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March 9, 2018

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***Biswas A, Smith PM, and Alter DA. Is promoting six hours of standing an appropriate public health message? European Journal of Preventive Cardiology. 2018; [epub ahead of print].**
http://dx.doi.org/10.1177/2047487318763430

***Collie A, Newnam S, Keleher H, Petersen A, Kosny A, Vogel AP, and Thompson J. Recovery within injury compensation schemes: a system mapping study. Journal of Occupational Rehabilitation. 2018; [epub ahead of print].**
http://dx.doi.org/10.1007/s10926-018-9764-z
Abstract: Purpose Many industrialised nations have systems of injury compensation and rehabilitation that are designed to support injury recovery and return to work. Despite their intention, there is now substantial evidence that injured people, employers and healthcare providers can experience those systems as difficult to navigate, and that this can affect injury recovery. This study sought to characterise the relationships and interactions occurring between actors in three Australian injury compensation systems, to identify the range of factors that impact on injury recovery, and the interactions and inter-relationships between these factors. Methods This study uses data collected directly from injured workers and their family members via qualitative interviews, analysed for major themes and interactions between themes, and then mapped to a system level model. Results Multiple factors across multiple system levels were reported by participants as influencing injury recovery. Factors at the level of the injured person's immediate environment, the organisations and personnel involved in rehabilitation and compensation processes were more commonly cited than governmental or societal factors as influencing physical function, psychological

function and work participation. Conclusions The study demonstrates that injury recovery is a complex process influenced by the decisions and actions of organisations and individuals operating across multiple levels of the compensation system. Changes occurring 'upstream', for instance at the level of governmental or organisational policy, can impact injury recovery through both direct and diffuse pathways

***van Genderen S, Plasqui G, van der Heijde D, van Gaalen F, Heuft L, Luime J, Spoorenberg A, Arends S, Lacaille D, Gignac M, Landewe R, and Boonen A. Social role participation and satisfaction with life: a study among patients with ankylosing spondylitis and population controls. Arthritis Care & Research. 2017; [epub ahead of print].**
http://dx.doi.org/10.1002/acr.23304
Abstract: OBJECTIVE: Participation in society of persons with chronic diseases receives increasing attention. However, little is known about which components of participation are most relevant to life satisfaction. This study examines the association between several aspects of social role participation and satisfaction with life (SWL) in patients with ankylosing spondylitis (AS) compared to population controls. METHODS: In a cross-sectional study, participants completed the Social Role Participation Questionnaire (SRPQ) and SWL scale. The SRPQ assesses several dimensions of participation (importance, satisfaction with performance, and satisfaction with time and physical difficulty) in 11 roles representing 3 domains (interpersonal relations, leisure, and work). For individuals with AS and controls, the association between role domains and SWL was examined using linear regression for each participation dimension separately, in the total and the employed population, adjusting for age, sex, education, and income. RESULTS: A total of 246 AS patients (mean +/- SD age 51 +/- 12 years, 62% males, mean +/- SD disease duration 17 +/- 12 years) and 510 controls (mean +/- SD age 42 +/- 15 years, 70% males) were included. AS patients were more frequently (extremely) dissatisfied with life (17.9% versus 8.6%; $P < 0.05$). In the total and the employed population, less physical difficulty and higher satisfaction with interpersonal relations and leisure were associated with higher SWL, and this was somewhat stronger in patients than in controls ($P < 0.1$). In employed controls, but not in employed patients, satisfaction with work was independently associated with SWL. CONCLUSION: These findings highlight the importance of supporting persons with AS in ameliorating social role participation, particularly in areas like close relationships and leisure activities, which are typically ignored when treating AS

