Process The following lexicons will be reviewed at a high-level: International Classification of Diseases (ICD) diagnoses and mechanism of injury codes, the International Collaborative Effort (ICE) on Injury Statistics Barell Injury Diagnosis Matrix, the Association for the Advancement of Automotive Medicine's (AAAM's) Abbreviated Injury Scale (AIS), and multiple mapping options from ICD to AIS codes for various versions of each.

Analysis and Outcomes Understanding a systematic and standardized approach to injury coding and mapping is critical to ensure methodologically rigorous and valid activities for injury registry personnel, medical providers, and researchers. There are multiple applications for injury coding and mapping including: mandates for trauma registry accreditation, informing surveillance and interventions, contributing to regional and national trauma databases, facilitating database sharing across various entities, describe community and region-specific epidemiology, guiding injury prevention prioritization efforts, facilitating the evaluation of injury prevention programs' effectiveness, and synergistic collaboration with other groups.

Learning Outcomes The audience will learn about injury coding and mapping using various, standardized lexicons.

6D.003 "IDEAS", USING NATIONAL DATA AS A DRIVING FORCE FOR LOCAL ACTION AND ENGAGEMENT

Eva Vaagland*. *Norwegian Safety Forum, Oslo, Norway*

10.1136/injuryprev-2021-safety.164

Context Norwegian Safety Forum is a non-profit organization, a national advocate for safety supported by the Norwegian Ministry of Health, working on three levels; projects and activities on local level, lobbying and policy work on national level, partner and contributor on International level.

National data on injuries are incomplete and difficult to access in Norway. As an advocate for safety we needed a tool to present injury data and prevention measures in an engaging way. We came up with 'IDEAS', the Injury Data Easily Accessible Solution.

Process A grant from InnoMed gave us an opportunity to cooperate with experts on information and service design. With their expertise in communication and our knowledge of available data, and best practice we developed a digital solution.

The solution is based on national data, converted to a local setting, using informative graphic combined with information on injury prevention programs. The goal is to promote local action plans.

Outcomes In February 2019 we launched the prototype. It has been tested by several communities and organizations. The feedback from the test groups was important and we could adjust and improve the solution. The feedback proved that our hypothesis was correct, and we have established a solid base for further work and a future national solution.

Learning Easy accessible data introduced in a logical, comprehensible way, with a local approach, along with information on how to prevent accidents is a way to create more focus and interest for the scope of injuries and the possibilities to prevent them.

6E – Mixed Bag – Injury Prevention, March 25, 2021

6E.001 PHYSICAL INJURIES AND BURNS AMONG REFUGEES IN LEBANON: PREVENTION, PROGRAMS, AND POLICIES

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10.1136/injuryprev-2021-safety.165

Background Refugees are prone to increased risks of injury frequency and severity. In this study, we systematically quantified the prevalence of injuries and burns among refugees in Lebanon and examined injury characteristics, risk factors and outcomes.

Method We conducted a cluster-based population survey across 21 refugee camps in Lebanon from February to April 2019. We used a modified SOSAS tool to record refugees' injuries sustained in the last 12 months. We performed descriptive and multivariate regression analyses to understand the association between variables.

Results of the 1,500 refugees interviewed, 33% sustained an injury, of which 30% were occupational injuries. Injuries caused 12% of refugees' reported deaths. Almost 18.1% of refugees (N=136) suffered from burns and 14.8% (N=111) suffered from other injuries (i.e. road traffic, assault). Most burns were sustained by children and caused by boiling liquid (N= 61, 49.6%), heat contact (N= 38, 30.9%) and open flame (N= 17, 13.8%). Injuries mainly affected extremities (43%, $p<0.001$) compared to head/face (26%, $p<0.001$), and occurred on the road (29%) and in the field (4%). Burns was more frequent to face (34%, $p<0.001$) compared to abdomen (17%, $p<0.001$) and occurred mostly inside the tent (31%). Male gender, illiteracy and occupation were associated with increased injuries ($p<0.05$). Almost 31.4% of injured suffered long term disability, and 6.8% required help with mobility.

Conclusion Refugees suffer from a high burden of injury with human and economic repercussions. These findings will guide the allocation of healthcare resources and the design of refugee injury prevention programs and policies.

6F – WHS – Program, March 25, 2021

6F.001 INJURY AT WORK: HOW CAN WORKERS CONTRIBUTE TO REDUCE HARMS?

