tracting during a disaster or or to provide humanitarian medical assistance. The mobile field hospital supports the activities of civil protection in national and international contexts, implements local emergency medical services, and supports hospitals in bed surge capacity and treatment of mass-casualties for a specific period of time.
Results: The Field Hospital of Alpines, created in 1976, has operated in Italy and in different international contexts.
Conclusions: During complex disasters (civil conflicts, wars), field hospitals (civilian or military) have been used successfully and have a crucial role in supporting the health care of the affected population.
Keywords: civil-military collaboration; disasters, foreign field hospitals; hospital preparedness; international cooperation
Prehosp Disast Med 2009;24(2):s15–s16

Using Military Resources to Sustain Government Hospitals during Labor Unrest: The South African Experience

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Introduction: In 2006, a work strike by certain groups of healthcare professionals in government hospitals in South Africa completley paralyzed 84 large public hospitals for nearly one month. All hospital nursing and support personnel were absent and intimidation by strikers prevented staff from entering the hospital premises. More than 6,000 hospital beds were without caregivers. Military resources, including military medical personnel, were deployed to sustain essential health services.
Methods: This presentation will provide a retrospective overview of the experience gained during this operation in which nearly 1,000 military personnel were rotated daily to staff 84 hospitals throughout the country. Due to the large numbers of personnel required, unskilled and partially skilled personnel also were utilized after emergency training, to maintain advanced services.

Services required included nursing care, cleaning services, emergency care, laundry services, and logistical supply distribution.

Guidelines will be given on how to prepare and re-organize a large hospital for a total absence of nursing and support staff, as well as lessons learned in providing military personnel to sustain service delivery for an extensive period of time.
Results: Through the use of military resources, it was possible to sustain care of civilian patients in government hospitals for a period of nearly a month.
Conclusions: Military medical resources are a valuable, organized, and disciplined asset that can be used to sustain civilian facilities during crisis situations.
Keywords: civil-military cooperation; health care; hospital strike action; labor strike; South Africa
Prehosp Disast Med 2009;22(2):s16

Frozen -80°C Red Cells, Plasma, and Platelets in Combat Casualty Care

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Introduction: Since 2004, the Netherlands military mainly has used -80°C frozen blood products for their medical treatment facilities since 2004. This report describes the experience with these products during the past two years in Afghanistan.
Methods: All -80°C frozen red cells, plasma, and platelets are produced and stored in the Netherlands. Units are shipped at -80°C (dry ice), stored in the theatre at -80°C (mechanical freezer), and thawed on demand (all products) or stored subsequently at 4°C (red cells). Data from August 2006–2008 were collected from the Netherlands' peripheral blood banks in support of (inter)national medical treatment facilities in South Afghanistan.
Results: During the past two years, 397 patients (85% Afghan) were transfused with 469 4°C liquid stored red cells and 2,345 -80°C frozen blood products (941 red cells, 1,023 plasma, and 381 platelets). Approximately 10% of the frozen red cells and 100% of the platelets and plasma transfused, were prepared on demand. The data showed that most (>90%) of the transfused patients were trauma victims, of which approximately 10% required more than 10 red cell units within 24 hours. No shortages or transfusion reactions were reported.
Conclusions: A -80°C frozen inventory of the most essential blood components readily available after thawing (and washing) allows for safely reducing shipments and abandoning the backup "walking blood bank" without compromising the availability of blood products in theatre. Fully tested, frozen blood products, shipped, stored, and readily available on location after thaw, proved to be an effective and safe blood support for combat casualty care.
Keywords: blood bank; capacity building; combat; frozen; inventory; preparedness; transfusion
Prehosp Disast Med 2009;24(2):s16

Poster Presentations—Civil-Military Collaboration

(L1) Developing an Integrated Civilian-Military Model for Healthcare Emergency Response Planning

