

until back in service) reached three hours in 82% of the total call volume in the pilgrimage area during 1996.

These results were the primary reason for the study group to recommend a more efficient and effective approach to the needs for the emergency medical coverage of this area, which was called "Treat and Release".

This pilot plan was implemented for two consecutive pilgrimage seasons (1997, 1998), and showed that by using the management plan, 73.8% of the ambulance trips have been eliminated. The results highlight the efficacy and efficiency of emergency medical services when provided at the crowd site compared to the results attained with the former, more traditional plan.

**Keywords:** emergency medical services (EMS); Hajj; needs; mass gatherings; mass gatherings; pilgrimage; planning; preparedness; transport; treat and release

### G-78

#### The Disco Fire in Göteborg October, 1998

*P. Örténwall, MD, PhD; A. Hedelin, RN;  
S. Martinell, MD*

Emergency and Disaster Planning and Education,  
Office of the County Council, Göteborg, Sweden

Just before midnight on 29 October, 1998, a fire broke out in a discotheque located on the second floor of an old warehouse in Göteborg, Sweden. Despite a rapid response from the Fire and Rescue Service, 61 teenagers died entrapped in the burning building.

The medical treatment on scene were limited due to physical abuse of ambulance crews by bystanders and friends of the injured. The "load and go" principle was used bringing nearly 200 injured people to the hospitals within the area in a short time span.

Thirteen patients had to be transported to Burns Units within and outside Sweden. However, the major strain on the Health Care System was caused by an enormous demand for psychosocial support.

**Keywords:** burn units; burns; discotheque; fire; load-and-go; psychosocial support

### G-79

#### Medical Liaison Officers — A Useful Tool to Counteract Potential Hazards

*A. Hedelin, RN; S. Martinell, MD;  
P. Örténwall, MD, PhD*

Emergency and Disaster Planning and Education,  
Office of the County Council, Gothenburg, Sweden

Mass gatherings are potential risks for major accidents and disasters. During the last years, a number of public events have been held in Gothenburg, resulting in massive crowding of the inner city area. As a response to such situations, a formal collaboration between the Gothenburg Police Department and Gothenburg Health and Medical Services has evolved

In situations in which potential risks of casualties are foreseen, health personnel will be stationed as liaison

officers in the Police Command Centre. In this position, they immediately will become aware of any escalating threats, and thus, can respond early. This routine has proven useful both in situations that can be foreseen (e.g., sports events, demonstrations), as well as suddenly appearing incidents (e.g., bomb threats).

**Keywords:** disasters; hazards; liaison officers; mass gatherings; police; risks

### G-80

#### Admission of Mass Casualties in Gothenburg after the Great Discotheque Fire, 29 October, 1998

*T. Wikström, MD, B. Engarås, MD; P. Örténwall, MD*  
Department of Surgery, University of Gothenburg,  
Gothenburg, Sweden

At 23:42 hours (h) on 29 October, 1998, the worst fire disaster in modern Swedish history occurred in a discotheque in Gothenburg. Sixty young girls and boys died at the scene. Three more died later in hospital due to burn injuries and lung injuries. The majority of the victims were second generation immigrants.

A total of 162 patients were brought to the hospitals in the Gothenburg area. The patients were triaged rapidly in the emergency rooms, and then transferred to the intensive care units (ICUs) or regular patient-care wards. Thirteen patients were transferred by air to other hospitals with Burn Units within and outside Sweden.

What came as surprise was the enormous workload placed on the teams giving psychosocial care, both within the hospitals as well as in the community as a whole.

**Keywords:** burns; burn units; discotheque; fire; inhalation injury; lung injury; multi-casualty incident; psychosocial care

### G-81

#### Mass Flame Disasters: Rules of Stage Treatment

*L.I. Gerasimova; A.N. Putintsev*

Central Institute of Traumatology and Orthopaedics,  
Burn Center of Sklifosovsky Institute for Emergency  
Care, Moscow, Russia

This presentation is based on the experience in medical aftermath from technogenic disasters in Russia.

The strategy for the provision of Disaster Medicine includes three stages of medical aid to burn victims:

- 1) A doctor is sent to the disaster zone depending on the evaluation of the severity and prognosis;
- 2) Render emergency aid in the case of acute disorders of the victim's vital functions; and
- 3) Casualty transportation.

The stage of qualified medical aid occurs in local hospitals that are located near to the disaster zones. It varies depending on the number of burn victims, the results of medical triage, and the availability of medical resources. The general rules of medical aid are: 1) adequate pain relief; 2) respiratory or cardiovascular insufficiency; 3) provision of intensive antishock infusions and