

compared with the medical assessment. More frequent diagnoses, treatments, and transportation rates and causes that were mistriaged were studied.

**Results and Discussion:** Calls were classed by dispatchers in the following way: 1) Code 3 = 138 (35.3%); 2) Code 2 = 208 (53.2%); and 3) Code 1 = 39 (10%). After medical assistance, we concluded that dispatcher's assessment was sensible in 96% of the Code 3 calls and 94% for Code 2 and 1 calls. But they were specific in 4% of the Code 3, 58% Code 2, and 97% Code 1 calls. Only 1.2 % of the total calls were mistriaged to a lower priority.

Trauma and cardiovascular diseases were the most frequent illnesses classified as Code 3. Minor trauma, hypotension, and mild hypertensive arrests were the top three diagnosis in the Code 2 group. A total of 52 patients were transported to the hospital: 36 of the classified as Code 3 (27%), 15 as Code 2 (7%), and only one previously classed as Code 1. Trauma, cardiac arrest, cerebrovascular attack, and abdominal illnesses were the principal diagnoses in admitted patients. In spite of the classification, only 48% of runs justified emergency attention.

#### 041.

### Emergency Physicians As Medical Command Officers: An Investigation of Effectiveness And Quality

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**Introduction:** The implementation of a senior physician of pre-hospital emergency care as an on-scene medical command officer (MCO) within the emergency medical service (EMS) is an essential prerequisite to guarantee qualified medical supervision during mass-casualty incidents. The purpose of this study was to investigate the effectiveness of the MCO-system of Mainz, which was implemented in 1990.

**Methods:** To evaluate the frequency and the indication of calls, reaction intervals, and the distance from the MCI, the number of patients, EMS personnel and equipment on-scene, as well as the activities of the MCO, and occurring problems. All calls were recorded and analyzed. Within a period of 22 months, the MCOs recorded their activities and experiences on the scene using standardized data collection sheets.

**Results:** The MCOs responded to 48 emergency calls. In 35 cases, the situation on-scene met the requirements of the MCO system indication list. The reaction intervals were dependent on whether the MCOs were picked up by the fire-brigade (15.6 ± 8.5 min) or driving themselves (10.9 ± 5.8 min). On the scene, the MCO dealt with from 5 to 450 individuals (median 15). Problems encountered included premature departure of ambulances from the scene (9 cases), late arrival of the MCO at the scene (7), and the delayed call of the MCO or call cancellation although his presence on-scene was required (6).

**Conclusions:** A short reaction interval is the crucial point of a MCO call. In our system, the MCO has to be on-scene within at

least 15 min. to triage all patients and to take charge of the medical organization and of patient transport to different hospitals.

#### 001.

### An Analysis of Body Armor for Paramedics

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This research paper investigates and identifies the necessity on the use of protective soft body armor (i.e., Ballistic Resistant Vest) for emergency medical personnel in large urban American cities. The research used a descriptive research methodology in a non-experimental design. A total of 575 Paramedics were surveyed, and 25 American cities with populations in the 500,000 range were interviewed. 43% of the paramedic population responded to the surveys.

Of the emergency workers who responded, 91% were assaulted while providing prehospital care. Eighty-seven percent reported a need for body armor in the work place. Of the cities interviewed, 96% had emergency workers assaulted during the performance of their duties.

**Conclusion:** The study concluded that body armor is a necessity for emergency prehospital care workers in large, urban American cities due to occupational encountered violence.

#### 116.

### Developing an Effective Medical Coordination and Control Organization For Disasters and Major Emergencies: State of Victoria, Australia

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**Objective:** To provide an overview of a method for establishing an effective permanent Disaster Medical Control Organization for use in major emergencies or disasters.

**Method:** The establishment of a permanent Medical Coordinator Organization for daily interface on medical disaster planning matters and integrated with other emergency response agencies at all levels of local, regional, state, and at the national jurisdictions, was considered to be absolutely essential following a review of arrangements which existed in 1980. Such an organization was developed at that time for the Metropolitan Response Zone of Melbourne, the capital city of Victoria with a population of 3 million persons. The organization since has been developed to include the entire state, and has been effective in providing early medical control during all major incidents and during disasters such as the widespread event that affected the Southeastern part of Australia in 1983 with such disastrous results. The formation of the medical coordinator organization, which includes a Metropolitan Medical Commander Squad (12 persons) and Rural Regional Area Medical Coordinators (45), ensures that an immediate on-site and cen-