

Anna Sindbjerg Hobolth

The role of transient risk factors in occupational injuries: a case-crossover study

Introduction: Despite the high frequency and significant loss of work time associated with occupational injuries, there are still large gaps in our understanding of risk factors for occupational injuries. One reason could be the focus on stable risk factors, neglecting the role of transient risk factors.

Objectives: To study the role of transient risk factors in acute occupational injuries. To assess the influence of transient risk factors for occupational injuries in temporal and fixed work settings. To assess the optimal timeframe reference on the case-crossover study (e.g. 10 min, 1 hour, a week), when estimating the role of transient risk factors on occupational injuries.

Method: The project is a case-crossover study of occupational emergency-room treated injuries, with a focus on upper and lower extremity injuries. The population consists of subjects who have experienced the outcome of interest in an accident at work. Each subject then serves as his or her own control, which eliminates selection bias.

The study will be based on occupational injuries that lead to acute hospital treatment in one regional and one university hospital, covering populations of approximately 200.000 and 500.000 people, respectively.

Discussion: The case-crossover design has in other research fields e.g. traffic injury and use of mobile phones, shown to be effective in identifying stable and transient risk factors. This can lead to specific recommendations and thereby reduce similar accidents. However, this study design has been used very little in occupational health. Results of this study are expected to lead to specific accessible guidelines for preventing occupational injuries.

Vejledere: *Jens Lauritsen, Flemming Lander, Pete Kines

Indskrivningsdato: 01.04.2012