ADL score ($r$ = -0.040; $p$ = 0.749) or post-morbidity ADL score ($r$ = -0.65; $p$ = 0.636). A 45% decline in ADL score was noted one month following discharge (pre-ADL = 15.85; post-ADL = 8.78).

**Conclusions:** Elderly subjects are at higher risk of poor functional outcome because they are less likely to recover function lost before admission and more likely to develop new functional deficits during hospitalization and after discharge. For older adults discharged after being hospitalized due to a medical illness, prognosis for functional recovery is poor at one month.

**Keywords:** ability to perform activities; acute illness; daily activity; decline in function; emergency health; geriatrics; hospital
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## (N57) Tool for Control over Emergency Medical Dispatch during a Major Incident

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**Introduction:** In Sweden, all emergency medical dispatch (EMD) is conducted by contracted EMD-companies. The County Council in the Gothenburg area wanted effective tools to monitor and control the dispatch situation during a major incident.

**Methods:** The unusual procurement form of the "negotiated purchase" was used in which competing companies develop the specifications together with the client, and finally the bidder with the best quality and lowest price was chosen.

**Results:** The purchase procedure gave the county council high-tech, computerized monitoring tools where the capacity and the ambulance units' load and positions, can be monitored in real-time.

**Conclusions:** Even though the County Council lacked the technical knowledge required to do so independently, it is possible for competing, high-skilled companies to develop a major incident management tool. The county council in the Gothenburg area now has its own central EMD, fully equipped with the necessary tools to cope with a major incident.

**Keywords:** ambulance services; company; disaster; emergency medical dispatch; emergency medical services; monitor; tools
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## (N58) Out-of-Hospital Cardiac Arrest in Train Stations and Trains: The Need for Public Access Defibrillation

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**Introduction:** The occurrence of witnessed out-of-hospital cardiac arrests (OHCAs) in public places inspired the implementation of public access defibrillation (PAD) throughout many countries. Among such places, airports and planes were equipped with automatic external defibrillators (AEDs). In Switzerland, >300 million persons travel by train each year. The question of setting up a PAD program in such places is relevant, at least in high-risk places (<2 OHCAs every five years).

**Methods:** Analysis of OHCAs in public places in the Vaud state of Switzerland (650,000 inhabitants) was conducted during a five-year period (2001–2005). Of these, there was a focus on those occurring in train stations and trains.

**Results:** Of 1,556 OHCAs, 306 occurred in public places (19.6%). A detailed analysis revealed that 21 cases (6.9% of public places OHCA) occurred in train stations and trains. Among the train stations, three had more than two OHCAs during this five-year period.

**Conclusions:** The occurrence of OHCAs in high-risk train stations justifies the implementation of a PAD program in such places. In airports and airplanes, such programs have saved many lives and have been linked to flight personal basic life support and AED training. The probability of having a health professional among travelers in high-risk places can be a useful gain for provider assistance. A PAD program with cost-effectiveness analysis will be initiated soon in the region along with a local first responder program.

**Keywords:** out-of-hospital cardiac arrest; public access defibrillation; public health; public places; train stations
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## (N59) Effectiveness of Prehospital Triage and Emergency Management during Mass-Casualty Incidents with the Utilization of Information Technology

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**Introduction:** Information and communication technologies enter many professional fields. Medical rescue services are more frequently equipped with information and communication technologies used for medical assistance during everyday practice. However, mass-casualty incidents (MCIs) require an exceptionally efficient management system and greater information flow in a short period of time. During MCIs, traditional communication systems may be insufficient for obtaining management efficiency. The solution to the problem may be information technology.

**Methods:** The objective of this study was to evaluate the opportunities of using currently available information and communication technologies in management support systems and telemedicine to increase prehospital triage and management effectiveness.

The study was conducted at the fourth Polish International Winter Championships in Emergency Care in Bielsko-Biala. There were 60 ALS teams. An MCI in which 60 people were injured was simulated. Triage and re-triage effectiveness, transport priorities, and casualty allocation to local hospitals were evaluated using the traditional method, as compared to information and communication technology. The WASKO's Command Centre Support System was used.

**Results:** The implementation of information technology resulted in more effective emergency care in triage accuracy, transport priority, emergency department allocation, and time

required to perform triage and emergency care management compared to methods based on traditional procedures and information transmission.

