and designing for construction ergonomics skills, resonates with the findings of other research. There is a need for construction ergonomics to be embedded in tertiary built environment programmes, ergonomics continuing professional development (CPD), a construction industry ergonomics standard, and ergonomics practice notes.

817 SECONDARY PREVENTION OF LOW BACK PAIN IN THE OCCUPATIONAL HEALTH: EFFECTIVENESS AND COST-EFFECTIVENESS OF AN EARLY MANAGEMENT PROGRAM

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Introduction Low back pain (LBP) is one of the leading causes of disability all over the world. We performed a secondary prevention program of LBP among employees that reported mild or moderate level low back symptoms in a large forestry industry complex.

Methods First, respondents of an employee survey (n=2480; response rate 71%) were eligible into this study, if they fulfilled pre-defined low back (LB) specific risk assessment criteria. Secondly, eligible employees (n=505, 66% males, 45 y) were divided into two sub-cohorts, 'Mild' and 'Moderate' LBP, according to recent LB pain intensity. Sub-cohort Mild (n=181, 47 refused) was randomised into two intervention arms, both receiving back book information and the other arm also additional face-to-face patient information. Sub-cohort Moderate (n=126, 17 refused) was randomised into three groups, receiving either one of two active exercise interventions or LB specific advice from their occupational health (OH) physician. All intervention arms in Mild and Moderate were controlled by their respective natural course (NC) of LBP groups (n=83 and n=50, respectively). Primary outcomes were disability (Roland-Morris Disability Questionnaire (0–18) and Oswestry Disability sum index, 0–50), LB pain (Visual Analogue Scale, 0–100 mm) and total sickness absence days (SA).

Results Mild: Compared to NC, pain, disability and SA decreased after both interventions and back book information alone was also cost-effective. Moderate: Compared to NC, pain and disability decreased after both active interventions but SA did not. OH physician's advice was not effective. Interventions in Moderate were not cost-effective in two years.

Discussion Simple patient information was effective and also cost-effective in mild LBP. Active LB specific interventions were effective but not cost-effective after two years in moderate LBP. OH physician's advice was not effective. Population based LB specific risk assessment seems feasible. In general, proactive management of LBP is recommendable in the OH setting.

852 WORK-BREAK SCHEDULES FOR PREVENTING MUSCULOSKELETAL DISORDERS IN WORKERS – A COCHRANE REVIEW

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Introduction Repetitive and monotonous work, especially manual work, is very common in modern industrial operations, resulting in an increased risk of musculoskeletal disorders. It is therefore important to find an appropriate intervention counteracting or preventing the repetitive and monotonous character of work tasks, for example by work-breaks. This review aims to assess the effectiveness of work-breaks (compared to no work-breaks or regular work-break schedules) for preventing work-related musculoskeletal disorders in workers. A work-break can be defined as any scheduled work-interruption that is not related to work, which includes the following characteristics: frequency (amount, timing), duration, or type (e.g. active or passive).

Methods We will search the literature (e.g., CENTRAL, PubMed) for randomised, quasi-randomised, and cluster-randomised studies without language restrictions. We will include trials that have enrolled adult workers without musculoskeletal symptoms and that have assessed one or more of the following work-break interventions: changes in break duration, frequency, timing, or type. Two review authors will independently consider retrieved records for eligibility and extract the data.

Result The extracted data will be summarised and two review authors will independently assess the risk of bias for each study regarding random sequence allocation, allocation concealment, blinding of participants and personnel, blinding of outcome assessment, incomplete outcome data, and selective outcome reporting (criteria as outlined in the Cochrane Handbook). The meta-analysis will initially be performed including all studies. Thereafter a sensitivity analysis confined to trials at low risk of bias will be conducted. The heterogeneity of the results of included studies will be assessed by visual inspection of the forest plots and consideration of trial characteristics, e.g. work-break characteristics.

Discussion The results of this Cochrane Review will provide insights into the effectiveness of work-break interventions and provide direction for optimising current prevention approaches and help prioritise future fields of research.

893 REDUCTION OF LEG SWELLING BY COMPRESSION STOCKINGS WITH DIFFERENT COMPRESSION INTENSITIES DURING A TWO HOUR STANDING EXPOSURE – A PILOT STUDY

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Introduction Lower leg swelling is considered to be a risk factor of venous disorders among workers exposed to prolonged standing. Compression stockings might be effective in reducing lower leg swelling; however, little is known about the effect of different compression intensities. The aim of this study was