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# Training Disaster Workers in the Management of Post-Disaster Emotional Disturbances

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**Objective**: The authors draw upon the findings of their earlier studies on victims of two different disasters, and suggest material for use in training of disaster relief workers (DRW). The contention is that, if the DRWs are trained in the management of expected emotional problems, the process of emotional recuperation for the disaster victims can begin early, and the long-term perpetuation of the distress symptoms can be prevented.

**Method**: The data include the initial and follow-up screening of victims. They highlight the commonality of symptoms and a narrow range of psychiatric diagnoses exhibited by these individuals, although they have had different exposure to and different impact of disaster. The factors associated with continued presence of psychopathology over a long period also have been presented.

**Results**: Using this information, a schemata of training material is identified. This includes learning: 1) to administer and score the screening questionnaire; 2) to isolate cases to be referred to specialty mental-health sector; 3) to counsel the remaining distressed individuals; and 4) the areas in the post disaster circumstances of the individuals that need to be prioritized and addressed.

**Conclusion**: This brief training package easily can be used in disaster preparedness training of disaster relief worker.

### SEA DISASTERS

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# Injuries Caused by Grounding of the High-Speed Passenger Vessel "Sea Cat," Norway, 1991

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**Objective:** To describe the accident and the injuries caused by the grounding of the high-speed passenger vessel "Sea Cat" with 131 persons on board. The incident occurred November 1991, on the west coast of Norway.

Method: Retrospective case analysis.

**Results:** The boat hit a small island at a speed of 38 knots (70 km/h). The bow was pressed in, but the casualties were caused by disintegration of the seat-rows and detachment of loose objects due to the sudden deceleration. Two passengers died from severe head trauma at the scene of the accident. Helicopters and nearby vessels transported 74 people to Haukeland Hospital. The injuries consisted of 27 head injuries (two fatal, none to major surgery); 10 cervical spine injuries (none serious); 14 face injuries; one carotid artery injury; two blunt abdominal trauma (one to major surgery); 19 upper-extremity injuries; and 29 lower-extremity injuries; totalling 50 blunt traumas and 23 fractures.

**Conclusion:** As far as we know, this is the first publication of the panorama of injuries caused by grounding of a high-speed passenger vessel. The accident was comparable to a large bus accident. Fortunate circumstances contributed to the limited number of severe injuries and deaths—there was no fire; the boat did not sink or take in water; and passengers did not suffer from hypothermia as they were brought to safety in a building on a nearby island.

High-speed passenger vessels will certainly become more common in sea transportation. The International Maritime Organization (IMO) is working out codes for such passenger vessels carrying up to 400 people.

## 136 The Sinking of the Marchioness Pleasure Boat on the Thames

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Basics

- London, England
- \*\* Honorable Secretary

World Association for Emergency and Disaster Medicine (WAEDM)

In August 1989, a pleasure boat with more than 200 passengers on board was hit from behind by a dredger. Within minutes, it was sinking and some passengers were trapped within the vessel while others were swept or jumped into the river.

There were several unusual features of this marine accident. The tidal nature of the Thames meant passengers were swept up river and rescuers were spread along the banks and

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under the bridges. Later, when the tide changed, these teams needed repositioning. The river police, with their experience, were able to identify the most likely sites and times that survivors and bodies would be recovered, but night conditions rendered visibility difficult. After the initial rescue activity, there was a prolonged period of searching followed by the slow recovery of the dead trapped within the hull.

This incident, tragic as it was, seems small when compared with similar incidents in the past. In the 19th century, a similar incident left 600 dead and also will be described. "The man who fails to learn from the mistakes of history is doomed to repeat them."

#### 137 The "M /S Marrier C

#### The "M/S Maxim Gorkij" Accident Lossius HM

Hammerfest Hospital Norway

On 19 June 1989, at 22.28 UTC, the "M/S Maxim Gorkij" hit an iceberg at the position of 77.37–N 004.10–E, 145.5 nm west of Spitsbergen. The ship was seriously damaged and there was an imminent risk that the ship would sink. There were 953 persons on board, mainly German pensioners. There was fog in the area, the wind was blowing at 22 knots, and the temperature was  $\pm 1.3^{\circ}$ C.

A major rescue operation was initiated, headed by the Norwegian RCC in Bodo. Five Norwegian rescue helicopters and one Norwegian coast guard vessel participated in the operation. The "M/S Maxim Gorkij" stayed afloat, and there were no major problems during the rescue operation. Nevertheless, the operation was a great challenge to the rescue forces, especially at the damage area. The accident also threw light on an ever more pressing problem: how to attend to the safety of tourists travelling in remote areas with extreme weather conditions?

As of today, there are no rescue or medical services that can handle such large accidents in remote areas within acceptable time limits. The existing medical resources are not sufficient to deal with the number of serious casualties in connection with such accidents.

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# The "Scandinavian Star" Fire Disaster— What Could have Saved the Passengers?

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The "Scandinavian Star" caught fire on the Skagerak in April 1990, killing 158 people. Only 30 people had minor injuries and 324 were saved. Of the 158 persons that died, 100 died from inhalation of cyanide and carbon monoxide in the smoke; 52 also were burned; and six possibly were killed directly by the fire. All the dead were trapped inside the ship. Only early evacuation of the passengers from the smoke and fire could have saved them.

**Conclusion:** Sending medical teams to a burning ship should not have priority.