Poster-discussion: Musculoskeletal topics

P24 **PROSPECTIVE EVALUATION OF THE MANUAL HANDLING ASSESSMENT CHARTS**

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Objectives To assess prospectively the ability of the Health and Safety Executive's Manual handling Assessment Charts (MAC) to predict the incidence of work loss due to low back pain (LBP).

Methods We are reanalysing data originally collected to test the ability of the 1991 NIOSH lifting equation to predict work loss (time off work, or light duties) due to LBP. Baseline measurements were made of the parameters, such as load weight, hand start and finish positions and frequency of lift, of manual handling tasks carried out regularly by 515 workers from a range of industries. Covariates that are known to be important, including the history of musculoskeletal trouble and psychosocial variables were also measured at baseline. Participants were contacted at 3-month intervals for 18 months to collect information on incident episodes of LBP resulting in work loss.

Results There were 66 episodes of work loss due to LBP experienced by 53 participants. The MAC treats the task variables as categorical and assigns weights to the different levels. These scores are combined using an additive model.

Results Preliminary analysis suggests that some of these categorical variables (including "Hand distance from the lower back") predict work loss due to LBP.

Conclusions The analysis is on going and the results of the testing of the ability of the MAC and its constituent variables to predict work loss due to LBP will be presented at the conference. © Crown Copyright 2011.