57 out of 58 counties participated. Scenarios have

included Y2K roll-over, earthquakes, hazardous materials and decontamination. The event continues to expand the number of participants to incorporate hospitals and other healthcare providers (including long-term care facilities and clinics); pre-hospital care providers, auxiliary communication networks, blood banks and local and regional government agencies.

In keeping with last year's theme of "man-made" disasters and in addressing the current hazards and threats that confront emergency managers and the public and private healthcare community, the Exercise Planning Committee has designed this year's scenario around a radiological event and exercise. The exercise incorporates "sheltering" again to reinforce the critical policy decisions and procedures involved in its implementation. In addition, this year's scenario includes the treatment of radiologically "contaminated" patients requiring decontamination to emphasize the learning principles from previous exercises.

This year's Statewide Disaster Medical and Health Management Conferences, managed by the EMS Authority in conjunction with DHS and other sponsors, were also devoted to radiological emergencies. The conferences were held on October 1st in Ontario, October 3rd in Commerce and October 15th in San Rafael. Over 800 physicians, nurses, EMTs, Paramedics, firefighters, and healthcare and government emergency management planners attended.

Distributing Federal Funds

The State of California was recently approved for and received a cooperative agreement grant for $ 9.9 million from the Health Resources and Services Administration (HRSA) for the development and implementation of regional plans to improve the capacity of hospitals, their emergency departments, outpatient centers, EMS systems and other collaborating health care entities to respond to bioterrorism incidents and/or other outbreaks of infectious disease. The EMS Authority is administering and implementing the provisions and planning of the

grant. In addition, to the State grant, the County of Los Angeles received and directly administers $3.5 million from HRSA to improve the county-wide hospital response to bioterrorism.

A Hospital Bioterrorism Preparedness Planning Committee (HBPPC) consisting of external content experts from state, federal, local, public and private health care, medical community, and emergency management has been established and meets regularly and is progressing toward meeting the HRSA mandated critical benchmarks for the grant program including regional approaches to planning. Program staff have been hired; a comprehensive assessment to address hospital capacities, capabilities, vulnerabilities and needs to respond to bioterrorism is in process (over 1,000 licensed general acute care hospitals and licensed community clinics); the development of both a standardized, statewide training program on bioterrorism and terrorism for healthcare providers including hospital, ambulance, EMS, clinic and public health staff and recommended standards (recommendations) and protocols for healthcare providers regarding the stockpiling of medications, treatment protocols, decontamination and personal protective equipment, isolation and biologic disaster drills are underway. Finally, the project will address communications and surveillance issues and needs for hospitals, EMS, clinics and other healthcare providers.

The EMS Authority, Department of Health Services and other agencies receiving similar current terrorism preparedness grants are required to collaborate on planning efforts. The EMS Authority is collaborating with Department of Health Services on their Centers for Disease Control: Public Health Assessment Grantees and the Metropolitan Medical Response Systems Programs throughout California.

If additional monies become available for funding for terrorism, considerations of the following four important principles should be considered for adoption:

1. Terrorism response and mitigation plans should be developed as sub-components of strong state and local, “all-hazard” disaster plans.
2. All state and local all-hazard disaster plans should use a standard command and control structure, common terminology, common response, mutual aid and patient dispersal procedures, and redundant communication systems.
3. Standardized terrorism response modules should also be developed at the state level for inclusion into existing state and local all-hazard disaster plans. These modules should include variances for utilization in urban and rural areas.
4. Grant funding for EMS, hospital, and public health should be available on a multi-year basis to be successful.

Assessing and Planning for Emergency Surge Capacity

The EMS Authority has recognized the need for additional capacities for both in-patient (hospital) and out-patient medical and health services following a disaster. Although the department has no direct statutory mandate over the health care system to require this to occur, the EMS Authority does have the responsibility of coordinating medical and disaster preparedness with our local EMS Agency partners and hospitals and, as previously stated, responding to any medical disaster by mobilizing and coordinating emergency medical services mutual aid resources to mitigate health problems. The department has; therefore, moved aggressively with its public and private partners to raise the level of emergency preparedness awareness and seek to build on existing capacities with mutual aid/mutual assistance systems to augment them. Awareness and preparedness has been increased through ongoing training programs, planning meetings with statewide associations and local government partners, and developing plans and agreements for response support to affected areas.

The EMS Authority, in concert with the emergency management community and following SEMS, works on the premise that all disasters are local and the State's role is to provide leadership, additional medical personnel, supplies, and equipment resources. At the time of a disaster, the responsibility to work with local hospitals and the medical community rests with the local EMS Agency and the local Health Officer. All local EMS Agencies currently work with their hospital facilities to coordinate day-to-day EMS patient care services and multi-casualty incident management (such as large traffic accidents). The EMS Authority supports local government efforts through development of model programs, plans, and procedures; convening disaster work groups; and responding to resource requests following a disaster.

