Background Paraquat (dipyridylium herbicide), used commonly in Taiwan, may cause severe pulmonary injury and lung fibrosis and be associated with Parkinsonism. Ocular exposure had caused acute, severe and prolong conjunctivitis with persistent fibrosis, pannus and vascular distortion due to superoxide radicals formation and NADPH depletion via redox cycling reaction as **David McKeag's and others' cases**. We will report a case with delay onset and relative better prognosis.
Case A 31 years old male farmer had his left eye spilled by Paraquat solution during preparing procedure on Sep 11, 2012. After washing eye by himself with clean water for about 5 minutes, no discomfort was noted initially. Unfortunately, he suffered from pain and tearing 3 days later. Mild conjunctivitis with slight reddish was noted in Ophthalmology Clinic. Focal steroid and antibiotics were used. Progressive worsening condition with more tearing, ocular pain, photophobia, erythematous hyperaemic change, discharge, eyelid swelling, vascular congestion, more papilla and follicles and infiltration had been noted since the 4th day. Eventually, local pulse steroid every day, focal steroid ointment every 2 hours and oral antioxidant were administered on the impression of Paraquat-associated keratoconjunctivitis caused by superoxide radical on 6th day. Pseudomembrane formation was found on 8th. Condition was improving after intensive therapy. Symptoms subsided on 12th day and papillae, follicles and infiltration disappeared on 18th day. Only mild dry eye sensation, cicatrization on conjunctiva and no impairment of visual acuity were found 45 days later. No systemic effect could be found.
Conclusion Delay onset is different from acute severe conjunctivitis in McKeag's and other chemical and pesticide exposured ocular injuries. More intense therapy with local pulse steroid and oral antioxidant may improve prognosis with less sequelae. Close monitoring, early management should be considered in case of ocular exposure to Paraquat solution even without early symptom/sign.

68 INJURY RELATED DEATH OF PRODUCTION WORKER IN SHENZHEN FROM 2007–2011

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Objectives There are many production workers in Shenzhen, a city of immigrants, which is a public problem, should be concerned. This study aimed to explore the nature of injury related death of production worker, and provided basic interventional measures.
Methods The data were collected from the Death Surveillance System in China from 2007 Jun 1st to 2011 Dec 31st. The cause of injury related death was coded from V01 to Y98, and the occupation was production worker. The data were analysed by SPSS 15.0.
Results 517 deaths of production worker due to injury were indentified from 2007–2011 in Shenzhen. There were 437 male workers (84.5%), and 80 female workers (15.5%). The average age was 34.72. The first five cause of injury death was W17, V03, V09, W20, and V02 (ICD-10, fall and traffic injury), accounted for 15.7%, 11.6%, 10.6%, 7.9% and 3.9%, respectively. The distribution of injury cause in different district was significant different ($p<0.05$).
Conclusions Production worker is a dangerous job. More effective measures should be taken to prevent fall and traffic injury for production worker. The aim population is the young male worker in special district.

69 BRAZILIAN CONSTRUCTION INDUSTRY: A CONTRIBUTION TO IMPROVE INFORMATION ON FATAL WORK ACCIDENTS

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Objectives Considering data sources and statistical trends on recent fatal cases resulting from workplace accidents in the Brazilian construction industry, herein two aspects are emphasised: a critical appraisal of the official registers on deaths resulting from work-related accidents, and a discussion on alternatives to achieve better information to support interventions in this sector.
Methods First, statistics and the variability in the profiles of death at work from 2000 to 2010 were analysed for construction industry according to the federal data sources on dimensions related to occupational health, working conditions and social security. Second, besides some difficulties in qualifying of fatal work accidents among the set of external causes of mortality, measurements has been taken in the description of work accidents classified into one of three categories: typical workplace accident; transport accident (that occurring during transport to and from work); work-related diseases.
Results In addition to presentation of specific rates and a set of indicators, a technical proposal is suggested for a more effective and realistic characterisation of the profile of mortality in workplaces by considering age, gender, education, occupation, as well the more frequent causes related to each type of accident. All of them as a condition to understand the main risks and to help teams of OSH facing the worst violence against workers.
Conclusions By reason of the high social and economic costs involving work accidents in Brazil, this study searches to provide a specific comprehension on fatal cases as well as some subsidies for the government to draw policies oriented to minimise risks in the workplaces of construction industry. However, mortality resulting from accidents in the informal labour market should be considered to overcome gap on information. After all, if the number of unemployed workers is underestimated, the number of underemployed has not been taken into account.