**Conclusions:** Implementation of information and communication technology increases the effectiveness and safety of emergency care during MCIs.

**Keywords:** emergency health; emergency management; emergency medical services; information technology; mass-casualty incident; triage

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## (N60) Meeting Reproductive Health Needs during Crises

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**Introduction:** Freedom from violence is a basic human right. Women and girls often are at an increased risk of violence, and may be unable to access assistance. Men may suffer other disadvantages in different situations and for different reasons than women because of their gender role socialization. For example, men's roles as protectors may place a greater responsibility on them for risk-taking during and after a disaster. People caught in crisis situations have crucial reproductive health (RH) needs.

**Methods:** This study sought to: conduct assessment of comprehensive RH; (2) understand the key RH interventions in different phases of an emergency; (3) understand the rationale and components of the Minimum Initial Service Package (MISP); (4) understand how to access resources for the MISP; and (5) understand how to plan for comprehensive RH in a crisis situation.

**Results:** Staff members were trained on the clinical management of rape. Men, active and recently demobilized members of armed/security forces, displaced persons, and refugees are targeted with RH and HIV/AIDS messages. Data on demographics, mortality, morbidity, and health services were collected routinely and were disaggregated and reported by age and sex, and a gender analysis was applied. Formal monitoring and evaluation mechanisms reported the health impact of humanitarian crises on women, girls, boys, and men

**Conclusions:** The right to health is an inclusive right, extending not only to timely and appropriate health care, but also to the underlying determinants of health, such as RH in a crisis situation.

**Keywords:** crisis; emergency health; men; reproductive health; women

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## (N61) Traffic Injuries: Realities and Prospects in the Regional Hospital of Kebili, Tunisia

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**Introduction:** Traffic injuries are a worldwide public health problem because they produce a high number of casualties. The goal of this study is to analyze the epidemiological factors of traffic injuries recorded in the Hôpital régional de Kebili to identify major injuries observed, and identify which are the prospects.

**Methods:** This is a retrospective study on 520 observations of traffic injuries victims from January 2008 to December 2008.

**Results:** Of 520 injured, 65% of the patients were between 14 and 39 years old, and 45% were between 40 and 65 years old. The sex ratio was M:F = 5.27. More than two-thirds of the patients received at least one medical investigation, 85% were radiological examinations.

The majority of patients received at least one medicine.

After emergency medical care was provided, 58% of patients returned home, 20% of the cases were sent to an outpatient specialist, 15% of those injured were hospitalized, and 5% were transferred to a university hospital. The lesions are dominated by head injury (27% of all injuries). Five of seven deaths that occurred at emergency department were due to cranial trauma.

**Conclusions:** To reduce mortality and morbidity caused by traffic injuries, medical and paramedical training in the field of emergency medicine should be enhanced, and a reliable system of information and data collection must be established. All actors involved in responding to and treating traffic injuries must combine their efforts to develop a strategy for prevention and road safety.

**Keywords:** emergency medical services; injuries; prevention; public health; traffic injuries

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## (N62) Experience of Thoracic Trauma at a Level-1 Trauma Center

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**Introduction:** Thoracic trauma is a sudden and dramatic event. Its incidence is increasing because of a rise in road traffic crashes, especially in the urban setting. Thoracic trauma cases were evaluated and results were compared with the data published in the English literature.

**Methods:** This is a prospective, observational study. The data of all thoracic trauma patients admitted between January 2008 through December 2008 in the JPN Apex Trauma Center at the All India Institute of Medical Sciences in New Delhi were collected.

**Results:** Of 885 surgical admissions, thoracic trauma was present in 214 (24%) patients between the ages of 4 to 93 years. Isolated thoracic trauma was present in 54% of the patients. Blunt injuries accounted for 82% of thoracic trauma, and the most common mode of injury was motor vehicle crash. Unilateral thoracic trauma was present in 78% cases. Hemothorax was the most common presentation. Multiple rib fractures were present in 76%, single rib fracture in 19%, and flail chest in 6%. Extra-thoracic injuries were seen in 46%. Treatment consisted of tube thoracostomy in 184 patients (86%) and thoracotomy in 15 patients (7%). Indications of thoracotomy were lung lacerations with massive hemorrhages in eight (53%), open chest wound closure in two (13%), atrial laceration repair in two (13%), foreign body removal in two (13%), and esophagopleural fistula in one (7%). Thoracic epidural catheter for