Genuine leadership is essential to transform a reactive culture into a preventive one.

Annually different capacitation plans are generated for all employees and corresponding competences are developed so they can perform their job in a safety way. Communication and awareness must continually be directed towards employees when sharing relevant discussions of incidents that have occurred to make sure they don’t happen again. The methodology of risks assessment is done in a structured process, where every activity must have a risk analysis before starting it. Every day, every shift work and every critical task. We are respectful towards the fulfilment of every legal requirement that apply to us.

**Results** We went from a frequency index of 14.8 in 2000 to a LTIFR of 2.4 on 2003, where we had an increase is due to the consideration of incidents with contractors, visitors and third parties. Since 2006 we have had a constant decrease that has taken us to a LTIFR of 0.19 and a LTISR of 16 up to 2016 (ANSI 16.1).

Progreso has been awarded with several titles including: First Guatemalan company acknowledged as one of the top ethical organisations by Ethisphere Institute. Since 2009 until 2017, we were awarded by the Great Place to Work Institute. At 2016 and 2017 the British Safety Council awarded us with recognition for our practices and good results in Occupational Health and Safety.

So we have achieved operations with ZERO injuries in different companies at Grupo Progreso.

**Conclusion** Illness of our employees as objective and a strategy of commitment and genuine leadership, communication, competences, acknowledgement of safe acts, rigorous monitoring of predicting indicators and a minimum tolerance towards jobs under risk it is possible to achieve operations with zero incidents.

**Results** Eighty percent of professionals had never follow any training in handling and 35% who have already follow a training believe that this was not relevant to the work in the hold. Seventy percent of professionals did not consider they had any good handling strategies. After seeing the video, 93% of professionals (98% of trainees) judge that the video is useful and 92% of professionals (97% of trainees) that it would help them to be more careful when handling baggage. Finally, 81% of professionals believe that this project was useful and should be repeated (94%), and 56% report that they had changed their way of handling.

**Discussion** Training in handling is crucial when handling is realised in a kneeling posture in an aircraft hold using an ERC. Our results suggest that a video could be a useful tool to speed up handling experience in this specific work environment.

### Abstract 1129

**A TRAINING VIDEO EXPERIENCE FOR HANDLING IN AIRCRAFT HOLD WITH AN EXTENDABLE ROLLER TRACK CONVEYOR**


1. Attentia, Charleroi, Belgium; 2. Brussels South Charleroi Airport, Charleroi, Belgium; 3. Wallonie Aerotraining Network, Charleroi, Belgium; 4. Haute Ecole Louvain en Hainaut, Charleroi, Belgium

**Introduction** The influence of experience, training, and use of mechanical equipment during baggage handling in a kneeling posture in the aircraft hold remain still largely unknown. However, the introduction of an extendable roller track conveyor (ERC) at the Charleroi airport allow to reduce the number of work accidents occurring in the hold. The purpose of this study was to produce a training video for baggage handlers to speed up their experience with an ERC.

**Method** Expert (n=24) and novice (n=34) handlers were filmed during real handling conditions in the hold of aircrafts to identify specific postures and movements associated to experience level. Based on these findings and ergonomic criteria, a training video of the best handling strategies associated with the use of ERC was realised. The video was showed during training sessions of 72 professional and 61 trainee baggage handlers. Results were collected by self-administered questionnaires.

**Results** Seventy percent of professionals had never follow any training in handling and 35% who have already follow a training believe that this was not relevant to the work in the hold. Seventy percent of professionals did not consider they had any good handling strategies. After seeing the video, 93% of professionals (98% of trainees) judge that the video is useful and 92% of professionals (97% of trainees) that it would help them to be more careful when handling baggage. Finally, 81% of professionals believe that this project was useful and should be repeated (94%), and 56% report that they had changed their way of handling.

**Discussion** Training in handling is crucial when handling is realised in a kneeling posture in an aircraft hold using an ERC. Our results suggest that a video could be a useful tool to speed up handling experience in this specific work environment.

**Abstract 1162**

**ACCIDENT PREVENTION – ROLE OF SAFETY OBSERVATION AT WORKPLACE IN REDUCING ACCIDENTS**

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**Introduction** Tata Motors Limited, a USD 42 billion organisation, is a leading global automobile manufacturer with a portfolio that covers a wide range of cars, sports vehicles, buses, trucks and defense vehicles. Our marque can be found on and off-road in over 175 countries around the globe. Sustainability and the spirit of ‘giving back to society’ is a core philosophy and good corporate citizenship is strongly embedded in our DNA. Our design and R and D centres located in India, the UK, Italy and Korea strive to innovate new products that achieve performances that will fire the imagination of GenNext customers. It employs more than 60,000 permanent employees and most of the employees work in various shop floors like assembly unit, power train, welding and painting unit and in ERC (Engineering Research Centre). Such type of working places pre-disposes employees to various type of workplace accidents, which include but are not limited to slip, trip, falls, lacerations, fractures, polytrauma, weld injury, blunt trauma, foreign body in eye and so forth. Most of these accidents are due to behavior-based safety (BBS). So, to reduce these occurrences, it was decided to target unsafe behaviours of employees working in such places with the help of World leaders in safety – DuPont that works on the principle 'All accidents are preventable'. One of the most effective tool for addressing behavior-based safety is 'Safety observations' in these areas.