Agarwal S, Steinmaus C, and Harris-Adamson C. Sit-stand workstations and impact on low back discomfort: a systematic review and meta-analysis. Ergonomics. 2018; 61(4):538-552.
http://dx.doi.org/10.1080/00140139.2017.1402960
Abstract: BACKGROUND: Sit-stand workstations are proposed solutions to reduce sedentary time at work. Numerous companies are using them to mitigate

health concerns such as musculoskeletal discomfort. OBJECTIVE: To review the literature on sit-stand workstations and low back discomfort. METHOD: We conducted a meta-analysis on literature published before 17 November 2016 that addressed the relationship between sit-stand workstations and musculoskeletal discomfort, focusing on the low back. RESULTS: Twelve articles were identified and eight that presented results in means (SD) were included. Among a pain-free population, the standardised mean difference was -0.230 for low back discomfort with use of sit-stand workstations. When applying the SMD to studies using the 10-point pain scale, the effect estimates ranged between -0.30 and -0.51. CONCLUSION: sit-stand workstations may reduce low back pain among workers. Further research is needed to help quantify dosage parameters and other health outcomes. Practitioner Summary: In a sedentary population, changing posture may reduce the chance of developing low back pain. The literature lacks studies on specific populations such as those who have pre-existing low back pain and also does not adequately address the dosage of sit-stand time required to help reduce pain

Allers K, Hoffmann F, Mathes T, and Pieper D. Systematic reviews with published protocols compared to those without: more effort, older search. Journal of Clinical Epidemiology. 2018; 95:102-110.
http://dx.doi.org/10.1016/j.jclinepi.2017.12.005
Abstract: OBJECTIVE: To explore trends in published protocols of systematic reviews (SRs) and to analyze how SRs with published protocols differ from those without. STUDY DESIGN AND SETTING: We searched PubMed up to December 31, 2016 to identify SR protocols. We also searched for the corresponding SR for each protocol published in 2012 and 2013 and matched this with an SR without published protocol by year and journal. RESULTS: The number of protocols published increased from 42 in 2012 to 404 in 2016; 125 were published in 2012 and 2013. One-third of SRs remained unpublished after 3-5 years. We included 80 SRs with protocols and 80 controls. SRs with protocols reported their methods more comprehensively than their controls, but their median time from search to submission was longer (325 vs. 122 days; $P < 0.001$). Almost two-thirds of the SRs with protocols and about 10% of the controls could be found in the International Prospective Register of Systematic Reviews (PROSPERO). CONCLUSION: Time from search to submission was longer for SRs with published protocols, while at the same time SRs with published protocols were better elaborated and reported. As quality, transparency, and currency are cornerstones of SRs, we suggest critically discussing the current practice of publishing SR protocols

Ben-Shalom Y, Stapleton D, and Bryce A. Trends in SSDI benefit receipt: are more recent birth cohorts entering sooner and receiving benefits longer? [Working paper 55]. Princeton, NJ: Mathematica Policy Research; 2018.

Bolvig J, Juhl CB, Boutron I, Tugwell P, Ghogomu EAT, Pardo JP, Rader T, Wells GA, Mayhew A, Maxwell L, Lund H, Bliddal H, and Christensen R. Some Cochrane risk-of-bias items are not important in osteoarthritis trials: a meta-epidemiological study based on Cochrane reviews. Journal of Clinical Epidemiology. 2018; 95:128-136.
http://dx.doi.org/10.1016/j.jclinepi.2017.11.026
Abstract: OBJECTIVE: To evaluate the impact of bias-related study characteristics on treatment effects in osteoarthritis (OA) trials. STUDY DESIGN AND SETTING: Based on OA trials included in Cochrane reviews, the impact of study characteristics on treatment effect estimates was evaluated. Characteristics included items of the risk of bias (RoB) tool, trial size, single vs. multisite, and source of funding. Effect sizes (ESs) were calculated as standardized mean differences (SMDs). Meta-regression was performed to identify "relevant study-level covariates" that decrease the between-study variance (tau^(2)). RESULTS: Twenty reviews, including 126 OA trials with a high degree of heterogeneity, were included (tau^(2) = 0.1247). Among the RoB domains, only patient blinding had an impact on the results (reducing heterogeneity according to tau^(2) < 7%). Inadequate blinding of patients yielded larger effects (SMDDifference = 0.15; 95% confidence interval [CI]: 0.01-0.29, P = 0.035). The most important study characteristic was trial size (heterogeneity reduced by 25%), with small trials reporting larger effects (SMDDifference = 0.29; 95% CI: 0.16-0.42, P < 0.001). CONCLUSION: In musculoskeletal reviews addressing pain, all the items included in the Cochrane RoB tool might not be equally important. OA trial results may be affected by bias constructs that are not yet fully elucidated

