

areas of health intelligence, command and control, team selection, medical equipment, communications, appropriateness of role, and logistics. These were the first recent major deployments for Australian civilian disaster medical relief teams and will form the basis for Australian deployments in the future.

**Keywords:** Australia; epidemics; injuries; lessons learned; Maldives; medical team; relief; tsunami

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### Israeli Field Clinic Sent to Sri Lanka—A Provisional Alternative to the Local Medical System of the Community of Balapitiya

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As soon as the dimensions of the tsunami disaster were understood, Magen David Adom (MDA) sent a medical delegation to assist the people in the stricken area. The MDA prepared a small medical delegation, called a “field clinic” (similar to the Red Cross Medical Emergency Response Unit) consisting of four doctors, three paramedics, one nurse, and one medic. The delegation planned to be independent regarding its treatment abilities, the variety of professions and skills of the physicians, and the administrative and logistical needs of its staff. The Israeli National Council for Volunteering decided one week post-tsunami to send a delegation to Sri Lanka: MDAs medical field clinic and a logistical delegation that would handle the preparation and supply of food. Two days after arrival in Sri Lanka, both components of the Israeli delegation were stationed in Balapitiya, a village of >10,000 inhabitants, many of whom had been affected by the tsunami. The victims of the tsunami were lodged in six temples. A mobile team of two doctors and one paramedic was developed to provide medical care within the temples; while the other members of the team functioned within the main clinic. The mobile clinic examined and treated 80–100 patients per day, while the main clinic examined up to 200 patients per day. The two clinics together treated a total of 2,300 patients during eight days of activity.

Ten percent of the patients visiting MDA's clinics had injuries related to the tsunami, such as contaminated wounds, contusions, bruises, and body pain. A total of 30% suffered from acute diseases, such as respiratory tract infections, asthma patients needing inhalations, and children with fevers and coughs. The MDA teams examined the remaining 60% presenting with chronic diseases, and most were referred to the health system of Sri Lanka (at their request) for further treatment.

**Lessons learned:** A foreign medical team must be coordinated, and fulfill the needs of the local medical community. Lessons learned included:

1. The Israeli medical team was invited and approved by the Director General of Health services of Sri Lanka;
2. The delay of two days in finding where to station the medical teams occurred because local coordinators were not from the medical community;
3. The medical activities of the team in Balapitiya were coordinated and authorized (in writing) by the medical officer of this region; and

4. The decision of when to leave Balapitiya, to whom to donate the transported medical equipment, and which medications to leave was made on the basis of mutual understanding with the local medical officer and the Ministry of Health of Sri Lanka.

**Conclusion:** The medical delegation of the MDA achieved the goal for which it was dispatched to Sri Lanka, i.e., to provide an alternative professional medical system until the local medical system had returned to be able to provide adequate medical functions to the community of Balapitiya.

**Keywords:** Balapitiya; diseases; lessons learned; Magen David Adom (MDA); medical system; relief; Sri Lanka; tsunami

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### Support Factors of the Healthcare Teams in Affected Areas of Thailand during the Disaster Medical Response—Lessons from the 26 December 2004 Tsunami

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**Introduction:** On 26 December 2004 at 09:00 hours, an earthquake with a magnitude of 9.0 (Richter scale) struck the area off the western coast of northern Sumatra, triggering massive tidal waves (tsunami). The tsunami waves flooded coastal areas in countries around the Indian Ocean rim, including Thailand, causing a huge number of fatalities and injuries as well as destruction of infrastructure. In Thailand on 25 January 2005, 5,388 fatal cases were confirmed, 3,120 people were reported missing, and 8,457 people were wounded. The Thai health system faced the task of dealing with the large number of victims. The individual and collective coping mechanisms, which emerged under those dramatic circumstances, will be presented.

**Objective:** To evaluate the function and coping methods of healthcare providers and administrators in Thailand in the wake of the tsunami disaster.

**Methods:** The IDF Home Front Command Medical Department sent a research team to study the response of the Thai medical system to the disaster. The research team included three physicians and one behavioral psychologist experienced in hospital preparedness for disaster and emergency medicine. The delegation arrived in Thailand one month after the precipitating event. The team met with Thai healthcare officials, including the General Director of the Ministry of Health and three Provincial Directors (in the areas affected by the tsunami). The team also met with the head of the Thai Air Force and visited six public hospitals and four community clinics involved in the care of the victims. Data were collected primarily through the conduct of personal and group interviews. Additional data were gathered from open and closed questionnaires. Analysts of health teams' support factors used concepts from models dealing with coping with stress, resilience, and self-efficacy.

