

work suitability. We report the different clinical and instrumental pathological patterns evidenced among the workers.

Discussion Stabylometric footboard seems to be a valid instrument to increase possibility of detection of at-height workers hyper susceptible to fall. Instrumental evaluation must be associate with medical clinical specialised examination. Our results have to be confirmed in larger studies having the aim of better define objective parameters of a normal balance in general population.

62 **THE DEVELOPMENT AND TRIAL OF SYSTEMATIC VISUAL SEARCH; A NOVEL METHOD TO IMPROVE THE OBSERVATION OF WORKPLACE HAZARDS DURING INSPECTIONS**

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Introduction Visual inspection, as core element in hazard identification, represents a widely used risk assessment method for workplace safety. However, poorly conducted visual inspections are problematical as observable hazards that should be seen, are often missed. Fourteen fatalities from the Rosepark Nursing Home fire in Scotland in 2011, tragically exemplifies this problem. The coroner in this case, reporting under judicial conditions concluded that; if the health and safety consultant who conducted a recent workplace inspection, had correctly observed inappropriately stored flammable materials, the deaths would have been avoided.

Methods To improve the practice of visual inspection, a systematic visual search method was developed and tested under randomised controlled trial conditions. Participants (n=211), previously trained in occupational health and food safety, were tasked with visually inspecting an industrial standard kitchen during a thirty minute period. The experimental group (n=107) received training in the use of systematic visual search while a control group (n=104) conducted their visual inspection as per normal. The kitchens were specially prepared for the experiment and contained a known number of observable hazards, representative of what environmental health and safety professionals, routinely encounter in reality.

Result Control group participants were only able to identify a circa mean 33% of observable hazards in the kitchens. In contrast experimental group participants, using the novel systematic visual search method, observed, a circa mean 50% of observable hazards present. This 17% difference was highly significant, with a large effect size ($p \leq 0.001$, Cohen's $d = 1.85$), and demonstrates the higher performance of systematic visual search compared to current visual inspection practice.

Discussion These base rates reported, remain below what should be expected from environmental health and safety professionals. Visual inspection therefore needs further academic attention in order to improve workplace visual inspection practice and thereby improve the standard of risk assessment.

675 **PICTURE BOOKS FOR SAFETY – COMMUNICATING OSH KNOWLEDGE WITHOUT WORDS**

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Introduction Forestry and agriculture are industries with a relatively high number of serious and lethal accidents in Sweden. They also employ a significant amount of foreign seasonal workers, as it is hard to find enough labour force within Sweden. The latter applies also to horticulture, landscaping and outdoor environmental care, and work in golf courses.

During 2015 and 2016, many refugees arrived in Sweden. This arrival of potential workers is seen by the above-mentioned industries, and by the Swedish state, as an opportunity to employ more people in these industries. But to work safely, these people need basic information on occupational health and safety, although they have not learnt Swedish yet.

To meet this need, Prevent together with the social partners, has created picture books on OSH aimed at workers in forestry, agriculture, horticulture, landscaping and outdoor environmental care and golf course keeping.

Methods The books use no text but depict key information and risky situations in the workplace, and show how risks can be mitigated through following existing guidelines and regulations. To decide what situations to show, Prevent worked with experts from the social parties and professionals from the industries. The situations range from specific instructions like how to lead cattle and what PPE should be used, to the importance of taking breaks.

The picture books are free of cost, pocket-sized, and they are also available as pdf and e-publications. The pictures can be used to get started communicating on various operations in the workplace, and to reflect on safety issues.

Result The first book, on forestry, was published in November 2016 and the following four books in spring/summer 2017. The books have created a lot of attention in the media and from other industries who would like their own versions, as well as from training instances.

794 **LEARNING BY GAME PLAYING AND USING DIGITAL MEDIA: AN EXAMPLE THROUGH MANAGEMENT OF CHEMICAL EXPOSURE**

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Objectives Chemical burn is relatively rare, frightening and potentially invalidating. Simple and effective means are necessary to become actors and not spectators before and during an accident.

Methods We started by designing a movie describing a chemical burn and explaining good practical guidance for management in hospital environment.

After evaluation, we decided to target all occupational and safety professionals: a workshop took place during a congress introducing the gaming and fun notion of learning together. After assessing this workshop, we decided to move forward and improve contents and interactivity by elaborating a symposium workshop with the aim of including all occupational health and safety professionals and workers.

Players commented the different steps and choices regarding their management. Time was given for evaluation followed by exchanges between all.

Results Over hundred professionals participated. They totally adhered to the project and were fully implicated. Confronted to real life situations, panic was observed as the most