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?

¹Vallorie Hodges*, ¹Fiona McCarthy, ^{2,3}Sidney Dekker, ⁴Ivan Pupilidy. ¹University of Tasmania, Hobart, Australia; ²Safety Science Innovation Lab Griffith University, Nathan, Australia; ³Delft University of Technology, Delft, Netherlands; ⁴Advanced Safety Engineering and Management – University of Alabama at Birmingham, Santa Fe, USA

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

¹Vallorie Hodges*, ¹Fiona McCarthy*, ²Ivan Pupilidy, ^{3,4}Professor Sidney Dekker, ⁵Crista Vesel. ¹University of Tasmania, Hobart, Australia; ²Advanced Safety Engineering and Management University of Alabama at Birmingham, Santa Fe, USA; ³Safety Science Innovation Lab Griffith University, Nathan, Australia; ⁴Delft University of Technology, Delft, Netherlands; ⁵Dynamic Inquiry LLC, Santa Fe, USA

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

¹Preeti Gautam*, ²Julie Mytton, ²Paul Pilkington, ¹Sunil Joshi. ¹Nepal Injury Research Centre, Kathmandu Medical College Public Limited, Kathmandu, Nepal; ²University of the West of England, Bristol, UK

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