units (18%). Specially equipped motorcycles or super-mini city cars provided initial care in 1% of the cases. The observed cancellation rate was 20%.

**Conclusions:** The center of Athens was particularly aggravated, probably due to the lower socioeconomic level of the inhabitants. Women are more vulnerable than men, probably due to the underlying intentional poisoning that in turn may reflect the social pressure imposed upon them. Shorter daylight duration during winter may account for the observed peak in January.

Keywords: Athens; dispatch center; drug poisoning; emergency transport

Prebosp Disast Med 2007;22(2):s46-s47

### (75) The Australian Emergency Prehospital Pandemic Influenza Project: A Methodology for Operational Evidence

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In early 2006, a collaborative, national and international team led by the Australian Centre for Pre-hospital Research and Monash University Centre for Ambulance and Paramedic Studies was funded by a National Health and Medical Research Council Urgent Research Grant to study risk perception.

The study examined the perception of risk of Australian paramedics and their families to working and living in pandemic conditions. The study also assessed the utility of ambulance call-taking and dispatch data in constructing population-based models of surveillance and triage. This project secured early support from the National Council of Ambulance Authorities and the eight individual Ambulance Service jurisdictions across the country. The consultative approach and methodology applied for this project have provided an important platform for the development of evidence-based approaches to issues of national significance for Ambulance Authorities in Australia. This paper will describe the methodology applied to this project and emphasize the opportunities the project presented to facilitate national engagement, as well as to develop a governance structure to ensure good practice in the transition of research into operational policy.

Keywords: ambulance; Australia; pandemic conditions; paramedic; risk perception Prebosp Disast Med 2007:22(2):s47

## (76) Air Ambulance Emergency Medical Services in the Greek Island Complex of Dodekanisos

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Introduction: The Emergency Medical Services (EMS) of an island complex may face many difficulties with emergency evacuations. The Dodekanisos island complex of southern Greece solved these problems through the implementation of a well-organized system of physician and paramedic-staffed helicopters. The Rhodes helicopter EMS (HEMS) model is under the direct supervision of a nationwide air ambulance service based in Athens (EKAV—Department of Air Ambulance EMS).

Methods: The Rhodes HEMS model conducts air ambulance evacuations between smaller islands of the complex and Rhodes Hospital. Only few evacuations are directed to Crete or Athens. The statistical analysis results of Rhodes HEMS reports and EKAV air ambulance EMS reports were evaluated.

**Results:** A total of 1,071 cases were evacuated by air ambulance in Dodekanisos during 2003–2005. There were no significant differences in the rates of Rhodes EMS model evacuations through this period. In 2003, a total of 331 cases were evacuated. Rhodes HEMS model serviced 108 of these cases (32.6%). Respectively, in 2004, 151 of a total 390 (38.7%) cases were covered by the HEMS model and in 2005, 135 cases of a total 350 (38.6%). The rest of the evacuations were managed through aircrafts from the Athens Central Department of Air Ambulance EMS.

Conclusions: Air ambulance EMS systems are challenged all over the world. Rhodes HEMS model covers more than one-third of the evacuations yearly, representing an efficient local air ambulance model appropriate for an island complex. Keywords: air ambulance; air evacuation; emergency medical ser-

vices; Greece; island complex Prehosp Disast Med 2007;22(2):s47

# (77) Expanding the Scope of Paramedic Practice in Rural, Remote, and Isolated Communities

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The Queensland Ambulance Service (QAS) is the fourth largest Ambulance Service in the world. The QAS provides state-wide coverage to an area of 1.77 million km<sup>2</sup> from 282 service locations serviced by 2,800 clinically active staff. Due to the vast area of Queensland and the number of remote, rural, and isolated communities—including many island communities—Queensland is expanding the role of paramedics in these communities to increase their ability to support primary health care as part of a wider healthcare team including rural doctors and nurses.

Since 2004, QAS has worked with James Cook University, Mount Isa Centre for Rural and Remote Health, and Queensland Health to develop the Graduate Certificate in Rural and Remote Paramedic Practice. The Graduate Certificate in Rural and Remote Paramedic Practice aims to produce graduates who are able to provide expanded support services to medical, nursing, and allied health professionals. The certificate students will be prepared to integrate and acquire skills and knowledge relevant to the context of practice for their communities in the area of ambulance service operations, primary health care, and public health. The students will have an understanding of the context in which rural and remote health services are delivered. The program has a primary and public health focus that enhances skills in patient assessment, decisionmaking, consultation, and clinical practice. It is the first step in enabling paramedics to play a more integrated role in health service delivery and to contribute significantly to building capacity in Queensland's isolated communities.

