has experienced catastrophic flooding, on the heels of almost two decades of yearly major flooding. This paper describes the community and individual psychosocial responses to the current Red River flood, based on resiliency paradigms and the backdrop of successful mitigation of serial disasters. In addition, the author will present examples of real-time networking with colleagues around the world who are responding to natural disasters. *Prebasp Disaster Med* 2011;26(Suppl. 1):s86–s87 doi:10.1017/51049023X11002925

## (A-309) Flood Disaster Averted: Red River Resilience *A.J. Mclean*,<sup>1</sup> *J.M. Shultz*<sup>2</sup>

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Flood Disaster Averted: Red River Resilience It is estimated that floods make up 40% of all natural disasters and that the majority of natural disaster deaths are attributable to these events. The vast majority of literature on mental health and disaster revolves around response and recovery after the event. Mitigation of flooding can have a tremendous impact on health, including the prevention of common physical ailments including diarrhea, hepatitis, typhoid, tetanus, malnutrition, dermatologic conditions, orthopedic injuries, etc... It can also reduce mental health difficulties including stress, anxiety, depression, PTSD and other disorders. Psychosocial reactions to trauma are recognized to be among the most long-term and debilitating outcomes of disasters. This presentation describes a community's successful efforts to prevent a major flood disaster in the midst of a changing risk landscape. The authors focus on factors contributing to the resilience of a community in the upper Midwest of the United States in responding to the threat of a catastrophic natural disaster. In addition, the presentation includes the building blocks for successful integration of mental health presence through all phases of disaster: mitigation, preparedness, response and recovery. Andrew J. McLean, MD Medical Director, Department of Human Services, State of North Dakota. 2624 9th Ave. SW, Fargo, ND 58103 ajmclean@nd.gov, amclean@medicine.nodak. edu James M. Shultz, MS PhD<sup>.</sup> Director, Center for Disaster & Extreme Event Preparedness (DEEP Center) University of Miami Miller School of Medicine, Clinical Research Building 1120 NW 14 St.<sup>,</sup> Miami, FL 33160, USA and Partner, High-Alert International<sup>,</sup> Orlando, FL, USA 305-219-9011 jamesmichaelshultz@gmail.com. jshultz1@med.miami.edu. jshultz@ high-alert.com.

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## (A310) Academic Training for Paramedics - A Unique University Based Model

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Introduction: The paramedic profession is relatively new, dating to the 1970's. In Israel, it was introduced in 1980 and paralleled the introduction of advanced life support units (ALS) to Israel's national emergency medical services (EMS), Magen David Adom (MDA). The curriculum and assigned roles were adopted with minor changes from Anglo-American systems. Initially, paramedics were assigned alongside physicians, but in recent years a growing percentage of units operate without an on-board physician. Despite the increasing complexity of required tasks and the move toward paramedic-led crews, paramedic training has changed little. Most are trained through a non-academic, certificate granting tracts. In 1998, a fully academic bachelor's degree program was launched at the Ben-Gurion University (BGU).

**Methods:** The programs aims, curriculum, and experience are described, based on past and current curriculum and on interviews with past and current staff and students.

**Results:** The BGU program is a three year program that grants its graduates both a University BA and professional paramedic certification. The program is housed as a university department within the Faculty of Health Sciences. First year courses center on basic sciences. The second year centers on classroom and simulation-based learning of the clinical topics. The third is devoted mostly to clinical clerkships, in hospital wards in the first semester and on MDA ALS units in the second. To date, the program boasts more than 300 graduates, many attaining higher academic degrees in healthcare sciences and many who work in Israel's national EMS.

**Discussion:** The BGU academic paramedic training program is the only such program in Israel and one of a few worldwide. Questions regarding the increasing responsibility and task complexity require a move from certificate training to University degree granting learning and the possible contribution of such *Prebasp Disaster Med* 2011;26(Suppl. 1):s87 doi:10.1017/S1049023X11002949

## (A312) Evaluation of a Continuing Education Intervention to Improve Management of Mass-Casualty Incidents

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Introduction: Emergency medical services (EMS) personnel must continuously educate themselves on mass-casualty management. Emergency medical services personnel in Israel are provided with continuing education programs aimed at maintaining knowledge and skills to manage different types of mass-casualty incidents (MCIs). There are 11 Magen David Adom (MDA) regions that have different incidences and experience with MCIs.

**Objective:** The purpose of this study was to evaluate the effectiveness of an intervention for the management of conventional and mega MCIs.

Methods: A 17-item, multiple choice question pre-test (n = 640) and post-test (n = 536) were administered after a brief continuing education intervention based on lectures and discussion in all 11 EMS regions. The MCI and mega MCI scores were combined to provide an overall MCI score. An independent t-test and ANOVA were used to examine for differences by age, seniority, role, and area of employment of EMS personnel. (p = 0.05)

**Results:** Reliability of the pre- and post-tests was 0.70. The overall mean score and standard deviation for the pre- and post-test was 64.31%  $\hat{A} \pm 14.2\%$  and 75.0%  $\hat{A} \pm 14.0\%$ ) respectively (p=0.000). Distribution of scores on the pre- and post-tests were: 80%, 11.8% pre-test, 42.7% post-test. No significant differences were found in pre-/post-test scores by area. Older personnel