

Currently, the ERS provides service to a population of 2.5 million people.

#### Objectives:

1. To profile the patients who have used ERS;
2. To measure the impact of the ERS in terms of ambulance transportation time, prehospital care, and quality of service; and
3. To identify the types of emergencies and the management of the response.

**Methods:** The study was conducted in eight cities of Andhra Pradesh. Two groups were evaluated: (1) An experimental group was defined as those patients who have used the ERS; and (2) a control group was defined as those patients who have not used the ERS. Approximately 1,000 patients comprised the experimental group, and 500 were in the control group. The sample size for each of the eight cities was based on probability proportionate to size (PPS). The patients in the experimental group were selected randomly, and the patients in the control group were selected randomly from local hospitals. A structured data collection was used to elicit the information. The reference period was four months from the date of the survey. All data were analyzed using SPSS.

**Results:** The initial results indicate that: (1) mean ambulance transportation time from the site of the incident to the hospital was 13 minutes; (2) 87% of the patients in the experimental group received prehospital care; (3) 90.6% of the patients in the experimental group rated the quality of care as good; and (4) the survival status of the patients was 93.7%. Qualitative data of ambulance services also were collected and will be reported in the results.

**Conclusions:** These initial results indicate an overall positive impact of the ERS in Andhra Pradesh, India.

**Keywords:** ambulance; Emergency Response Service; India; prehospital  
*Prehosp Disast Med 2007;22(2):s27–s28*

#### Ambulance Transport and Services in the Rural Areas of Sweden, Scotland, and Iceland

*H. Svavarsdottir,<sup>1</sup> B. Gunnarsson,<sup>1</sup> S. Duason<sup>2</sup>*

1. FSA University Hospital, Akureyri, Iceland
2. Akureyri Fire and Rescue Service, Akureyri, Iceland

Ambulance personnel frequently deliver initial care to patients with critical illnesses or severe injuries. Therefore, it seems intuitive that it would be beneficial to have highly trained ambulance personnel in order to provide optimal care. However, skill maintenance of personnel often is difficult in rural ambulance stations. Geography and weather provide challenges to the ambulance service providers in northern European rural areas.

FSA University Hospital in Iceland, the Centre for Emergency and Disaster Medicine (AKMC) in Sweden, and the National Health Service (NHS)-Western Isles in Scotland received a grant from the INTERREG III Northern Periphery Programme to work on the "Ambulance Transport and Services in the Rural Areas" project. The objective of this project was to provide an overview of the present status of ambulance transport and services in the three participating regions.

Members of the working groups reviewed the current status of prehospital services in their country. The authors reviewed pertinent literature on this subject as well as the reports from each partner.

The main finding of the project is that the emergency medical services (EMS) systems in the three northern rural areas have many similarities. However, there are significant differences in several areas, e.g., the number and distribution of ambulances, service operation, education of ambulance personnel, and first responder schemes. The authors believe that this collaborative project will foster improvements in the provision of ambulance transport and services by partners of each region. It is important to increase the number and quality studies of in this field, with emphasis on patient outcome and utilization of resources.

**Keywords:** hazards; infectious disease; isolation facilities; nuclear, biological, chemical; training; viral hemorrhagic fever  
*Prehosp Disast Med 2007;22(2):s28*

#### Traffic Crashes in Crete (1996–2006): The Role of EKAB-Crete

*D. Vourvahakis,<sup>1</sup> M. Zeaki,<sup>1</sup> S. Loulaki,<sup>1</sup> M. Zervopoulos,<sup>1</sup> V. Kontoyiannis,<sup>2</sup> C.E. Chronaki,<sup>2</sup> D. Panagopoulos<sup>2</sup>*

1. Emergency Coordination Center of Crete, Heraklion, Greece
2. FORTH-Institute of Computer Science, Heraklion, Crete, Greece

The decline in traffic accidents that has been noted throughout Europe is not present in Crete, a favorite holiday destination. The extent of the problem and interventions made by the Emergency Coordination Center of Crete (EKAB-Crete) are presented.

Demographic, topological, and qualitative data from 1996–2005 have been analyzed. The primary data source was 315,000 emergency calls recorded in the EKAB-Crete database. Data analysis revealed that 60% of traffic accidents involved people of 20–50 years of age, who were primarily male (72% of dead, 80% of injured), and Greek (79% of dead, 85% of injured). The EKAB-Crete intervened with: (1) a unified emergency coordination center (ECC); (2) new sectors in areas with high accident rates; (3) advanced equipment in BLS and ALS-MICU ambulances; and (4) continuing education. The ECC employs Global Information System and Global Positioning System technology and telemetry for biosignals in ambulances, as well as online recording of emergency calls, and up-to-date triage protocols.

Despite the prevalence of accidents in Crete, the EKAB-Crete has succeeded in reducing: (1) the mean dispatch time; (2) the mean time to the accident scene from 10–12 minutes to 5 minutes in metropolitan areas; and (3) the mean time spent in the emergency ward by increasing the therapeutic interventions on-site. Other methods of reducing the number of accidents and deaths include: (1) continuing education on traffic safety starting in primary school; (2) information to visitors who are accustomed to driving on the left side of the road; (3) the creation of a Prehospital Trauma Life Support center; (4) better road supervision; (5) the use of separating bars on national roads; and (6) an improved road infrastructure.

**Keywords:** Crete; Emergency Coordination Center of Crete; emergency medical services; traffic crashes

*Prehosp Disast Med 2007;22(2):s28*