

relief not as a charity, but as a right;

- 4) Health is perceived not as a luxury, but as a human right;
- 5) Disaster aid is seen not as an ad hoc repair episode, but as an essential factor in long-term development;
- 6) The donor community is comprehending relief not as a magnanimous contribution, but as humanitarian obligation;
- 7) Armed forces of traditional combat function are being recycled for peace-keeping and peace-making missions;
- 8) The medical community, that had long felt the spirit of the human factor, is calling Disaster Medicine, Humanitarian Medicine; and
- 9) The International Association for Humanitarian Medicine has been founded.

These constitute a quantum leap forward in human, medical, and international relations.

**Key words:** armed forces; compassion; development; Disaster Medicine; disasters; emergency medical services; human rights; Humanitarian Medicine; mutual aid; peace-keeping; peace-making

### Light Guidance and Other Brilliant Applications for Disaster Situations

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An intelligent lighting and information system was planned primarily for passenger safety systems in cruise ships and fast ferries. In case of an accident, it is extremely important that all passengers can find a safe way out of their cabins to the ship deck and lifeboats. This Modular Intelligent Life-Line System (MILS) easily can be controlled centrally and adjusted to the actual needs and conditions.

The same idea already has been applied to airports and aircraft, but it also could be very important in accidents and disasters. The Life-Line is produced as strips in reels so that it easily can be installed and moved in accordance with specific the needs. Polyuretane, the basic material for Life-Lines, makes the product easy to handle and also offers superior resistance to tears and abrasions. It can be installed outdoors as well, because the product is moisture resistant. The consumption of energy is minimal. All these features make Life-Line ideal for light guidance, even in extreme situations. Its epitet Intelligent comes from its flexible controllability from a computer network.

In a disaster situation, there also are needs for written information in form of safety guidance panels. The information texts are controlled using a computer network, and thus, they can form an essential element in directing different groups and individuals to their targets and goals.

MILS offers new possibilities for well-controlled

direction of different rescue groups. Its use will improve the efficacy, utilisation of resources, and coordination, which, in turn, means saving of human lives and decreasing the suffering of casualties.

It is important to learn the MILS characteristics and use, so that its flexible features are implemented fully when the first rescue group arrives to the accident scene.

**Key words:** computers; disasters; information systems; lighting; needs; networks; rescue

### Polish Medical Rescue Systems Problem's on the Example of Wroclaw City Collapse Under the Superflow

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Mortality due to acute, life-threatening conditions is very high in Poland. Trauma is the leading cause of death for people under age of 44 years. The peritrauma morbidity rate from road accidents is 14%. In the older generation, coronary heart disease is a major cause of death. The average length of life in Poland is 67.5 years for men and 76 years for women. One of the main reasons for these unfortunate circumstances is the lack of a properly organised emergency medicine system. In Poland, the emergency medicine system is monopolised by provincial, primary care stations which are working without structural and administrative cooperation with hospitals. The hospitals do not have regular emergency departments with dedicated and established specialised personnel.

The emergency structure for Wroclaw city and province is based on one Provincial Primary Care Station with seven local first-aid stations, five rescue ambulances, three pediatric ambulances, and 19 general ambulances. None of the local hospitals possess an emergency department with specialised emergency nurses and doctors. As a result, overall mortality in emergency cases is very high in this region.

The flood disaster, which happened during July 1997 in Wroclaw, uncovered the weak points of the existing emergency services. Since the Provincial Primary Care Station with its central dispatching and ambulances was one of the first institutions swamped with flood water, this prehospital emergency medical system failed. Faced with the lack of a local, regional, or provincial programme of disaster preparedness, people were forced to self-defence and improvisation of all types of rescue activities. Some experiences during this event will be described.

**Key words:** disaster; emergency departments; emergency medical services system; emergency medicine; emergency nursing; flood; morbidity; mortality; preparedness; rescue