**Methods** Safety observation is a kind of safety round undertaken in various areas which addresses unsafe act (80% prevalence) and unsafe conditions (20% prevalence). It is done by taking a round of workplace observing people working in an unsafe manner and then, actually making contact with them. It uses 6 step process (observe, comment on what the employee was doing safely, discuss consequences of unsafe acts and safer ways of doing job, take agreement for working safely in future, discuss any other safety issues and thanking the employee). All employees perform safety observation each week and it has proved a great tool for eliminating unsafe acts/conditions and thereby reducing/preventing accidents at workplace and simultaneously improving behaviour towards safety and morale of employees.
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**Result** With this methodology of safety observation, the accident rate in terms of LTI (Lost Time Injury) and TRC (Total Recordable Cases) has been drastically brought down from 51 cases (2013–2014) to 23 cases (2016–2017) – 55% reduction which includes 3 consecutive years of being LTI (Lost Time Injury) free.

**Discussion** Safety observation has proved an effective and excellent tool, which reinforces positive safety behaviour, raises safety awareness thereby motivating people to be committed for safety, corrects unsafe behaviours in a positive, proactive way leading to prevention of injuries and property losses.

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**1165 BEHAVIOURAL SAFETY – THE ULTIMATE STAGE IN ACCIDENT PREVENTION**

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**Introduction** To establish employee’s perception of the safety culture in a multinational manufacturing facility, the status of safety management, in particular to measure the intangibles such as management commitment and employee beliefs and involvement in safety.

**Method** Cross sectional data was collected from 455 employees who voluntarily participated in the study. The research study was implemented based on a descriptive survey in order to estimate certain population parameters in relation to safety climate, safety culture and behavioural based safety in the workplace. They were asked to prioritise in relation to their perceived importance, the eight sections which had a total of fifty-four statements to address all of the important factors in safety management including beliefs and practices.

**Results** A valid sample of 89.2% was achieved for this study. The data showed a strong organisational commitment to safety, with 99% employees agreeing with this statement. 90% of employees agree that management commitment is evident; however, opportunities were identified in ensuring greater supervisory presence in the workplace. The lowest scoring values were the beliefs by employees that all accidents were preventable and that they were linked to personal behaviour. 65% agree that zero accidents are possible, 23% agreeing that if they had an accident it would be their own fault, these results remain a significant challenge for the organisation and may reflect a lack of understanding of the organisation’s injury data which reflects that over 50% of accidents are linked to behaviour.

**Discussion** This research study confirmed the validity of the one of the most important factors in the model of safety management, which is management commitment and employee involvement. If these ‘soft’ factors are identified and present within an organisation, this will then lead to excellence in safety.

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**1186 PSYCHOLOGICAL CONSEQUENCES OF ELECTRICAL ACCIDENTS AT WORK. INTERVIEWS WITH SWEDISH ELECTRICIANS**

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**Introduction** It is well known that electrical accidents can cause physical injury. Less well known is that long-term consequences may include emotional and cognitive problems. The objective was to explore electricians’ experiences and perceptions of work-related electrical accidents, with focus on psychological short- and long-term consequences, including how contacts with health care services and the workplace had been perceived.

**Methods** Semi-structured interviews with 23 Swedish male electricians, aged 25–68, who had experienced at least one electrical accident and who had reported residual sensory, muscular, or mental symptoms. Data was analysed by means of qualitative content analysis, with the analysis keeping close to the areas of query and the electricians’ statements.

**Result** Immediate emotional reactions included surprise, confusion, fear, anxiety, and anger, but also long-term consequences in terms of psychological dysfunction were seen. Experiencing a no-let-go situation was particularly stressful. The cause of the accident, and questions about guilt and blame, were central in the aftermath. Lack of knowledge and routine among health care professionals concerning electrical injury was reported, as well as lack of medical and psychological follow-up.

**Discussion** Long-term psychological consequences can be seen after occupational electrical accidents. Adequate handling at the workplace and from the health care services, including follow-up, could facilitate rehabilitation and return-to-work.

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**1223 KOREA’S RISK ASSESSMENT RECOGNITION SYSTEM AND PERFORMANCE**

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10.1136/oemed-2018-ICOHabstracts.66

**Introduction** KOSHA has promoted risk assessment in the workplace so that employers can identify, evaluate, manage and improve hazardous factors in their workplaces. Risk assessment recognition is given to excellence sites that apply for risk assessment evaluation and are recognised as proper level in risk assessment from KOSHA. As a result, this system supports the establishment of a voluntary system

*Legal basis: Article 41–2 (Risk Assessment) of the KOREA ISHA and ACoP No. 2016–2017 of the Ministry of Labour*

**Methods** We carry out risk assessment recognition work as follows.

- Workplaces apply for risk assessment evaluation to KOSHA
- Issuance of certificate within 5 days

**Results** The risk assessment recognition system has been implemented since 2013 and has achieved remarkable achievement by educating about 1 30 000 employers, consulting 110 000 places, recognising 14 000 places, and reducing average industrial accident by 30.5% annually

**Conclusion** As the Korean government introduced the risk assessment recognition system to support self-safety management system