Prevention of accidents in SME's - DTU Orbit (23/04/2019)

Prevention of accidents in SME’s: How do you prevent something you don’t know will happen?*

Abstract When the accident has happened, everyone seems to know what should have been done to prevent it, but knowing how to prevent it beforehand is an incredible difficult task. During the past 5 years, a Dutch project has developed a risk assessment model for occupational accidents, based on an analysis of more than 10,000 serious accidents in the Netherlands, along with a comprehensive assessment of exposures. For the exposure assessment, data was collected on how often and how long workers perform certain actions and how the way they did it could be linked to the accident analysis. This for the first time ever makes it possible to determine the real risk of ordinary occupational accidents with respect to fatality, permanent and serious injury. This can be done at the level of industry sectors and type of job, as well as for any kind of job or activity. In Denmark we created a project in which we developed a method to observe and document the activities and risks in small enterprises, on the basis of the Dutch study. The co-operation between the Dutch and Danish projects has resulted in a very useful web-based risk assessment tool, which towards June 2009 will be accessible in Dutch, English and Danish. This tool can be used to obtain information, for both industry sectors as well as individual jobs, on real occupational risks divided into 64 categories, along with those safety barriers that are most effective to prevent accidents. The method has been tested in the Danish project in a series of small enterprises covering observations of about 120 man-days. These observations demonstrated that maintaining barriers against accidents can only partly be managed by the employer. Especially in enterprises with employees normally working outside the establishment, the daily safety assessment needs to be assigned to the individual employee, and he/she has to do this safety assessment ad hoc, responding to frequent changes in his/her working conditions. This is especially the case for jobs in building and construction, but also in many other enterprises with service or sales activities. The results of the Danish project is an application of the Dutch findings to describe what risks and safety barriers are most important for small enterprises in some industry sectors and jobs. Based on this knowledge, we can formulate requirements for, 1) what can and should the employer take care of; 2) what essential instructions and training should the employees receive; and 3) which specific considerations should the employee always have before starting an assignment. Even though this project provides the opportunity to calculate the real occupational accident risk and to identify the most relevant safety barriers, it is questionable whether this will change anything at all for a single person. There will probably be very few people from SMEs that will perform calculations or will look for this information. The question is how to disseminate this new knowledge, how to arrive at an understanding, and how to get apply it to real life. This challenge persists.