social emergency, and the District Health Secretariat delegated an emergency response team to meet the needs of the community in terms of medical assistance during their weeklong stay in a university campus in the capital. Although the inter-disciplinary team had experience in mass-gathering situations, they were confronted with a wide variety of aboriginal health traditions and beliefs and had to find a balance in order to effectively intervene without the resistance of the indigenous community. An investigation on what lessons are to be learned by health professionals who provide assistance to indigenous communities in urban settings was attempted.

Methods: A questionnaire-based survey is being conducted among members of the team who were assigned to assist the indigenous group. Experience, training in relation to aboriginal health and mass migration issues, and ethical and legal concerns are being sought. A five-point Likert Scale was used for responses.

Results: The results will be presented at the Congress.

Conclusions: Health professionals routinely are trained to respond to civilians, but there is a need to understand the differences when it comes to assisting indigenous communities. **Keywords:** Columbia; human rights; indigenous communities; lessons learned; mass gathering

Prehosp Disast Med 2009;24(2):s40-s41

(P84) Schoolies Festival—What Do Young People Do to Stay Safe and Healthy at Crowded Events?

Alison Hutton; Allison Roderick; Rebecca Munt; Paul Arbon Flinders University, Adelaide, South Australia Australia

Introduction: Schoolies Festivals are events that give young people the opportunity to celebrate the end of their school life. These festivals provide a "safe zone" in a designated alcohol-free area for dance and live music. Festivals such as the Adelaide Schoolies Festival (ASF) are a common phenomenon in today's society and provide the opportunity to investigate the health protective behaviors of young people who attend mass gatherings. This pilot study provides baseline data about young people's health and safety concerns and improves our preparedness at mass gatherings.

Methods: Young people attending the ASF were surveyed. Surveys gathered baseline data on demographics and rated attitudes and behaviors. Surveys were distributed by hand and collected by the researchers during the festival.

Results: A total of 300 surveys were distributed and 220 were returned (73%) in a population of 5,000 (3.3%). Behaviors important to staying safe were: not using drugs, staying hydrated, and drinking alcohol responsibly. When asked "What is risky?", participants rated violent behavior and exposure to drugs as their main concerns. The mean age of participants was 17.7 years.

Conclusions: Data on young people attending mass gatherings are limited. This pilot is developing ways of assessing opinions of young people attending mass gatherings. This presentation will identify deficits in data collection techniques used and highlight some emerging themes from the data. By improving understanding of young people's health and safety while attending mass gatherings, preparedness can be improved.

Keywords: health; mass gatherings; preparedness; safety; youth Prebosp Disast Med 2009;24(2):s41

March – April 2009

Oral Presentations—Emergency Medical Services

Developing Disaster Medical Assistance Teams in Australia—From Kandalhudoo to Karratha

Andrew Robertson; Muriel Leclercq

Western Australian Department of Health, East Perth, Western Australia Australia

Western Australia (WA) was one of the first states in Australia to deploy medical team members to work in the stricken regions of the Maldives and Banda Aceh following the 2004 tsunami. Historically, Australia has relied on the Australian Defence Force to provide overseas medical assistance. However, in this instance, the volunteers deployed were civilian staff predominantly from tertiary hospital environments. While the deployment of civilian-based medical teams has been questioned (mainly because of the lack of pre-deployment arrangements), Australia's civilian medical response to the Tsunami proved to be appropriate and effective.

This early experience of civilian disaster medical assistance teams led the WA Department of Health to pilot these teams and develop a national model for their future development, which would then be implemented by other Australian States and Territories. This pilot has been completed and implemented in WA, with further lessons learned after the deployment of a WA medical team to Yogyakarta following the 2006 Java earthquake and to Karratha after Cyclone George in 2007.

This presentation will examine the current status of the implementation of the Australian Medical Assistance Team's (AUSMAT) model in Australia, recent team deployments, and the challenges faced in delivering medical care—particularly deploying medical teams and evacuating casualties in states like WA, which have major high-risk industries located in areas that are thousands of kilometers from a major population center with small, poorly-resourced hospitals.

By late 2009, Australia should have well prepared, equipped, and trained civilian, state-based teams that are capable of deploying to a mass-casualty incident either within Australia or internationally.

Keywords: Australia; civilian; disaster medical assistance team; emergency medical services; Western Australia Prehosp Disast Med 2009;24(2):s41

Development of an Emergency Medical Services and Trauma System in Sri Lanka: An Experiential Report Ross E. Bryan, IV;¹ Amy Marr;¹ Donnie Woodyard;² Mohammad Daya¹

1. Oregon Health and Science University, Portland, Oregon USA

2. Medical Team International, Tigard, Oregon USA

Introduction: Trauma is a leading cause of morbidity and mortality in many developing countries. In 2005, Sri Lanka experienced a total of 550,108 hospital admissions due to trauma resulting in an incidence rate of 2,797 per 100,000 persons, and a hospitalization rate of 15%. The majority of these patients were between their second and fourth decade of life, resulting in a staggering loss of productivity. In response, the country began to develop a national emergency medical services (EMS) and trauma system.