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Introduction: Developing an integrated civilian-military (CIV/MIL) model for healthcare emergency response planning will support collaborative and synchronized medical responses in domestic disasters. Identifying opportunities for such integration through an initial strategic assessment and then, by developing, piloting, implementing, exercising, evaluating, and disseminating programs and services that meet the documented needs of civilian and military partners is

essential to a more effective and efficient national response. The civilian and military sectors each have numerous directives, standards, regulations, and guidelines that encourage or require such integration.
Methods: Prepare for joint responses through CIV-MIL leadership support and appropriate resources by: initiating planning; exercising and developing organizational infrastructure; identifying, developing, piloting, evaluating, implementing and disseminating specific needs and suitable activities to address them; developing a broad-based constituency advocating for the support and promotion of integration activities; and providing the subject matter expertise and advice required to keep the tasks purposeful and on target.
Results: The integrated civilian-military model for healthcare emergency response planning project will develop and implement programs and services (a training assessment, education and training, drills and exercises, a centralized electronic repository of best practices for domestic disaster medical response) that foster the integration of medical responses of the civilian and military sectors to achieve these types of results and enhance the disaster response and recovery capability of the nation.
Conclusions: An integrated CIV-MIL response will foster a heightened state of resiliency through reduction of human injuries, decrease in property damage and loss, protection of critical infrastructure, and a more rapid recovery post-disaster.
Keywords: civil-military collaboration; emergency; health care; model; planning; response
Prehosp Disast Med 2009;24(2):s16–s17

(L2) Response and Assistance of the Greek Health Sector to a Mass-Casualty Incident in Albania

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A series of explosions in an old army storage facility in Gerde, Albania on 15 March 2008 resulted in 21 deaths and <300 injured persons, while <4,000 people lost their homes due to severe damage to nearby housing. The Greek government was notified of the event through its embassy in Tirana, while Albania notified the European Monitoring and Information Centre (MIC) of the Civil Protection Unit and requested international assistance to care for multiple casualties.

The National Health Operations Centre of the Ministry of Health immediately assumed a leading role in coordinating the response and assisting the neighboring state. Three staff members were deployed in Tirana where they participated in triaging the trauma patients and coordinating the transport of six of them to Greek hospitals for specialized care (critical care and microsurgery) during the first 12 hours after the incident. The on-scene staff also coordinated the transport of blood transfusion units, pharmaceuticals, and medical equipment such as ventilators and monitors to the Albanian hospitals. The transportation of patients and materials was successful with the close collaboration with the Greek military services.

The early deployment of personnel at the scene and the close collaboration with the military enabled the fast and efficient response of the Greek Health Sector in assisting its neighbor state with this mass-casualty incident.
Keywords: Albania; disaster health; disaster management; Greece; mass-casualty incident; response
Prehosp Disast Med 2009;24(2):s17

(L3) Emergency Medicine in a Tertiary Care Medical Center Under Missile Attack

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Introduction: Rambam Medical Center, an 800 bed, tertiary care, university medical center in northern Israel, is the only Level-1 Trauma Center in the region. Each year, 117,000 patients visit the emergency department. During the second Israel-Lebanon War, the Rambam Medical Center was the main receiving hospital for wounded Israel Defence Forces (IDF) soldiers. Rambam also cared for many of the injured civilians and was under constant missile threat.
Methods: Data regarding emergency department patient volume, patient demographics, chief complaints, and disposition were collected retrospectively from electronic emergency department records. Data regarding missile falls in Haifa and its vicinity was collected from the Home Front Command.
Results: The number of total emergency room visits decreased from an average of 229.9 in the 42 days preceding the war, to an average of 130.1 in the 34 days of conflict. The emergency department visits during the conflict include 849 war-injured soldiers and civilians. Labor and delivery admissions decreased between the two periods from an average of 12.3 to 3.6. Admissions to general surgery and orthopedics were mildly influenced.
Discussion: While serving as the main receiving hospital for soldiers and civilians injured in the war, emergency department visits, admissions, and characteristics underwent drastic changes when the Rambam medical center and surrounding city of Haifa were under intensive missile attacks. The three-fold decrease in admissions for the labor and delivery reflect that the population moved out of the heavily targeted Haifa area.
Keywords: attack; civil-military collaboration; emergency medicine; medicine; war
Prehosp Disast Med 2009;24(2):s17

Oral Presentations—Disaster Health Management

Computerized Patient Information

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The Israeli health system is on constant alert for mass-casualty incidents (MCIs) and disasters. Although experience