

updated feedback from receiving facilities and have basic life support providers preferably provide extrication and movement to an evacuation point while advanced life support providers provide secondary triage and transport with advanced treatment begun (preferably) enroute; 8) Log events for subsequent evaluation recognizing that media can be useful in chronicling events as well as for informing the public of hazards and any need for specialized assistance; 9) Provide post-incident care for rescuers, victims and incoming family/friends including immediate debriefings, protection from legal and media opportunists, as well as simple food, shelter and medical care; 10) Train and test all potential rescuers including the lay public and auxillary agencies.

THE TRAINING OF UNDERGRADUATE MEDICAL STUDENTS IN DISASTER AND EMERGENCY MANAGEMENT

**Morgan Fahey, O.B.E., M.D.ChB.,
F.R.N.Z.C.G.P., Christchurch, New Zealand**

This paper will discuss the challenges to improve world wide the standards of undergraduate training in emergency and disaster medicine. Successful methods of teaching traffic medicine, mass casualty management and airport disaster preparedness will be presented, answering the questions who should be taught, who should teach and how should the subjects be taught. The paper will conclude that emergency and disaster medicine are neglected topics in many countries and the challenges remain to improve standards of teaching for the future.

MAJOR AND MINOR TOXICOLOGICAL DISASTERS: ORGANIZATION OF PREVENTION AND TREATMENT

Sergio I. Magalini, M.D., Rome, Italy

To reduce the potential risks in toxicological disasters the following steps will be discussed: 1) To prepare and keep an updated map of where toxic substances are produced or stored. 2) To collect documentation on the nature of the toxic substance used, the metabolites formed during their production or those developed following accidental events (fire,

water, air, contact). 3) To preidentify generic and specific measures to prevent or reduce damage to person or the environment (flora and fauna) and the treatment of eventual lesions. 4) To authorize transport of toxic substances only when provided with the documentation indicated in point 2. 5) To establish a "direct line of communication" and continuous consultation between manufacturers and transporters and Poison Centers, which could act as coordinators both in the preventive and therapeutic phases from the site of accident to the hospital care.

TRAINING IN DISASTER MEDICINE

**Adriaan J.H. Korver, M.D., The Hague,
The Netherlands**

A disaster is a situation where there is a discrepancy between the demand for medical aid and the supply of it, on the one hand, and where the aid given has to be in specific accordance with the disaster in order to be able to fight the disaster's consequences, on the other.

The medical care (mostly referred to as disaster aid) has to be such that the largest number of those victims whose life or health are in serious danger, are given the largest amount of help. Doctors will have to concentrate on providing curative and preventive care, while taking the disaster situation into account. Disaster is "mass" aid. This demands a different frame of thinking: individual care is not possible.

This paper details more specifically the theoretical and practical knowledge doctors need to have in order to be able to provide adequate relief in disaster situations.

THE NAEMSP: A SOURCE OF A PHYSICIAN NETWORK FOR MAJOR INCIDENTS IN THE U.S.A.

**Paul E. Pepe, M.D., Raymond L. Fowler, M.D.
and Ronald Stewart, M.D., Houston,
Texas, U.S.A.**

In recent conferences on disaster medicine in the United States, a recurrent debate has arisen regarding the role of physicians at the scene of a major incident. While most agree, in theory, that expert, knowledgeable medical participation is desirable, it has been the experience of most civil authorities that

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

John P. Sullivan, M.A., Jersey City,
New Jersey, U.S.A.

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

A. Grife, M.D., A. Zamudio, M.D.,
R. Garccia-Morales, M.D., M. Gomez-Palacio,
M.D. and A. Rodriguez, M.D.,
Mexico City, Mexico

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