

## CHAPTER 6

### HIGHLIGHTS OF PROJECT NO. 4: EMS TRAINING AND PUBLIC EDUCATION

Lead Nations: ITALY and PORTUGAL

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#### PROJECT OBJECTIVES:

- To develop a multinational training program plan for EMS personnel
- To develop a public information and education program

### INTRODUCTION

During the past two years, the EMS Training and Education Project has made great progress in developing, testing, and promoting national programs to educate the general public and train all those involved in the delivery of emergency health care. The project has also engendered wide support and interest from public officials, the media and international experts in emergency health care. Project participants are still actively engaged in follow-up activities.

The co-directors of the project are Professor Corrado Manni of Italy and Professor Eduardo do Amaral of Portugal. These noted international health care experts assembled a distinguished international team to assist them, including Dr. Knud Jessen, Director of Aeromedical Services in the Danish Defense Command; Professor Sergio Magalini of Italy, who also chairs the CCMS/EMS Poison Control Project; Dr. Francisco Rocha da Silva, President of Portugal's Cabinet of Emergency Medicine; Professor Maurice Cara of France, who serves as Co-Chairman of the CCMS/EMS Communications, First Response, and Transportation Project; Professor Louis Serre, Director of SAMU, Montpellier, France; Dr. Morgan Fahey of New Zealand; and Dr. William R. Gemma, Chairman of the CCMS/EMS Pilot Study.

The remainder of this chapter discusses: (1) the methodology used by the project team to achieve the objectives stated above; (2) the project's major conclusions; (3) the progress made in implementing EMS education and training

programs at the national level (in Italy and Portugal, the lead nations); (4) the progress in gaining the interest and support of the international community; and (5) the recommendations for follow-up actions made by the CCMS/EMS Pilot Study at its Working Meeting in Munich, Germany, in September 1980.

### METHODOLOGY

To achieve the project objectives, the co-directors developed a survey questionnaire, which was later approved by the other members of the team and circulated to participating nations. The questionnaire asked each country to submit certain information on pre-system and system activities currently in progress to train EMS personnel and educate the public on how to provide timely emergency action.

Pre-systematic activities include those activities necessary to bring about a timely appropriate response by the general public before the system is accessed. Systematic activities include those activities necessary to train EMS system personnel, beginning with appropriate pre-hospital response and continuing through preparatory training for EMS specialists.

Based on the survey results and discussions among team members, a framework for a national EMS public education and training program was developed.

This framework included the following education and training activities:

- PRE-SYSTEMATIC ACTION

- Public Education Programs

- Television
    - Radio
    - Cinema
    - Press

- Elementary School Programs

Training of specialized personnel to teach children the importance of the EMS system as well as basic procedures of emergency care

- Industrial Education Programs

Training of monitors to alert workers to the importance of the EMS system and give them emergency care instruction

- SYSTEMATIC ACTION

- Special courses for the following support personnel:

- Ambulance drivers
    - Pilots of rescue helicopters and ships

- Class 1 Emergency Medical Technicians
- Class 2 Emergency Medical Technicians
- Class 3 Emergency Medical Technicians
- CPR technicians
- Poison control personnel
- Obstetrics personnel
- Life guards
- Scuba teams
- Communications personnel
- Central dispatchers

EMS courses for emergency room and ICU nurses

Special EMS programs for medical students covering the following:

- Explanation of EMS Systems
- Resuscitation
- Traumatology
  - Head and face
  - Thorax
  - Abdomen
- Drowning
- Obstetrics
- Pediatrics
- Cardio-Vascular
- Poison Control
- Disaster Training

Special post-graduate programs for acute medical situations, such as:

- Anesthesiology and Resuscitation
- Traumatology
  - Neurosurgery
  - Chest surgery
  - Abdominal surgery
  - Orthopedics
- Drowning
- Cardiology
- Pediatrics
- Obstetrics
- Psychiatry
- Disaster Medical Screening
- Burns
- Poison Control