**Results and Conclusions:** Leadership is crucial to rank-and-file functioning. Differences were found in the way different teams within the Thai health system grasped the

situation and evaluated their own performance. Job identification and responsibility are essential for both senior and junior staff morale and functioning. Organization (information flow, orderly work, and task allocation) is critical in coping with chaotic situations like that generated by the tsunami. Team cohesiveness makes them better able to withstand prolonged exposure to the stresses generated by severe disaster. Positive thinking and orientation towards the future gives people strength and motivation to keep working. Those who had volunteered for the disaster team were found to be more supportive and immunizing than those who had been asked to work with the team. Technical problems (such as the language barrier *vis-a-vis* the tourists) were a cause of stress and the elimination of such problems (through the position of translators in healthcare facilities) alleviated that stress.

**Keywords:** disaster medical response; evaluation; healthcare; interviews; Israel; leadership; stress factors; Thailand; tsunami

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### Medical Repatriation of Swedish Citizens Injured in the 26 December 2004 Tsunami

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Swedish tourists are prominent in Thailand, especially in the Phuket region. The tsunami, caused by the earthquake near the northwest coast of Indonesia, impacted Khau Lac, one of the most popular areas used by Swedes. After 96 hours, 70–80 patients with relatives in the hospitals of Phuket and in the surrounding rural area remained in Thailand. The Swedish government arranged the evacuation of these hospitalized casualties. The process used will be presented.

A Medevac team of 18 persons left Sweden 84 hours after the tsunami had occurred. After localization of the patients, each was evaluated with respect for the risks associated with a prolonged, airborne evacuation. The repatriation was performed during the following 72 hours using various types of aircraft. One bottleneck was the limited capacity of available intensive care beds. The experiences obtained from the operation supports the need for: (1) coordinated structures in the healthcare system; (2) education; (3) training of medical teams to be prepared to take part in complex international operations; and (4) systems for performing needs assessments to guide the allocation of resources.

**Keywords:** coordination; evacuation; intensive care; needs assessment; repatriation; Sweden; Thailand; tsunami

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### Central System for Psychosocial Support of Czech Victims Affected by the Tsunami in Southeast Asia

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**Introduction:** The Czech Republic has a population of 10 million. More than 300 Czech citizens were reported as missing on the day following the tsunami in Southeast

Asia. After three weeks, 11 seriously injured patients and one dead person had been found. Also, hundreds of Czechs were traumatized mentally by this event. The Ministry of Interior (MIO) coordinated the psychological and psychosocial support to the victims in the Czech Republic.

**Methods:** Methods used included case study and both qualitative and quantitative data collection and processing.

**Results:** Three hundred patients, of a total 1,400 tourists monitored by the team in airports in Prague, were Czech.

1. *Psychological help line:* The MIO found that 80–90% of emergency calls for help during the first three weeks were related to the tsunami. Fifty–sixty percent of the total calls were related to acute and very serious injuries and/or illnesses; 10% of the critical calls required interventions, and 20% of the calls required professional or humanitarian support;
2. *Team for psychological assistance:* The tasks and responsibilities of the team were: (1) assistance at the airports; (2) crisis intervention; (3) psychological “first aid”; (4) assistance in the collection of DNA material from relatives; and (5) supporting surviving relatives;
3. *Making and distributing printed and electronic material:* The MIO provided leaflets with instructions, handbooks, and an address list of psychosocial service available in the Czech Republic. Not only was the material provided to Czech tourists, but also for their relatives, other professionals, and employees of the Czech airline. It was produced in English for foreigners;
4. *Regional network of psychosocial support in the Czech Republic;*
5. *Helping concerned people:* There are 150 professional contacts, including psychologists, doctors, priests, social workers, police officers, and firemen. They are certified in Critical Incident Stress Management;
6. *Collaboration among departments:* Cooperation included: the Ministry of Interior, Ministry of Health, Ministry of Foreign Affairs, and Ministry of Defense. Also included were Czech embassies in the affected areas of Asia, Czech Airlines, Prague airports, and travel agencies; and
7. *Process of analyzing and making prognoses:* the consequences for the affected victims, the effectiveness and evaluation of the helpfulness of this system during the entire process have been analyzed.

**Conclusion:** Approximately, 1,500 people were evaluated psychologically via telephone contact and at the airports, and were given instructions and handbooks during the first three weeks after the event. Of these, approximately 450 were Czech citizens. Television, newspapers, and websites informed hundreds of people about the availability of psychological help. The detailed research continues.

**Keywords:** collaboration; consequences; Czech Republic; injuries; patients; process; psychological; psychosocial; stress; support; tsunami

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