In the EMS Authority's leadership role, it has recently developed standards and will embark on a regulatory process to clearly delineate the role local EMS Agencies in planning for, responding to and recovering from medical disasters involving mass casualty events (such as earthquakes, terrorist attacks). As part of these responsibilities, local EMS Agencies will coordinate:

1. disaster medical and health resources;
2. patient distribution and medical evacuations;
3. hospital inpatient and emergency care providers;
4. out-of-hospital medical care providers;
5. pre-hospital emergency services; and,
6. the establishment of temporary field treatment sites.

The EMS Authority has devoted its resources to directly work with our hospital and health system partners from a statewide perspective. Aside from the training and drills previously mentioned, the department convenes a hospital and health system Disaster Interest Group to address specific emergency preparedness and response issues. Through the California Healthcare Association and its member regional organizations, representatives of both large and small hospital corporations, government, and rural facilities gather monthly to address timely

emergency response topics. The EMS Authority staffs the work of the group. They have recently completed and published a document that provides recommendations for all California facilities regarding patient decontamination algorithm, staff protection and equipment required during patient decontamination, and evidence collection. This “by-hospitals-for hospitals” approach has been adopted by the Joint Commission on Accreditation of Health Care Organizations (JCAHO) and the American Hospital Association.

The EMS Authority recognizes planning for the management of large numbers of victims affected by a disaster and seeking medical care at facilities involves two separate but intertwined systems. One is the identification of the resources to serve those patients (staff, supplies, medications, equipment, physical space, etc.), and the second is a management system (with appropriate communication mechanisms) to oversee the process. Both are developed and instituted following a hazard vulnerability assessment that realistically looks at the threats that an area faces (earthquakes, floods, hazardous materials accidents, terrorism, etc.) and then juxtapose that against the likelihood of that threat occurring and affecting the ability to continue to provide medical and health services.

Hospitals and health systems, working in partnership with local EMS agencies and health departments, are continuously examining their abilities to handle mass casualties. Some counties have provided monies to help hospitals prepare by purchasing response equipment and medication. Hospitals in turn have responded, such as in Orange County, by agreeing to rotate stocks of critical drugs and medications through their pharmacies to ensure their availability at the time of an event. More and more hospitals are purchasing communication systems such as ReddiNet to link them with local EMS agencies, health departments and field EMS responders to coordinate both day-to-day ambulance diversions as well as allocate distribution of patients and required staff and other resources during a multi-or mass casualty emergency. Hospitals are also

instituting the Hospital Emergency Incident Command Systems (HEICS), developed through the EMS Authority, to manage both their internal and external disaster operations.

If local facilities within a county are overwhelmed in the event of a catastrophic disaster, the EMS Authority, at the request of local government and following SEMS, will manage the evacuation and distribution of patients to facilities outside the area. This process is managed by the EMS Authority's funded system of Regional Disaster Medical Health Specialists (RDMHS). During the statewide flooding in 1997, critical intensive care patients were moved from Sutter and Yuba counties (Mutual Aid Region III) to hospital facilities in the Sacramento area (Mutual Aid Region IV) for treatment as local hospitals prepared for the impact of the disaster. Larger-scale evacuations can be coordinated through this same system and, if necessary, can expand through the National Disaster Medical Systems to look at staffed bed availability in other states.

An alternative, and an adjunct to increasing existing surge capacities, is to provide field medical services through DMATs in a disaster response. DMATs, like other State medical resources, can be accessed through the medical mutual aid system and the RDMHSs. DMATs can not only provide life saving medical services following an event but can also hold patients for a period of time until they can be forwarded to an acute facility or discharged back into the general population. Dependent on the nature, size and scope of the emergency, a mixture of approaches involving field treatment and holding, placement in surviving local hospitals and near and distant patient evacuation will be implemented by local authorities and supported by the EMS Authority and DHS.

Providing a Bridge between the Public Health and Medical Care Delivery Professionals

Local EMS Agencies and the EMS Authority are critically positioned to serve as a natural bridge between the public health communities and medical care delivery professionals to enhance public health preparedness. It should be made very clear in making this statement that EMS is a partner to public health in this process and works within the statutory authorities of local Health Officers and the State Department of Health Services. At the local level because of day-to-day medical direction and administrative coordination of the local EMS system, local EMS Agencies serve a critical health planning role involving pre-hospital care providers, hospitals, law enforcement, fire service and first responders, and local health departments. In a disaster planning and response role these activities expand to include emergency management agencies, National Guard and other State and Federal agencies, medical and pharmaceutical suppliers, physician and nursing societies, etc. Similarly, the EMS Authority partners with the DHS to carry-out the State level counterpart for these activities.

The EMS Authority spends considerable time with local EMS Agencies, local Health Officers and Health Executives to develop integrated medical and health disaster plans and provide training and exercise opportunities to better develop a coordinated response and recovery program. The EMS Authority has funded over thirty counties for these local planning efforts. Projects include planning for vulnerable populations in a disaster, developing model integrated medical and health plans and procedures, and establishing a functional medical and health department emergency operations center. Both the EMS Authority and its local partners believe that these efforts are helping to integrate governmental planning efforts and the inclusion of the private health care community.

I wish to once again thank the committee for this opportunity and to discuss the EMS Authority's role in public health preparedness.