## PROJECT CONCLUSIONS

Based on its research over the past two years, the project team concluded the following:

- Public education and training should be an integral part of a country's EMS system.
- EMS training and education programs should include both pre-systematic and systematic actions directed to the groups listed in the framework outlined in the previous section. The following are illustrations of programs applicable to a pre-systematic education program:
  - Education of the general public on the importance of an effective EMS system
  - Public education on the use of a universal number for emergencies, the use of SOS call boxes, and training in simple life-saving procedures
  - Utilization of mass media
  - Legislative actions to establish basic-level EMS programs in the curricula of elementary schools, driver's education programs, and industry
  - Extrication courses for police and fire personnel
- These programs, moreover, should be drawn up in such a way that laymen, public assistance personnel (police, fire, and rescue) as well as health care professionals and paraprofessionals can render assistance appropriate to their roles in the system.
- Training should be required for EMS system personnel at all levels. Refresher courses in the latest emergency techniques should also be mandatory.

## ACCOMPLISHMENTS AT THE NATIONAL LEVEL

The project team's accomplishments at the national level in Italy and Portugal concentrated primarily on making public officials, the media, and ordinary citizens aware of the critical role the general public can play in medical emergencies.

In Italy, the media agreed to participate in the development of a national effort to inform the public concerning: simple first-aid measures; what each individual -- the victim as well as the person supplying the assistance -- should do in specific emergencies; and ways of accessing existing emergency medical services. The media also agreed to report instances in which the timely intervention of emergency techniques prevented or mitigated death or disability (e.g., a son who saved his father's life by giving heart massage or a person saving a friend by giving artificial respiration). The project team has developed a series of short public service programs on

accident prevention and first-aid techniques. Television and radio stations occasionally insert these public service spots during news programs. To gain the interest and support of public authorities to improve emergency medical services in Italy generally, the Italian Society of Intensive Therapy will focus on education, training, and planning for medical emergencies outside the hospital.

With respect to national programs in Portugal, where a total reorganization of emergency medical care is now underway, this country, too, has successfully developed several public education programs. Examples include a set of matchboxes that illustrate various first-aid techniques and film clips that appear on national television.

#### ACCOMPLISHMENTS AT THE INTERNATIONAL LEVEL

In addition to the broad support from public officials, health care experts and the media in Italy and Portugal, the project team succeeded in eliciting wide interest from the international medical community.

Two examples of the international interest the project has engendered are:

- A cooperative EMS training program between Egypt and the United States is currently underway.
- Members of the Committee were invited to present programs at various meetings concerned with topics relevant to EMS.

In support of the work done by the project team, the CCMS/EMS Pilot Study endorsed the conclusions of the EMS Training and Public Education Project in their recommendations for follow-up action by the team.

#### EMS PILOT STUDY RECOMMENDATIONS

The following specific recommendations for improving EMS training and public education programs at the regional, national, or international level were endorsed by the delegates of the sixteen nations who attended the September 14-16, 1980 meeting of the EMS Pilot Study in Munich, Germany.

1. EMS training and public education programs should be an integral part of the EMS system.
2. Training programs should be such that laymen, public officials (police and fire), and emergency medical personnel in all capacities are able to render assistance appropriate to their roles in the system.

RECOMMENDATIONS (Continued)

3. Education for the general public should include, at a minimum, information on (a) first-aid, (b) simple life-saving techniques, (c) accident prevention, and (d) how to access the EMS system. An all-media approach should be used to disseminate this information. Children of all ages should receive EMS education in school.
4. EMS professional and support personnel in all capacities (ambulance drivers, rescue pilots, nurses, medical students, physicians) should not only receive initial training in all aspects of emergency health care, but must be given refresher courses to keep them up-to-date on recent advances in emergency care.
5. National standards for training EMS personnel should be developed. The standards then should be evaluated as a basis for determining a set of minimum international EMS training standards. Mechanisms should be developed for disseminating and implementing these minimum standards worldwide.