

**Conclusions:** The model and process experienced in the Oceania region may prove useful for other potential WADEM Chapters. Experience to date would suggest that WADEM Chapters are viable, achievable, and useful in promoting WADEM and its members.

**Keywords:** chapters; disaster medicine; Oceania; partnership; World Association for Disaster and Emergency Medicine  
*Prehosp Disast Med 2009;24(2):s129–s130*

### Lessons Learned from the Health Cluster Approach in Africa

Michel N. Yao

World Health Organization, Harare, Zimbabwe

**Introduction:** A review of humanitarian interventions suggested a reform based on three pillars: appointment of a Humanitarian Coordinator; an emergency fund; and the cluster approach for more predictability, efficiency, and accountability in a specific sector with an appointed leader. The cluster approach started late 2005 with some pilot countries in Africa, was followed by other countries. So far, Africa has been the wider cluster experience area. This paper will present different case studies and to highlight lessons learned.

**Methods:** Seven cases from African countries were studied. Cases were analyzed based on a developed framework that took different factors into account. Data were collected from field visits and from existing documents.

**Results:** The cluster approach was adopted using different models based on existing coordination structures, government structures and implications, and the presence of a Health Coordinator or an existing emergency body.

The cluster approach has improved sectoral programming in humanitarian responses in the field. It provided stronger and more predictable leadership across sectors, improved preparedness and surge capacities. However, it lacked clear guidance in implementation as well as resources for effective coordination in the field, which are successes. There was a lack of understanding of the concept which made non-governmental organizations reluctant to adhere to a cluster approach.

**Conclusions:** The success of implementation of the cluster approach required flexibility for an appropriate model in order to be adopted. A participatory approach and transparency are required to bring all partners on board.

**Keywords:** Africa; cluster; coordination; humanitarian; partnership  
*Prehosp Disast Med 2009;24(2):s130*

### A Tale of Two Cities

**A Tale of Two Cities: New Orleans and Dresden—Cutting-Edge Issues in Public Health Preparedness**

Kristi L. Koenig; Kelly Klein; Tareg Bey; Charles H. Schultz  
University of California-Irvine, Orange, California USA

From hurricanes and flooding, to bridge collapses and earthquakes, to large-scale blackouts and military conflict, the latter part of the past decade and the early part of this decade has confronted the world with a diverse group of

disasters. After each event, local governments, businesses, and public health organizations prepare after-action and improvement reports that describe the incidents and make recommendations for improvement. The science of disaster medicine is in its infancy and disaster metrics are urgently needed to measure what works and whether changes truly decrease morbidity and mortality. Millions of dollars have been infused into the improvement of public health preparedness, but where is the evidence that this new money has improved patient outcomes and the ability for the healthcare system to quickly restore baseline operations? Using relevant recent case studies to illustrate key findings, this panel will explore cutting edge issues in public health preparedness requiring additional research and education.

After introductory remarks by the Dr. Koenig as moderator, Dr. Bey will describe major issues that surfaced during the 2002 Dresden floods in Germany. Dr. Klein will then discuss policy and operational issues evolving from Hurricane Katrina—the first full-scale activation of the patient transport portion of the National Disaster Medical System in US history. Her presentation will include “black tag” triage decision analysis, state-of-the-art decision making for the allocation of scarce resources, evacuation issues, and scientific evidence to support or refute commonly held beliefs like the prevalence of panic during disasters and the potential for dead bodies to spread disease. Finally, Dr. Schultz will summarize key public health preparedness areas that would benefit from scientific inquiry and describe the most recent approaches to measuring the effectiveness of disaster management. This will be followed by a moderator led discussion with audience participation.

At the completion of his session, participants will be able to describe the challenges to measuring preparedness and the opportunities for future research and education in public health preparedness.

**Keywords:** benchmark; Dresden flood; flood; Hurricane Katrina; metrics; preparedness; public health; public health preparedness;  
*Prehosp Disast Med 2009;24(2):s130*

### Oral Presentations—Psychosocial Issues

**“In Gauze We Trust”: Lessons Learned from a Gendered Profession during Severe Acute Respiratory Syndrome**

Carol Amaratunga,<sup>1</sup> Tracey O’Sullivan<sup>2</sup>

1. Justice Institute of British Columbia, Vancouver, British Columbia, Canada
2. University of Ottawa, Ottawa, Ontario, Canada

In 2003, 44 people (including two nurses and one physician) in Canada lost their lives in the Severe Acute Respiratory Syndrome (SARS) outbreak, 30,000 people were quarantined, and several hundred people fell seriously ill with the SARS Corona virus. The World Health Organization placed an international travel advisory on Toronto as the city struggled to understand and contain the disease. SARS resulted in a “wake-up” call for the Canadian healthcare system. Five years after SARS, the lessons learned have resulted in significant nation-wide invest-

ments in institutional and system-wide preparedness for infectious disease control, surveillance, prehospital and community emergency preparedness, including pandemic influenza planning and stockpiling of millions of doses of antiviral influenza drugs. Despite these improvements, this study demonstrates that gendered professions such as nursing (national survey  $n = 1,544$  and focus groups  $n = 100$ ) remain particularly vulnerable during infectious disease outbreaks. Many participants, male and female, in this study expressed grave concern about the lack of gender sensitive instrumental, communication, and social supports available to members of their profession. For many nurses, work and family conflict, as well as the escalation of privatization “reform”, which is taking place in hospitals and nurses homes, have emerged as significant barriers. This presentation revisits the “lessons learned” from SARS in Canada and explores how gender and sex continue to serve as important determinants of health and well-being for First Receivers/First Responders during emergencies.

