REDUCTION OF OCCUPATIONAL INJURIES BY CONDUCTION OF A PREVENTIVE TRAINING PROGRAMME – AN EPIDEMIOLOGICAL FOLLOW-UP STUDY IN THE GERMAN GLASS INDUSTRY

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Objectives To facilitate the effective prevention of occupational injuries, a preventive training programme was developed by the work safety professionals of the German Social Accident Insurance focusing on the improvement of job-specific safety behavior and risk management. The effectiveness of this training program was evaluated in an epidemiological follow-up study among employees in the German glass industry.

Methods Intervention of 1 year work safety training (2002–03) was conducted among employees (n=860) in 10 factories producing flat glasses. The change of occupational injuries was observed over a period of 14 years (1996 – 2009) among workers in both intervention group and a reference population of all workers producing flat glass in Germany (n=14.200). The effectiveness of this training program was evaluated by interrupted time series analysis adjusted by time trend and factories.

Results Our analysis demonstrates a negative trend of about 5% decrease of occupational injuries each year. In addition to the negative time trend, intervention lead to about 37% decrease of compensable occupational injuries. Intervention seems to be more effective among factories with a higher injury rate than that with a lower injury rate. Large international firms seem to be more cooperative in the preventive training program, and have in general a much lower injury rate than the small and middle sized firms.

Conclusions Our study indicates that job-specific work safe training may significantly reduce the occupational injuries, especially among high risk workers.