

service has a major partnership project that enables a completely new way to co-operate on safety related matters national wide.

**Methods** Mx Safety will collect and share the information regarding safety issues and is also developing tools to promote safety. Mx Safety does involve track users to recognise risks and encourage them to make improvements towards safer training conditions.

The most visible project at the moment is basic safety sign standardisation for off road tracks.

National Rescue Service co-operation offers a great opportunity to get national wide risk management, rescue and emergency guidelines for all tracks.

**Results** An overview of MX Safety signs was first introduced at Motorcycle Show 2015 in Helsinki, in cooperation with the MX Safety project, the cooperative network of emergency services (Pelastuslaitosten Kumppanuusverkosto) and the Finnish Motorcycling Federation. The Finnish Motorcycling Federation (SML) motocross commission has confirmed that MX Safety signs will be introduced at all Finnish motocross tracks latest during 2016. By following common guidelines and best practices and deficiencies motorcycling clubs are able to prevent significant amount of accidents. All tracks users must commit to compliance with common rules. Signs has been translated already in English, Latvian and French languages.

**Conclusions** Each country is welcome to work together to promote safety.

## 216 MOVIT YELLOW FLAG (AUTOMATIC TRACK SAFETY SYSTEM)

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**Background** For the safety of riders at motorsport accommodations ‘yellow flag marshals’ are present at various locations on the track. The job of these people is to warn the riders in case of a dangerous situation. In most cases a dangerous situation means that a colleague competitor has crashed within the next section of the track. Riders must anticipate by slowing down and avoid jumping. Especially the landing area behind a jump is extremely dangerous, because a rider cannot adjust the bike’s route until the moment of the landing. What’s the problem? In recent years a number of serious accidents happened on various tracks. These accidents could in most cases probably have been avoided with the use of flag marshals. Organisers experience more and more difficulties finding a sufficient number of good people for this important job. At international and national races they still succeed most of the time, although it may cost a lot of effort and money. At free practices and small club events there are no people available or the price is too high for the track owner. As a result there are free practices and club events without (a sufficient number of good) flag marshals. This means a high risk for competitors. In various countries, legislation is being prepared to make flag marshals mandatory during free practices.

**Methods** Movit Yellow Flag is an automatic system that replaces (or is additional to) the ‘yellow flag marshals’ at motorsport accommodations. The system provides one or more warning light signals for the competitors at a practice or race in case of a dangerous situation on the track. This works completely automatically and without human interaction. The Movit Yellow Flag system is based upon a small sending device on each motorcycle, with sensors that detect gravity and acceleration. In case a competitor

crashes one or more light signals get automatically activated, so oncoming riders know that a vehicle of their colleague competitor is on the track within the next section. Riders can anticipate by slowing down and avoid jumping. At the moment the vehicle starts moving again the light signals are switched off automatically.

**Results** A working demo version has been developed already in 2014–2015, the production version will be available at the start of the 2016 Motocross season.

## Stepping up child maltreatment prevention in the World Health Organisation European Region

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### 217 STEPPING UP IMPLEMENTATION OF THE EUROPEAN CHILD MALTREATMENT PREVENTION ACTION PLAN

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**Background** Child maltreatment is a common public health problem globally and in Europe. The *European report on preventing child maltreatment* reported a prevalence of 9.4% for child sexual abuse, 23.9% for physical abuse, 29% for mental abuse. Investing in Children: the European Child Maltreatment Prevention Action Plan 2015–2020 has an aspirational target to reduce child maltreatment by 20% by 2020. The Action Plan has three objectives: 1) Strengthen health systems governance by developing intersectoral national action plans to prevent child maltreatment 2) Make the problem more visible by developing surveillance systems to measure and monitor child maltreatment 3) Reduce risks by implementing child maltreatment prevention programmes. The plan was approved by 53 Member States of the WHO European Region and requests that WHO to provide support to these countries to reduce the prevalence and consequences of child maltreatment by achieving these objectives. An assessment carried out and reported in *European facts and the Global status report on violence prevention 2014* shows that much work needs to be done in order to achieve these objectives. For example whereas 78% of countries reported having a child maltreatment prevention action plan, only 60% of countries reported that they had conducted population surveys of child maltreatment. The implementation of prevention programmes was also incomplete, with a median of 44% countries that reported implementation on a large scale. If the target is to be met, then action needs scaled up markedly.

**Objectives of workshop** The workshop will discuss tools that are being developed by WHO to support countries. The session will provide state of the art presentations to support countries in the areas of developing national plans, improving child maltreatment surveillance and implementing prevention programmes. These will be based on handbooks that are being developed.

**Workshop description** The session will comprise a series of brief lectures which will set the state of the art on how to develop national action plans, on how to improve surveillance through surveys of prevalence in school children, and on what experts say on how to implement prevention programmes. This will be followed by a facilitated discussion involving policy makers, practitioners and researchers who will share country experience. Handbooks in these 3 areas will be disseminated at this session.