Bruneau J, Ahamad K, Goyer ME, Poulin G, Selby P, Fischer B, Wild TC, and Wood E. Management of opioid use disorders: a national clinical practice guideline. CMAJ. 2018; 190(9):E247-E257.
http://dx.doi.org/10.1503/cmaj.170958

Commentary

Donroe JH and Tetrault JM. Narrowing the treatment gap in managing opioid use disorder. CMAJ. 2018; 190(9):E236-E237.
http://dx.doi.org/10.1503/cmaj.180209

Cunningham BJ, Hidecker MJC, Thomas-Stonell N, and Rosenbaum P. Moving research tools into practice: the successes and challenges in promoting uptake of classification tools. Disability and Rehabilitation. 2018; 40(9):1099-1107.
http://dx.doi.org/10.1080/09638288.2017.1280544
Abstract: PURPOSE: In this paper, we present our experiences - both successes and challenges - in implementing evidence-based classification tools into clinical practice. We also make recommendations for others wanting to promote the uptake and application of new research-based assessment tools. METHOD: We

first describe classification systems and the benefits of using them in both research and practice. We then present a theoretical framework from Implementation Science to report strategies we have used to implement two research-based classification tools into practice. We also illustrate some of the challenges we have encountered by reporting results from an online survey investigating 58 Speech-language Pathologists' knowledge and use of the Communication Function Classification System (CFCS), a new tool to classify children's functional communication skills. RESULT AND CONCLUSIONS: We offer recommendations for researchers wanting to promote the uptake of new tools in clinical practice. Specifically, we identify structural, organizational, innovation, practitioner, and patient-related factors that we recommend researchers address in the design of implementation interventions. Roles and responsibilities of both researchers and clinicians in making implementations science a success are presented. Implications for rehabilitation Promoting uptake of new and evidence-based tools into clinical practice is challenging. Implementation science can help researchers to close the knowledge-to-practice gap. Using concrete examples, we discuss our experiences in implementing evidence-based classification tools into practice within a theoretical framework. Recommendations are provided for researchers wanting to implement new tools in clinical practice. Implications for researchers and clinicians are presented

Dewa CS, Loong D, Trojanowski L, and Bonato S. The effectiveness of augmented versus standard individual placement and support programs in terms of employment: a systematic literature review. Journal of Mental Health. 2018; 27(2):174-183.
http://dx.doi.org/10.1080/09638237.2017.1322180
Abstract: BACKGROUND: The Individual Placement and Support (IPS) program is a well-studied vocational rehabilitation program. Although it is more effective than usual care, it is not effective for everyone. This offers an opportunity for program improvement. AIMS: This systematic literature review examines the state of knowledge regarding the effectiveness of augmented versus standard IPS for people with severe mental illness (SMI). We address the questions, "What IPS augmentations have been tested?" and "What is the evidence for the effectiveness of augmented IPS versus standard IPS in terms of employment?" METHODS: This systematic literature review used publically available peer-reviewed studies published between January 2002 and January 2016 in either: (1) Medline Current, (2) Medline In-process, (3) PsycINFO, (4) Econlit or (5) Web of Science. RESULTS: 5718 unique citations were identified; seven articles from five studies were included. Of these studies, four were rated as having moderate risk of bias and one as having high risk. CONCLUSIONS: The results suggest that augmentations of IPS focusing on cognitive and psychosocial skills training, may have additional effects to standard IPS. Areas in need of further research related to the process and targeting of those interventions are discussed