**Keywords:** Canada; gender; preparedness; severe acute respiratory syndrome; stockpiling

*Prehosp Disast Med* 2009;24(2):s130–s131

### Gender Matters: Critical Disaster Risk and Care Distinctions in Preparedness, Triage, and Psychosocial Needs

*Roxane Richter,<sup>1</sup> Thomas M. Flowers<sup>2</sup>*

1. University of the Witwatersrand Johannesburg, Seabrook, Texas USA

2. Clear lake Regional Hospital, Houston, Texas USA

**Introduction:** Emergency medical services planners and providers consider the needs of many special populations (infants, elderly, disabled, etc.) during a disaster. However, the critical distinctions in gender-specific care, which are based not only on a woman's physiological makeup, but also within her psychosocial framework should be not overlooked. This research identifies key factors in female-specific care, including: (1) 12 risk factors that affect vulnerability, impact, and exposure; (2) post-traumatic stress disorder and pain; (3) triage and advocacy; and (4) supplies and services.

**Methods:** More than 110 surveys were conducted among post-disaster females in the US and South Africa to obtain critical gender-disaggregated data in health services, aid, resources, and evacuations.

**Results:** The results support the contention that many gender-sensitive services and supplies were needed in post-disaster care settings, but were inadequate or non-existent.

**Conclusions:** Research indicates a pattern of gender differentiation in all areas of the disaster process—preparedness, response, impact, risk perception and exposure, recovery, and reconstruction. The research also issues and emphasizes interventions that could significantly reduce pain, suffering, and costs. These research conclusions indicate a dearth of gender-disaggregated data and the need for EMS planners and providers to take a more cognizant and proactive approach to gender-specific care in preparedness, triage, psychosocial needs assessment, aid, and advocacy.

**Keywords:** gender; preparedness; psychosocial; risk; triage; women's health

*Prehosp Disast Med* 2009;24(2):s131

### Emergency Psychosocial Support at the Egyptian Border (Rafah Crossing) for the Survivors of the 2008–2009 Gaza Crisis

*Fahmy B. Hanna*

Coordinator Disaster Mental Health Team, General Secretariat for Mental Health, Cairo, Egypt

**Introduction:** Since 2006, the Disaster Mental Health Team of the Egyptian Ministry of Health has provided aid during several crises, including the Red Sea Ferry accident, Sinai terrorist attacks, Delta train accident, and others. The Gaza crisis, which has not been resolved at the time of this report, has described as the worst crisis in the Middle East since the 1967 war.

**Methods:** The author of this report currently is at the Alarish General Hospital in North Sinai, Egypt.

The report elaborates on the actions of the Disaster Mental Health Team of the Egyptian Ministry of Health during the Gaza crisis in late 2008 and early 2009. Currently, the Team is at the Egypt-Gaza border, working side-by-side with an emergency medical team in North Sinai. The report discuss the approaches of the team and summarizes lessons learned from previous activities.

Currently, the roles of the team include working with the injured, family members, and emergency personnel.

**Results:** An in-depth view of the work done by the Egyptian Disaster Mental Health Team during the crisis will be documented, evaluated, and ways to improve future responses will be presented.

**Conclusions:** A set of managerial and clinical guidelines for disaster mental health is needed.

**Keywords:** disaster mental health; Egypt; Gaza; Middle East; psychological first aid; psychosocial support

*Prehosp Disast Med* 2009;24(2):s131

### Post-Traumatic Stress Disorder in Employment Peculiarities and Marital State in Armenian War Participants

*Samvel P. Margaryan; Samuel H. Sukiasyan*

Center “Stress”, Yerevan, Armenia

**Introduction:** The main objective of the study is to define the issues related to the employment and marital states in Armenian combatants with post-traumatic stress disorder.

**Methods:** The data from 105 patients who were former participants of combat actions in Karabakh during 1989–1994 were analyzed during nine months in 2007.

**Results:** The average age of the examined patients was 44.6 years; of them, 95 (91%) were unemployed, primarily due to their “unsociable and aggressive nature”. Practically none of other 10 working patients perform their professional duties adequately—they were just “tolerated at the workplace”. Herewith, 28 (26.7%) patients were not disabled, in spite of a long course of disease (average disease duration was approximately 13.5 years). Seventy-five patients (71.4%) were married before the war and remained married. Another seven (6.7%) married during the post-war years. Eight patients (7.6%) were divorced, and two (1.9%) remarried. A total of 13 patients (12.4%) were unmarried. Married patients and their family members noted extremely hard, unbearable, trauma-