Keywords: isolated communities; paramedics; Queensland Ambulance Service; rural health services Prehosp Disast Med 2007;22(2):s47-s48

# (78) Improving the Safety and Capability of Aeromedical Services in Queensland, Australia

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Aeromedical services are an integral part of emergency medical services in Queensland, Australia. Following a series of accidents resulting in the deaths of eight people, much has been done to improve the safety and capacity of rotary wing operations. A series of aero-medical reviews have been conducted, that resulted in the implementation of a number of operational improvements to safety and capability for rotary wing aircraft. These reviews highlighted the importance of participating in a state-wide, multifunctional partnership, delivering best-practice prehospital and inter-hospital services to the Queensland community through the combined efforts of staff and resources of Queensland Ambulance Service (QAS), Queensland Health, and the Community Helicopter Providers (CHPs). Consequently, Queensland employs best-practice frameworks for training, audit, safety, and operations of aeromedical services. Improvements have been made through: (1) the revision of service agreements with CHPs; (2) the revision of clinical crewing on helicopters (e.g., dedicated appointment of paramedics to rotary wing services resulting in opportunities for reduced risk through increased access to training, experience, personal protective equipment, and an understanding of CRM, safety, operations, and clinical practice); (3) establishment of minimum guidelines for CHPs (e.g., minimum twin engine turbine instrument flight rule (IFR) helicopter); (4) implementation of a fatigue management system for all aircrew; and (5) an audit of existing helipads with establishment of a minimum standard.

Keywords: aero-medical; Australia; capability; Community Helicopter Providers; safety; standards Prehosp Disast Med 2007;22(2):s48

### (79) "Prehospital Urgent Medicine in Space": Reality or Science Fiction?

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In concideration that some developed countries already have started to commercialize space flight, it is necessary to develop prehospital Emergency Medical Services (EMS) in space. Future space ships should have 10-15 seats. If a need for medical care arises, a space shuttle should be deployed to the space ship so that a qualification person can help the afflicted person. Of course, a person's health is under greater risk during space flight, but maximum precautions still should be taken. All possible ways of making diagnostic and medication judgements should be identified. The presense of EMS in space should not be precluded simply because EMS on Earth has not been frimly established.

We still hope that this vision may goes with the words of Neil Armstrong: "this is one small step for a man, one giant leap for mankind", and we will say it is a big step for prehospital EMS and of course for all emergency personnel! Keywords: commercialized space flight; Emergency Medical Services;

space

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## (80) Analysis of Emergency Aeromedical Transport in a University-Affiliated Hospital of Taiwan

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The purpose of this study was to analyze and evaluate the early definitive outcomes of the comprehensive emergency medical services and helicopter aeromedical transport systems for those patients in isolated or rural areas.

A total of 351 cases from July 1998 to June 2006 were collected from emergency service records. Each patient was evaluated according to the data from the registration sheet and computerized database. Information such as age, sex, diagnosis, transport place, and helicopter provider were analyzed.

The age range was 0-93 years with a median age of 50 years. The ratio between genders was 1.79:1 (225 men vs. 126 women). Children (<14 years of age) comprised 16.2% of the total study group. The number of trauma and nontrauma surgical patients were nearly equal, at ratio of 1.1:1. The frequency of helicopter transport decreased by 50% after 2002. All transport cases received satisfactory management and evaluation before being transferring to the ward or intensive care unit, except for the four victims that were dead on arrival (no vital signs or had CPR performed on them before being transported). The majority of trauma patients suffered from compound bone fractures and intracranial hemorrhaging. However, non-trauma patients experienced cardiopulmonary compromise and other diseases associated with respiratory failure. No complications occurred during transport.

Aeromedical helicopter transport plays an important role for critically ill patients, whether they suffer from traumatic or non-traumatic injuries, especially if the victims live in a rural area.

Keywords: aeromedical; emergency care; rural; Taiwan; transport Prehosp Disast Med 2007;22(2):s48

### (81)Reform of the Emergency Medical Services System in Serbia V.A. Alavanja

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The project of Emergency Medical Services system reform in the Republic of Serbia has been financed by the