

Pre-hospital emergency care – Requirements for an emergency medical service

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SUMMARY

The aim of an emergency medical service is to provide ill or injured patients with early life-saving medical treatment. Basic requirements for such a service are given.

DISASTERS, both natural and man-made, occur with little or no warning, and the problems they create at the time and during subsequent investigations, justify the efforts involved in attempting to anticipate their effects¹.

The aim of an emergency medical system (EMS) is to provide a critically ill or injured patient with the earliest possible life-saving medical treatment. The essentials of an EMS are as follows².

The call for help

The person discovering the casualty or disaster initiates this call by telephone, radio or messenger. A well-publicised call system will avoid confusion, delay and panic.

Immediate on-site first-aid

No matter how efficient the EMS, if the people who discover the casualty are not trained in first-aid and cardiopulmonary resuscitation, many lives will be lost as a result of bleeding, asphyxia or unconsciousness.

All 'first responders' in the EMS should be trained in **Basic Life Support** according to the internationally accepted standards of cardiopulmonary resuscitation (CPR) of the American Heart Association³.

All training organisations, including the First-Aid Societies, should abide by these international standards.

Dispatch of the correct help

The central control room, in communication with the whole EMS, evaluates the call and sends the necessary help. Opinions differ regarding the usefulness of a medical team at the disaster site, but if the circumstances justify sending doctors and nurses with first-aid personnel to the disaster, their efficient operation will depend on their training,

organisation and equipment. Medical personnel will need protective helmets, footwear and waterproof clothing. It may not be safe to send female medical personnel into potentially dangerous disaster areas, and for this reason trained paramedical male personnel are essential.

The doctor interested and trained in **Emergency Medicine**⁴ has the most important task of **Triage**⁵ (sorting out casualties in order of life-threatening conditions) at the disaster site.

Paramedical personnel

It is virtually impossible in a large community to send doctors and nurses to the site of a disaster or even a medical emergency. The personnel dispatched in response to an emergency call should be well trained in first-aid and cardiopulmonary resuscitation.

Communications

In almost every reported disaster or disaster exercise, communications have failed! All elements of the EMS should have voice contact. The control room communicates with fire, rescue emergency, police and traffic vehicles as well as with the hospital, and with other control rooms, and has a call system for key personnel. Three separate communication links are required by the medical team¹ viz. access to the emergency radio network of the police or fire team, a direct radio link between the medical officer at the disaster and receiving hospital, and inter-personnel communication at the scene of the disaster.

Transportation

A complete EMS has the support of fire-fighting, rescue, emergency and ambulance vehicles. Rescue vehicles are used to extricate casualties from wrecks; emergency vehicles are designed to allow effective treatment of the casualty at the site, and have sufficient life-support and monitoring equipment for use during transit. Ambulances are used for the transport of less seriously injured casualties.

Hospitals

One hospital in the area is the receiving hospital and others are supporting hospitals. Hospitals make their own internal arrangements in the casualty and intensive care units, but the importance of collaboration between the hospital service, fire, police and the EMS must be emphasised so that no confusion occurs when all the services are working together in a large-scale emergency.

Local authorities are responsible for the overall civil defence planning, and have to rely on the doctors in their areas to advise and actively assist with the formation of an efficient EMS⁶.

Disaster planning remains a difficult and unpopular task for very busy people hampered by public apathy, lack of funds and, in certain cases, a disregard for medical priorities by the local authority⁶. The final test for an efficient civil defence plan will be a properly designed exercise simulating a disaster. Catastrophes never seem imminent, and we must accept the irony that, as planning and training continue, the system becomes better geared to handle an event which everyone hopes will never occur^{1,7}.

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ADDICTED DOCTORS; RESPONDING TO THEIR NEEDS

A better understanding of the problems of physicians who misuse alcohol and drugs has helped in the early recognition and treatment of a chemical dependence. Treatment programs, particularly those which recognize physicians' special needs, report high rates of recovery. Many addicted doctors' needs are related to their professional role. Their image often becomes an obstacle to treatment. Relationships with colleagues frequently make it difficult to get help. These special problems usually reflect negative attitudes and moralistic judgments which are unwarranted. The early recognition of a developing dependence is encouraged by informal programs of assistance and an advocacy role for the profession.

Henderson, HW
Canadian Family Physician Vol 29: 1983 (1853 - 1855)

VOCATIONAL TRAINING FOR FAMILY PRACTICE IN ISRAEL

Awareness that the competent family physician in the community is the key person in providing economic and effective health services is increasing. In Israel, as in most Western countries, this need is being met by postgraduate vocational training in family medicine. In Israel, the 4-yr curriculum, after completion of the compulsory internship year, consists of 27 months in rotating residencies in approved hospital wards, followed by 21 months in approved teaching practices, under the supervision of family physician tutors. A formal course of academic studies or work in one of the basic medical sciences is required, as are the Board of Family Medicine mandatory examinations.

Now it is necessary to reach a consensus on the future scope and content of family medicine as an independent discipline that can provide comprehensive, continuous, accessible, and coordinated health care to all family members in the practice population, both in their homes and in clinics. There is also a need to recognize that academic and clinical teaching and research are as much a part of the family physician's task as his service commitment, and that adequate facilities must be provided.

Polliack, Max R (Dept. of Family Medicine, Tel Aviv University) *Isr J Med Sci* Vol 19: 1983 (783 - 786).