All participants with an interest in the prevention of child maltreatment are invited. The session will be facilitated by Dinesh Sethi, (WHO Regional Office for Europe), Mark Bellis (Public Health Wales), and Dimitrinka Jordanova Pesevska (the former Yugoslav Republic of Macedonia).

## Aftermath of disaster

TUE W 5

### 218 EARTHQUAKE 2015 IN NEPAL, AN EXPERIENCE AT BIR HOSPITAL, KATHMANDU

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**Background** On 25<sup>th</sup> April 2015 Nepal experienced earthquake of 7.8 Rector scale followed by another one of 6.8 Rector Scale next day with epicentre near Kathmandu. More than 9,000 people died, 25,000 injured, 200 missing, 500 000 houses collapsed. Big after-shock 17 days later on 12<sup>th</sup> May, killed 300, injured 3000 people. Country's central Hospital, Bir Hospital located in Kathmandu is a hub hospital for disaster management; though damaged itself, yet it treated all victims brought here.

**Methods** All victims brought in immediately and later were triaged, resuscitated, damage control surgery followed later by definite surgery were carried out as per necessity. Records were kept. Challenging logistics and supply were managed in best possible way under the circumstances with aid from abroad later in kinds, man power. As the hospital was damaged too, all in-patients were evacuated to nearby open field. Triage was carried out in open spaces available. Makeshift operation theatres were put up and surgery began as existing ones were damaged too. Side by side institutional rehabilitation was begun too with help from volunteers. Several volunteers from abroad technical and non-technical also helped us a lot.

**Results** Between 25 April till 17 June 2015, total of 2574 victims attended this hospital. Of them 132 were dead, 1434 were admitted, 1135 underwent Surgery, 568 of Major and 567 of Minor category, 24 died in hospital while on treatment. Of surgery, most (568) were orthopaedic cases, followed by Polytrauma and General Surgery 299, Neurosurgical 39, Chest trauma 24, Burn and Plastics 9, and ENT & Dental 7. Damage control surgery was performed on 40 victims. Of 190 Orthopaedic surgery, 101 were for Lower Limb, 69 for Upper limb, 20 for Spine and Pelvis. Mechanisms of injury included being buried in rubbles, trapped between heavy objects& collapsed building, falling objects and panic fleeing.

**Conclusions** This Natural catastrophe struck least developing country Nepal causing huge loss of life and economy. Rehabilitation and reconstruction is challenging. Since forewarning technology is still unavailable, Hospital preparedness in Emergency program with regular drill is essential for us to perform better in such situation.

### 219 ALLEVIATING AFTERMATH OF TERROR THROUGH A PSYCHO-SOCIAL PRO-ACTIVE MODEL FOR FOLLOW-UP

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**Background** In 22 July 2011 a lone wolf terrorist managed to massacre 77 people, mainly youngsters participating in a political youth camp at Utøya Island outside Oslo. To meet the situation characterised as a national trauma a major psycho-social intervention was developed and implemented under the stewardship of health authorities and through consultations with experts, other central stake holders and the exposed themselves.

**Methods** The intervention was a large-scale pilot targeting the exposed (survivors with families, bereaved with parents and siblings) through a municipality-based individual and collective psycho-social follow-up model. The watchful waiting principle was replaced by pro-activity in the services. The individual needs in the victims were to be monitored by a health professional three times during the first year after terror. Individual contact persons providing a long time follow-up were pointed out in the municipal crisis units. National week-end and county-wise one-day reunions were arranged for the bereaved and the survivors with families. A large capacity building exercise was initiated in order to increase the competency of psychological trauma reactions and conditions in all relevant services.

**Results** Even if the effect of the interventions on the trauma related conditions is hard to measure there is convincing evidence for the benefit of the pro-active model as well as the benefit of the collective interventions, communicated by the service users themselves. The pro-active principle was embraced by all the exposed as were the national week-end gatherings for the bereaved. 99% of the latter evaluated the collective intervention as a good or very good help in their grieving process.

**Conclusions** Even if it is very difficult to evaluate the effect of the intervention model in terms of reduced symptom load in the exposed, pro-activity should be considered as one of the guiding principles in assessing the psycho-social needs of the exposed in major incidents in the future.

## The European Injury Data Base (IDB)

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### 220 THE EUROPEAN INJURY DATA BASE: SUPPORTING INJURY RESEARCH AND POLICY ACROSS EUROPE

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**Background** Although various injury data sources exist in Europe; many lack sufficient size, scope, detail or comparability, to support injury prevention research or policy development. Emergency department (ED) records offer one of the most comprehensive sources of injury data; however, heterogeneous hospital data collection systems prevent comparative analyses between countries.

**Methods** As part of the Joint Action on Monitoring Injuries in Europe (JAMIE) project, and now the BRIDGE-Health (BRIDging Information and Data Generation for Evidence-based Health Policy and Research) development; the European Commission (EC) funded the development of a standardised European Injury Data