

the majority of volunteer physicians responding to incident scenes are unfamiliar with appropriate medical care provision in the out-of-hospital setting and that they do not usually appreciate the operational responsibilities of the jurisdictional authorities. As a result, it is felt that volunteer physicians generally inhibit operations more than they help during a multi-casualty incident (MCI), particularly in the modern urban setting. On the other hand, in municipalities where physicians regularly participate in field operations as part of the day-to-day emergency medical services (EMS) system, the incident command, including triage and scene management, appear to operate smoother during major incidents. This observation is not surprising in that it closely follows the first major rule of incident management, namely to follow day-to-day routines as closely as possible or else prospectively modify those daily routines to meet the potential needs of a major incident. The National Association of EMS Physicians (NAEMSP) is a recently-developed organization which provides a network for physicians who are legally responsible for prehospital medical care delivery and includes most of the designated medical directors for most major municipalities within the United States. The majority of these EMS physicians are familiar with the unique problems and logistics of the prehospital environment as well as the operational activities of the local civil authorities. Many regularly interact with the civil authorities on a routine basis in difficult emergency operations and can be prospectively recognized and trained as part of a disaster or MCI plan, whether at a local level or as part of a national network. Among its various activities, the organization has begun to provide routine discussions and reports on MCI management at its meetings and now plans to formally learn about major incidents whenever they occur in order to further educate its membership. It also is willing to assist the WAEDM in providing another centralized base of knowledge, as well as a clearinghouse for MCI research activities. Furthermore, the NAEMSP is even willing to provide an available pool of "street-wise" and capable physicians for assistance in major incidents. The overall goals and current activities of this organization will be discussed.

MEDICAL RESPONSE TO TERRORIST INCIDENTS

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Terrorist incidents are of increasing concern to the emergency medical community since they have the capability to produce the loss of life and casualties on a large scale. The mass casualties which may result from terrorist attack have the potential to overwhelm existing levels of response. Since all EMS personnel are potential responders to terrorist incidents, an understanding of the nature of terrorism and the types of injuries it can produce are essential. The nature of terrorist assault may require the development of specially trained Medical Response Teams for Terrorism. These teams, with their specialized training and skills, in cooperation with other agencies can form the basis of an appropriate medical response to terrorist incidents.

PREHOSPITAL CARE EXPERIENCE IN MEXICO

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Cruz Roja Mexicana Hospital is one of the largest institutions dedicated to the care of medical and surgical emergencies in Mexico City. Established in September, 1981, it conducted the first training course for pre-hospital care providers at the basic life support level in the country. In Mexico City with a population of 16,000,000, trauma is the second cause of death in the age group of major productivity. Despite the deficient technical and economical facilities it was imperative to organize such a training program.

Materials and Methods

From January, 1982, to June, 1983, 1,437 paramedic interventions were performed; 1,428 (99.37%) patients were transported by ambulances, 9 (0.62%) patients were transported by helicopter, the average age of the patients was 32; 1,184 (82.39%) were trauma victims and 221 (15.38%) were medical emergencies, while 836 (58.1%) were victims of blunt trauma and 317 (22.05%) penetrating trauma. Other

injuries, burns, etc., accounted for 4.3%. The pre-hospital care providers performed more than 2,000 non invasive procedures such as airways establishment, splint applications, etc. They also performed more than 300 invasive procedures including IV administered (under the radio direction of the physician), esophageal intubation, etc. The total mortality of this group was 32 patients (2.22%): 29 died at the scene of the accident and 3 patients died during transportation to the trauma center.

Conclusion

This pioneering attempt to create "the consciousness" in Latin America of the value of Pre-Hospital care providers, has been rewarded with a significant decrease in morbidity and mortality from a previous 25% to 2.2%.

DISASTER RESPONSE TO A PHOSPHOROUS FIRE EXPOSURE

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On July 8, 1986, 15 cars of a 38-car train derailed in Miamisburg, Ohio. A car in the derailment contained white phosphorus which immediately ignited upon exposure to air. The resultant cloud of toxic gas forced the evacuation of approximately 40,000 residents in the area. Emergency medical involvement during the incident included emergency physicians at the medical command post and 2 of the 12 evacuation centers, 116 EMS squads from 6 counties as well as personnel staffing emergency departments.

Approximately 500 victims were seen in local emergency departments. Most victims had eye and respiratory irritation. Minor injuries were sustained by several rescue workers. There were no deaths reported related to the incident.

The disaster incident lasted 110 hours and adequately tested the recently revised county disaster plan. A discussion of the evacuation and patient presentation and treatment is provided.

DEVELOPMENT OF A STATEWIDE TRAUMA/EMS SYSTEM: THE MARYLAND EXPERIENCE

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The Maryland Institute for Emergency Medical Services Systems has become a leader in trauma and emergency medical services committed to advancing the total care of the critically injured or ill patient by increasing the ability of the prehospital and hospital personnel to handle critical emergencies. MIEMSS is the control center of an organized, statewide EMS system unmatched in sophistication and scope. It is a composite of numerous interdependent subsystems, operated by public and private agencies and institutions at the state and local levels. MIEMSS coordinates the emergency care services of Maryland's 46 hospitals, 10 areawide trauma centers, 19 specialty referral centers and 6 consultation centers. The MIEMSS Shock Trauma Center, the clinical core of the system, was officially opened in 1961 with 2 beds. Today, the Center has 108 beds and cares for more than 2500 patients annually. Extended rehabilitation care for patients recovering from severe head, spinal cord or skeletal injuries is provided at the MIEMSS Montebello Center. MIEMSS also coordinates the state's EMS transportation and communications systems and provides training for emergency medical personnel. In addition, MIEMSS maintains a statewide registry and runs a baccalaureate and masters program in emergency health services at the University of Maryland Baltimore County. MIEMSS also conducts active public information and education programs to keep the public informed about EMS services and the Institute's accomplishments.

GENERAL CONCEPTS OF JAPAN MEDICAL TEAM FOR DISASTER RELIEF AND ITS PROBLEMS

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In cases of large scale disasters which destroy local emergency medical services system or even threaten these at a national level in developing countries,