

April 2015 Alive & Well Updates: Farmers and Safety I

The Human Factor in Agriculture: An Interview Study to Identify Farmers' Non-technical Skills. Irwin A; Poots J. April 1, 2015. *Safety Science* 74: 114-121.

Background: Farming represents a high risk occupation, responsible for several thousand worker injuries and fatalities worldwide per year. Research within other high risk industries, such as aviation, shipping and healthcare, has identified the importance of non-technical skills in maintaining effective performance and reducing the risk of an adverse event. The aim of the current study was to identify the categories of non-technical skills that are typically used by farmers.

Method: A sample of 32 farmers, from within two geographical regions (Scotland and Northern Ireland), were interviewed using the critical incident technique. The interview transcripts were then coded using thematic analysis in order to identify reported non-technical skills.

Results: Participants reported the daily use of a range of non-technical skills, these differed according to whether the farmer was working as part of a team or alone. Team non-technical skills were identified as: situation awareness, decision-making, leadership, teamwork and task management. Lone worker non-technical skills were identified as: situation awareness, decision-making and task management.

Conclusion: The results indicate that non-technical skills are an important aspect of farmers' work performance and safety; mirroring the findings reported within other high risk industries. Further research is required to validate the skill set suggested here, and to develop a behavioural marker system similar to that used in other industries.

Why do Farmworkers Delay Treatment After Debilitating Injuries? Thematic Analysis Explains If, When, and Why Farmworkers Were Treated for Injuries. Thierry, AD; Snipes, SA. Feb 2015. *American Journal of Industrial Medicine* 58(2): 178-192

Background: Farmworkers who delay treatment after workplace injuries may increase injury severity and experience longer recovery times. To understand why farmworkers delay treatment we employed a mixed-methods analysis of 393 farmworker injury narratives from the National Agricultural Workers Survey (NAWS).

Methods: First, open-ended injury narratives were coded for attitudes related to injury timing and delay. Next, narratives were compared against demographic survey attributes to assess contextual information and patterns linked to treatment timing.

Results: Four treatment timings were identified: immediate medical treatment (57.9%), delayed medical treatment (18.2%) self-administered treatment (14.9%), and no treatment at all (8.9%). Delay was primarily attributed to attitudes prioritizing work over pain, and when workers were able to work despite injury. However, immediate treatment was sought when workers were completely debilitated and unable to work, when a supervisor was notified, or when exposed to pesticides during injury. Timing choices varied by education, gender and migrant status.

Conclusions: Training on timely treatment, including notification of supervisors, may help reduce treatment delay for farmworkers.

Farmers, mechanized work, and links to obesity. Pickett, W; King, N; Lawson, J; Dosman, JA ; Trask, C; Brison, RJ; Hagel, L; Janssen, I. Group Author(s): Saskatchewan Farm Injury Cohort. Jan 2015. *Preventive Medicine* 70: 59-63.

Abstract: Objective. In a contemporary sample of Saskatchewan farm people, to relate the degree of mechanized and also non-mechanized farm work to the occurrence of being overweight or obese. Secondly to determine the prevalence of being overweight or obese, and to compare these prevalence levels with those reported for general populations.

Method. Cross-sectional analyses of baseline survey data provided for 2849 individuals (2619 adults) from 1216 Saskatchewan farms in 2013. Age/sex-standardized prevalence levels of overweight and obesity were compared between the farm cohort and general populations. Durations of specific types of work were described by metabolic equivalent scoring. Multi-level binomial regression was used to study relations between mechanized and also non-mechanized farm work with overweight and obesity.

Results. Overall, 65.1% of the adult farm cohort was overweight (39.6%) or obese (25.5%), with prevalence levels that exceeded estimated norms for Canada but not the province of Saskatchewan. Increases in risks for obesity were related to higher amounts of mechanized but not non-mechanized farm work.

Conclusion. While the mechanization of farm work has obvious benefits in terms of productivity, its potential effects on risks for overweight and obesity must be recognized.