Methods: Based on the recommendations made by the World Health Organization and experiences of other developing nations, a plan for developing a system was devised and implemented. This included the creation of a universal access number and a standardized emergency medical technician curriculum. Emergency medical services personnel were trained and ambulances were purchased and outfitted. Trauma centers were designated and protocols were developed to ensure patients arrived at appropriate locations.

Results: The program was initiated with a pilot project in Hikkaduwa. Over the next two years, the system was expanded to include the major population centers of Colombo, Galle, Jaffna, and Kandy (total population 3.5 million). Paramedics have responded to >1,000 calls with an average response time of <10 minutes for the large population centers. Patients receive prehospital care and arrive at appropriate hospitals in time to receive definitive treatment. **Conclusions:** Emergency medical services/trauma systems can be implemented in developing countries with limited resources. Further study is required to determine the impact of this program in reducing trauma morbidity and mortality.

Keywords: developing countries; emergency health; emergency medical services; Sri Lanka; trauma Prehosp Disast Med 2009;24(2):s41-s42

Unintentional Injury Outcomes Secondary to Pedestrian Traffic Crashes in Southwestern Nigeria: A Descriptive Analysis from One Major Medical Center

Adeleke O. Ifesanya;¹ Dolapo O. Afuwape;² Victoria N. Okoje;³ Atinuke Agunloye;⁴ Adesola Odole;⁵ Clement A. Okolo;⁶ Temitope O. Alonge^{1,2}

- 1. Department of Orthopaedics and Trauma, Ibadan, Nigeria
- 2. Department of Surgery, Ibadan, Nigeria
- 3. Department of Oral and Maxillofacial Surgery, Ibadan, Nigeria
- 4. Department of Radiology, Ibadan, Nigeria
- 5. Department of Physiotherapy, Ibadan, Nigeria
- 6. Department of Pathology, Ibadan, Nigeria

Introduction: An environment where traffic regulations are not strictly enforced often is characterized by motor vehicular carnage, severe injuries, and high mortality. This study evaluated the descriptive demographics and injury characteristics of pedestrian road crash victims presenting to a tertiary hospital in southwestern Nigeria to provide baseline epidemiology as a first step to determine areas of potential mitigation of unintentional injury care.

Methods: Consecutive pedestrian road traffic injury patients presenting between March 2007 and February 2008 to the Accident and Emergency Department of a tertiary hospital were reviewed prospectively to determine baseline demographics and clinical outcomes.

Results: A total of 184 patients (mean age = 31.4 years) were seen; 27% of these were <11years of age. The male:female ratio was 1.6:1. Fifty-four percent were struck by automobiles and 29% by motorcycles. Sixty-five percent were struck while crossing the road. Head injury occurred in 61% of patients. The mortality rate was 30.4% (56 subjects). The clinical course leading to death identified: 22.8% having initially experienced hemorrhagic shock; 17.5% severe head injury; and 17.5% aspiration. Brainstem herniation occurred in 28.1%. The average interval between injury and death was 5.5 \pm 13.6 days.

Conclusions: In this setting, three out of every ten patients experiencing pedestrian vehicular trauma will die before leaving the hospital. The elderly are at the highest risk of mortality. This raises serious questions about the prehospital and hospital-based emergency services for vehicular road crash victims in our environment and confirms the report by the World Health Organization (WHO) that Africa has the highest incidence of unintentional injury deaths in the world. A system-wide program must be established that addresses proven prevention measures across all sectors of the community.

Keywords: emergency medical services; mortality; Nigeria;

pedestrian injuries; road crashes; trauma; unintentional injury deaths

Prehosp Disast Med 2009;24(2):s42

Emergency Medical Services and a Community Development Medicinal Unit: An Overview *Tarak D. Banerjee*

Community Development Medicinal Unit, Bhubaneswar, India

Without organized effort, no emergency medicine services are effective. Therefore, in 1984, some of the health professionals working in eastern part of India created the "Community Development Medicinal Unit" (CDMU). It is a large, community-based organization with many actively involved local professionals working in the health sector.

The CDMU is a non-governmental organization (NGO) that provides essential medicines to non-profit NGOs working in the health services. The services are provided during emergencies and normal times to ensure the availability of essential medicines to the population. During medical emergencies, the CDMU always plays an important role to ensure the availability of essential medicines to the NGOs during medical emergencies. The CDMU also is working on emergency preparedness activities for different targeted populations.

Usually, the CDMU procures essential medicines directly from the manufacturers and stores them in a central location. A pooled procurement system is used to obtain large quantities of medicines from the manufacturers to ensure a lower cost, but good quality. Members get medicine from CDMU >40% to 60% cost than market. Therefore, people get access to cheap, high-quality drugs from a reliable source. These drugs are available at all times, even during emergencies. The large network is self-sustained, so it does not require outside assistance.

Keywords: Community Development Medicine Unit; drugs; emergency health; emergency medical services; India; nongovernmental organization

Prehosp Disast Med 2009;24(2):s42

Abstracts – 16th World Congress on Disaster and Emergency Medicine