authorities for information and action and that all efforts be made to keep the participating stakeholders active in following up the recommended activities.

Conlusion
The views of stakeholders tally with those found in existing literature. It is apparent that the interventions on the ground entail more of mitigation and not prevention. There is no goodwill on promotion as well as sustenance good practices. It is recommended that there should be better coordination of activities and increased networking among the various stakeholders, implementing strategies that recognize the role of all stakeholders, strengthening law enforcement organs within the government, increased and improved training of drivers and public awareness campaigns.

Noe, Rebecca
NIOSH, USA
Occupational injuries in Nicaragua
Co-authors: Aleman, Cristanto; Anderson, Mark; Clavel-Arcas, Carmen; Mock, Charles; Rocha C, Julio; Salazar, Mary

Problem
Annually, an estimated 250 million people suffer occupational injuries and 300,000 die from their injuries world-wide. The heaviest toll of occupational injuries is in the developing world because of the lack of safety standards and regulations. Occupational injury statistics are usually gathered from governmental bureaus of social security or labor insurance. Using these data sources exclusively in developing countries grossly underestimates the burden of occupational injuries for two reasons: there is a large informal working sector without insurance, and less than ten percent of the formal sector receives coverage. This study describes work-related injuries using the data from a PAHO/CDC/Nicaraguan Ministry of Health emergency department based injury surveillance system in Managua, Nicaragua.

Objectives
The purpose of this study was to identify and describe the work-related injuries in the formal and informal work sectors in Managua, Nicaragua that were captured in an emergency department based injury surveillance system. The aims were to calculate the frequency and use descriptive statistics to detail occupational injuries seen in the urban setting.

Method or Approach
For an eleven month period, August 1, 2001 to July 31, 2002, all cases from the surveillance database that indicated an injury occurred while working, were analyzed. The study data were from one participating ED, at the Hospital Escuela Antonio Lenin Fonseca (HEALF), located in Managua, Nicaragua. HEALF is a major referral center for trauma and the ED attends to 200-300 patients a day.

Results
There were 3,801 work-related injuries identified which comprised 18.5% of the total 20,425 injures captured by the surveillance system during that time. Twenty-seven work-related fatalities were recorded. Injuries that occurred outside of a traditional work location accounted for more than 60% of the work-related injuries. Almost half of these occurred at home, while 19% occurred on the street. The leading mechanisms for work-related injuries were found to be falls (30%), blunt objects (28%) and stabs/cuts (23%). Falls were by far the most lethal mechanism in the study, causing 37% of the work-related deaths and more than half of the fractures. The most lethal mechanism in the study, causing 37% of the work-related deaths and more than half of the fractures.

Conlusion
An emergency department can be an important alternative data source for occupational injuries in developing countries because it captures both the informal and formal sector workforce injuries.

Nogueira, Paulo
National Observatory of Health, NIH, Portugal
Evidence of the 2003 summer heat wave effect on Home and Leisure Accidents in Portugal
Co-authors: Brandão, João; Nunes, Baltazar

Problem
Occurrence of heat waves with impact on health and mortality, although not very frequent, contribute to serious losses of human lives and alterations on health patterns. The existence of on-line surveillance systems, like the European Home and Leisure Accidents Surveillance System (EHLASS), may help on quickly confirming the occurrence of such phenomena predicted by Heat Wave Surveillance Systems.

Objectives
Influence evaluation of the 2003 summer heat wave in Portugal on home and leisure accidents recorded by the Portuguese EHLASS.

Method or Approach
2002 and 2003 available EHLASS data was used. Comparisons were done within the months July and August and the two fortnights' periods and between 3 similar periods of 17 days were defined in both years: Period 1: July 11-27; Period 2: July 29-August 14; Period 3: August 15-31. The period 2 of 2003 includes a heat wave period with known severe effects on the Portuguese population. Pair wise comparisons within each year were done, using odds-ratios (OR), statistical significance and Confidence intervals of OR, assuming Poisson distributions of Home and Leisure Accidents (HLA) within each period. Comparisons between years were done using ratios of OR (ROR). Statistical evaluation was done using the binomial distribution resulting from the ration of Poison distribution conditional on the sum of observed number of HLA on the heat wave period.

Occupational injuries in Nicaragua

Author Noe, Rebecca
NIOSH, USA

Co-Author(s) Salazar, Mary
Mock, Charles
Rocha C, Julio
Clavel-Arcas, Carmen
Aleman, Cristanto
Anderson, Mark

Problem under study

Annually, an estimated 250 million people suffer occupational injuries and 300,000 die from their injuries world-wide. The heaviest toll of occupational injuries is in the developing world because of the lack of safety standards and regulations. Occupational injury statistics are usually gathered from governmental bureaus of social security or labor insurance. Using these data sources exclusively in developing countries grossly underestimates the burden of occupational injuries for two reasons: there is a large informal working sector without insurance, and less than ten percent of the formal sector receives coverage. This study describes work-related injuries using the data from a PAHO/CDC/Nicaraguan Ministry of Health emergency department based injury surveillance system in Managua, Nicaragua.

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Conclusion

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614 Kumar, Adarsh Kuamr
Manual head loading and back problems in rural India
Indian Agricultural Research Institute, Delhi, India

615 Li, Guohua
Illicit drug use by employees in the USA aviation industry, 1990–2001
Johns Hopkins University, USA

616 Maiti, J.
Predictors of work injuries in mines: an epidemiologic approach
Bengal Engineering College (Deemed University), India

617 Maria Rosaria, Fizzano
Chromium, nickel and cobalt: workplace exposure in Italy
Italian Workers' Compensation Authority INAIL, Italy

618 Michas, Roxana
Injuries among construction workers
Athens University, School of Medicine, Department of Hygiene and Epidemiology, Greece

619 Mohseni-Bandpei, Mohammad A.
Work related low back injury among nurses: an epidemiological study
Mazandaran University of Medical Sciences, Iran

620 Mrizak, Néjib
The neck injury prevention among dentists in a dental school Néjib Mrizak, Faten Debbabi, Olfa el Maalel, Lamia Nouira
Faculté de Médecine de Sousse, Tunisia

621 Mrizak, Néjib
Frequency and perceived risk of accidental blood exposure among Tunisian medical students
Faculté de Médecine de Sousse, Tunisia

622 Mutiso, Vincent
Survey of work related injuries within the manufacturing sector of the industrial zone of Nairobi, Kenya
University of Nairobi, Kenya

623 Noe, Rebecca
Occupational injuries in Nicaragua
NIOSH, USA

624 Plaitho, Jiraporn
Increasing death from falls in Lumpang province, Thailand 1997–2001
Ministry of public health, Thailand

625 Robaina-Aguirre, Caristina
The role of pidemiological survey in the prevention and control of accidents at work
National Institute for Workers' Health, Cuba

Road Safety
Child Safety
Violence Prevention
Work Safety and Health
Trauma, Disaster, Civil Protection, Terrorism
Sports, Leisure Safety
Suicide Prevention
Elder Safety
Home & Institutional Safety
Product Safety
Cross-Sectoral

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All posters remain hanging until 10:00 the following day.

Tuesday, June 8th, 2004