70 IMPROVEMENTS TO SURVEILLANCE OF WORK-RELATED INJURIES IN A DEVELOPING ECONOMY: A CASE STUDY FROM VIETNAM

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Objectives In Vietnam current public health statistics result in a substantial undercount of injuries and fail to distinguish injuries that occur while working. The objective of this study was to propose incremental changes in reporting to improve surveillance of work-related injuries in this rapidly developing country.
Methods Using nationally published data and the results of our own active surveillance research project in the Xuan Tien

commune we propose and evaluate improvements to the current system for tracking work-related injuries. We evaluate both passive and active approaches for capture sensitivity and the potential for collecting information on industries, occupations and populations at risk, injury types, causes, severity and burden.

Results Currently the Ministry of Health in Vietnam collects and publishes statistics on non-fatal injuries using hospital admission reports. A passive surveillance model which builds on the current system, but adds case reports for individuals treated at the commune health stations (CHS) and includes data from a newly designed additional injury log, would improve the capture of injuries and allow identification of occupations and populations at risk. However, with passive reporting the completion rate, accuracy and validity of the information collected are likely to be compromised. An active surveillance model, structurally similar to the passive approach, but gathering timely reports of injuries and including follow-up of injured individuals, would provide greater sensitivity of capture and case detail, while requiring significant resources. Active reporting in the Xuan Tien commune found counts of work-related injuries approximately 24 times higher than reported previously.

Conclusions We recommend that an extended passive surveillance approach be adopted in Vietnam to include hospital and community health station reporting. As health authorities become aware of counts or rates in specific communities which contribute disproportionately to the national burden, active surveillance in those communities might become a valuable extension to national surveillance.

71 SNAKE BITE ENVENOMATION IN SAN, MALI

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Objectives Envenoming resulting from snake bites is a serious public health problem in many regions of the world. The aim of this study is to describe the difficulties in the management of envenomation in the prefecture of San in Mali.

Methods A retrospective study of snake bites cases, recorded in the Health Reference Center of San (Ségou region) in 2001–2003, was conducted.

Results During the period of study, 88 victims were received and treated at the Health Reference Center of San. Of these, 42% were farmers and 6,8% shepherds. Adults 15 years and over were most commonly concerned because of their socio-professional activities (cattle breeding, gathering [3DOTS]). The majority (50,6% of reported cases) were occurred during field-work, 24,7% during nature walks and 9,4% during picking. Snakes belong to the Viperidae family (*Bitis arietans*, *Echis ocellatus*) and the Elapidae family (*Naja nigricolis*). In 50,6% of cases, the bite was on the lower limb, 48,2% on the upper limb and 1,2% on the trunk. According to data available, 28,4% of envenomated patients have benefited from antivenom administered intravenously. The average length of stay in hospital was 3 days, with a range of 12 hours to 11 days. Among the 29 cases for whom the evolution is known, 7 of them died. For other cases, the outcome was favourable with or without sequelae.

Conclusions Concerted action is needed to ensure adequate supplies of effective antivenom to develop systems that deliver high quality health care.

72 MENTAL OUTCOME OF WORKERS 12 MONTHS AFTER OCCUPATIONAL INJURY

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Objectives Workers hospitalised after occupational injury are at risk for psychiatric disorders. This study aimed to examine prevalence rates of both post-traumatic stress disorder (PTSD) and major depression at 12 months in workers experiencing different types of occupational injury in Taiwan.

Methods Workers sustaining occupational injury and hospitalised for 3 days or longer and received hospitalisation benefits from the Labour Insurance program were recruited in this study. A two-staged survey study was conducted. A self-reported questionnaire including the Brief Symptom Rating Scale (BSRS-50) and Post-traumatic Symptom Checklist (PTSC) was sent to workers at 12 months after injury. Those who scored high and suspected to have mental conditions were recruited for the second stage phone interview with a psychiatrist using the Mini-international Neuropsychiatric Interview (MINI).

Results A total of 1233 workers completed the questionnaire. Among them, 167 (13.5%) scored high in either BSRS or PTSC and were invited for the MINI interview. A total of 106 (63.5%) completed the phone interview. The estimated rates of PTSD, partial PTSD (PPTSD), major depression, comorbid PTSD/PPTSD and major depression, and either PTSD/PPTSD or major depression were 3.4%, 1.8%, 2.0%, 2.0%, and 5.2%, respectively. The risk factors for high scores in either BSRS or PTSC were gender, education level, marriage status, loss of consciousness after occupational injury, injury affecting physical appearance, occupational injury experience before this event, traumatic life events before and after this injury, length of hospital stay, self-rated injury severity, and the worker's proportion of income contribution to the family.

Conclusions Occupational injury can cause long-term mental condition in the workers. The identified risk factors in this study may provide valuable information for developing preventive strategies.

73 TARGETING PREVENTION POLICIES AND PRIORITIES FROM USING ROUTINE OCCUPATIONAL INJURIES STATISTICS; ARGENTINA, 2012

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Objective To identify from routine collected data in National worker's compensation database, sectors of the economy where workers are exposed to different risk levels, and to rank and prioritise groups to apply measures based on seriousness and coverage.