Trang Khieu*. *Worksafe NZ, Wellington, New Zealand*

10.1136/injuryprev-2021-safety.166

Background Work-related injury is a major concern for business, society and community. Identifying workers' role in addressing health and safety (H&S) risks in the workplace is key for implementing better harm prevention.

Methodology: The survey was conducted from 2014 to 2017. A total of 8489 workers in the four New Zealand high risk industries including construction, forestry, manufacturing

and agriculture were enrolled in the survey. Weighting by business size within sector was applied.

Results Annually, about 16.7% of workers reported experiencing a serious harm incident at work in the last 12 months. The serious harm incidents were statistically higher in workers who disagreed and strongly disagreed that ‘their boss encourages workers to speak up if they felt something is unsafe’ (Odds ratio (OR)= 2.4, 95% Confidence Interval (CI) (1.9 - 2.6)), ‘their boss encourages workers to come up with ideas for how to make them safer’ (OR=1.5, 95% CI (1.3–1.8)), and ‘When their boss makes decisions about workplace health and safety, workers are always told how their views have been considered’ (OR=1.7, 95% CI (1.4–2.0)). Regression model indicated that decreased serious harm incident and increased workers’ engagement were greatly affected by worker’s age.

Conclusion Work-related incidents were strongly associated with positive workers’ health and safety practice and perception. Younger workers were more likely to experience both higher serious harm incidents and being less involved in H&S at work.

Learning Outcomes The study provides evidence on the importance of workers’ involvement, especially younger workers in improving H&S at work.

6F.002 INVESTIGATION OR LEARNING REVIEW?

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10.1136/injuryprev-2021-safety.167

As safety practitioners we often struggle with how to interpret and apply safety research into our environments, how to truly engage our workers, and how to positively influence our safety culture.

This session shows how shifting focus from safety culture to developing a learning culture may provide a better pathway.

We show how realigning our investigation processes to Learning Reviews is moving us away from assumptions of human error and blame and is developing a new language and shared understanding toward a safety differently approach.

Since people create safety, we show how we engage the front line to identify what works and what doesn’t, using focus groups and influence mapping as a guide to the creation of cultural interventions.

6F.003 PREVENTION IS NOT ENOUGH

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10.1136/injuryprev-2021-safety.168

A strong prevention bias in safety thinking doesn’t offer a robust understanding of the complexity of high consequence events. Despite the best risk assessments, procedures, and people, we simply cannot prevent all incidents. We must instead balance prevention efforts with capacity to respond and recover when things go badly. But how do we promote this concept within our operations?

This session offers a model we are using as a simple visual framework to stimulate dialogue and promote learning, shared understanding and safety differently language. The model is an adaptation of the bow-tie as a propeller. It includes preventive, operational and recovery elements placed in a dynamic mode, represented by turning blades – within a margin of manoeuvre sphere.

On one side of the bow-tie, prevention efforts deter threats, while on the other side capacity to respond to events reduces impact. The centre represents operational activity and an event moment. This is also the moment when workers recognize anomaly and make sense of the information, learn in the moment, and innovate a change to the system.

The bow-tie is depicted inside a sphere of influence representing margin of manoeuvre. Positive influences create outward force, maintaining a buoyant sphere. Negative influences put pressure on the system, reduce its size, robustness and even collapse it. An unbalanced bow-tie can also collapse the system.

When we conceptually shift from bow-tie to propeller, the model becomes dynamic, demonstrating how learning creates a feedback loop to improve the entire system- including preventive, operational and response/recovery components.

7A – Child – Road, March 25, 2021

7A.001 ADOLESCENT’S PERCEPTION OF ROAD RISK ON THEIR ROUTES TO SCHOOL IN MAKWANPUR, NEPAL; A QUALITATIVE STUDY

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10.1136/injuryprev-2021-safety.169

Background Busy and poor road infrastructure along routes to school poses high risk of traffic injury for children. Every child’s safe and healthy journey to/from school is fundamental to achieving Sustainable Development Goal 3.6. However, there is little evidence reporting children’s views about their school travel from developing countries. This study aims to understand children’s perceptions of injury risks on their journey to school in Nepal.

Methods We used Photo-Elicitation Interview (PEI) methods to collect data from 14 children (12–16 years) who walk to school along the East-West Highway in Makwanpur, Nepal. The children used a camera to record parts of their journey, which they perceived as dangerous. Photographs were used as prompts during an interview afterwards. Interviews were audio-recorded, transcribed, translated and analysed thematically using NVivo.

Results Several themes were identified, categorised under environmental and behavioural factors. The children were