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**Trauma Signature Analysis: State of the Art and Evolving Future Directions**

*pp. 4–8*

Context: All-hazards. Global applications of evidence-based guidance for disaster behavioral health support in disasters. This Commentary introduces trauma signature (TSIG) analysis as an evidence-based method that examines the interrelationship between population exposure to a disaster, extreme event, or complex emergency; and the interrelated physical and psychological consequences; for the purpose of providing timely, actionable guidance for effective mental health and psychosocial support that is organically tailored and targeted to the defining features of the event. At this juncture in the ongoing development of TSIG, we are about to embark on a Delphi process to infuse expert consensus. The overarching goal is to create a fully operational system to provide timely guidance for adapting disaster behavioral health support to the salient psychological risk factors in each disaster. A growing series of TSIG case studies has been published since 2011 and *Disaster Health* intends to expedite and feature novel TSIG research focusing on late-breaking disaster events.

**Addressing the Gap between Public Health Emergency Planning and Incident Response: Lessons Learned from the 2009 H1N1 Outbreak in San Diego County**

*pp. 13–20*

Context: 2009 Global H1N1 Pandemic: focus on San Diego County, California, USA. Post-9/11, public health institutions have implemented Incident Command System (ICS) and Emergency Operations Center (EOC) structures for organizing staff during public health emergencies. Using critical case study methodology, this paper explores the use of ICS and EOC during the 2009 H1N1 influenza outbreak in San Diego County. Several elements emerged as keys to effective and efficient public health response: 1) developing a plan for emergency response; 2) establishing the framework for an ICS; 3) creating the infrastructure to support response; 4) supporting a workforce trained on emergency response roles, responsibilities, and equipment; and 5) conducting regular preparedness exercises. By having the infrastructure and experience based on ICS and EOC, the public health system had the capability to surge-up: to expand its day-to-day operation in a systematic and prolonged manner.

**A Mental Health Training Program for Community Members Following a Natural Disaster**

*pp. 9–12*

Context: 2009 Bushfires, Victoria, Australia. This study reports data on a disaster mental health training program to enhance the capacity of lay people from disaster-affected communities, to provide assistance to others following a bushfire disaster. Participants in the training sessions showed significant increases in key competencies including confidence in their abilities to detect coping difficulties in others and to provide assistance. The quality of the program and materials was rated highly. The findings of the evaluation provide support for the program as a beneficial, acceptable and feasible community-level intervention following disaster.

**Reducing the Risk of Public Health Emergencies for the World’s Largest Mass Gathering**

*pp. 21–9*

Context: 2010 World Exposition, Shanghai, China. Mass gatherings are highly visible events with the potential for serious health and political consequences if not managed carefully and effectively. Historically, mass gatherings have impacted public health systems, ranging from outbreaks of communicable diseases to terrorist attacks. Therefore, disaster risk reduction is a key element for the effective management of mass gatherings. Globally, the approach to emergencies and disasters has recently shifted from post-impact activities to a more comprehensive process of disaster risk management, including pre-impact disaster risk reduction (prevention, preparedness and mitigation) as well as post-impact response and recovery. This manuscript describes a comprehensive approach for disaster risk reduction as implemented by those entities responsible for health security associated with the 2010 Shanghai World Exposition (Shanghai Expo).
Mitigating Flood Exposure: Reducing Disaster Risk and Trauma Signature  
pp. 30–44

Context: 2011 River flood threats in Minot and Fargo, North Dakota, USA. In 2011, following heavy winter snowfall, two cities bordering two rivers in North Dakota, USA faced major flood threats. One community successfully mitigated and prevented flooding. For the other community prevention was not possible and downtown businesses and one-quarter of the homes were inundated, in the city’s worst flood on record. For these two cities, we compared the respective hazards, vulnerabilities, stressors, psychological risk factors, psychosocial consequences, and disaster risk reduction strategies under conditions where flood prevention was, and was not, possible. We used trauma signature (TSIG) analysis to compare the hazard profiles, identify salient disaster stressors, document the key components of disaster risk reduction response, and examine indicators of community resilience. Across a range of indicators, it is clear that successful mitigation diminishes both physical and psychological impact, thereby reducing the trauma signature of the event.

Post Disaster Resilience: Racially Different Correlates of Depression Symptoms among Hurricane Katrina-Rita Volunteers  
pp. 45–53

Context: 2005 Hurricanes Katrina and Rita. Analyses examined the differential risks and protective factors for depressive symptoms in African American and Non-Hispanic White American student volunteers, recruited from mental health professional programs at five “Deep South” universities impacted by Hurricanes Katrina and Rita. Respondents retrospectively provided information on peritraumatic emotional reactions during the hurricanes. African American respondents reported higher levels of disaster related stressors and depressive symptoms than their Non-Hispanic White counterparts. Peritraumatic negative emotion was a risk factor for depressive symptoms in both groups. Findings underscore racially different levels of depressive symptoms that may contribute to varying degrees of resilience among student volunteers and suggest the need to develop appropriate interventions for racial groups.

An Innovative Approach to Capability-Based Emergency Operations Planning  
pp. 54–62

Context: All-hazards. Global applications of information technology to assist disaster planners. This paper describes the use information technology for assisting disaster planners with a method for writing and improving evidence-based emergency operations plans. This process identifies all key objectives of the emergency response and then uses an objective-based format for drafting capability-based, operational-level plans. This information is integrated within a relational database to allow for ease of access and enhanced functionality to search, sort, and filter an emergency operations plan according to user need and technological capacity. This approach is offered as an effective option for integrating best practices of planning with the efficiency, scalability and flexibility of modern information technology.