Fleischmann M, Carr E, Stansfeld SA, Xue B, and Head J. Can favourable psychosocial working conditions in midlife moderate the risk of work exit for chronically ill workers? A 20-year follow-up of the Whitehall II study. Occupational & Environmental Medicine. 2018; 75(3):183-190. http://dx.doi.org/10.1136/oemed-2017-104452 [open access]
Abstract: OBJECTIVES: To investigate if favourable psychosocial working conditions can reduce the risk of work exit and specifically for workers with chronic disease. METHODS: Men and women (32%) aged 35-55, working and having no chronic disease at baseline of the Whitehall II study of London-based civil servants were selected (n=9040). We observed participants' exit from work through retirement, health-related exit and unemployment, new diagnosis of chronic disease (ie, coronary heart disease, diabetes, stroke and cancer) and their psychosocial working conditions in midlife. Using cause-specific Cox models, we examined the association of chronic disease and favourable psychosocial working conditions and their interaction, with the three types of work exit. We adjusted for gender, occupational grade, educational level, remaining in civil service, spouse's employment status and mental health. RESULTS: Chronic disease significantly increased the risk of any type of work exit (HR 1.27) and specifically the risk of health-related exit (HR 2.42). High skill discretion in midlife reduced the risk of any type of work exit (HR 0.90), retirement (HR 0.91) and health-related exit (HR 0.68). High work social support in midlife decreased the risk of health-related exit (HR 0.79) and unemployment (HR 0.71). Favourable psychosocial working conditions in midlife did not attenuate the association between chronic disease and work exit significantly. CONCLUSIONS: The chronically ill have increased risks of work exit, especially through health-related exit routes. Chronic disease is an obstacle to extended working lives. Favourable working conditions directly relate to reduced risks of work exit

Fritschi L, Valerie Gross J, Wild U, Heyworth JS, Glass DC, and Erren TC. Shift work that involves circadian disruption and breast cancer: a first application of chronobiological theory and the consequent challenges. Occupational & Environmental Medicine. 2018; 75(3):231-234. http://dx.doi.org/10.1136/oemed-2017-104441
Abstract: OBJECTIVES: In 2007, the International Agency for Research on Cancer classified shift work involving circadian disruption (CD) as probably carcinogenic to humans. Circadian disruption could be conceptualised as the overlap of activity, such as work, with an individual's biological night. The latter can be approximated from a worker's chronotype (or morning/evening preference). Few previous studies have taken chronotype into account when assessing CD caused by shift work. Our objective was to test the hypothesis that women working during their biological night would be at increased risk of breast cancer. METHODS: We used data from our case-control study of breast cancer to investigate associations between shift work involving CD and breast cancer risks. Previously, we had assumed that everyone working in jobs which involved

work for two or more shifts between midnight and 05:00 hours was equally exposed to CD. In the present analyses, we reclassified as unexposed those who had a late chronotype in which their preferred bedtime was 2 hours after the end of their shift. RESULTS: Only 30 of 1385 night jobs changed classification and the overall finding (OR 1.17, 95% CI 0.98 to 1.41) was not different to the original finding when chronotype was not considered. CONCLUSIONS: We found virtually no difference between our new and old classifications of exposure. However, we were not able to calculate the total number of chronodisrupted shifts over a lifetime in order to assess dose and nor were we able to determine how many women were exposed to CD when doing shifts which began before midnight. Our first practical application highlights challenges for future chronobiology-based research

Hooper M, Barbour V, Walsh A, Bradbury S, and Jacobs J. Designing integrated research integrity training: authorship, publication, and peer review. Research Integrity and Peer Review. 2018; 3(1):2. http://dx.doi.org/10.1186/s41073-018-0046-2 [open access]

Hunt H, Pollock A, Campbell P, Estcourt L, and Brunton G. An introduction to overviews of reviews: planning a relevant research question and objective for an overview. Systematic Reviews. 2018; 7(1):39. http://dx.doi.org/10.1186/s13643-018-0695-8 [open access]
Abstract: BACKGROUND: Overviews of systematic reviews are a relatively new approach to synthesising evidence, and research methods and associated guidance are developing. Within this paper we aim to help readers understand key issues which are essential to consider when taking the first steps in planning an overview. These issues relate to the development of clear, relevant research questions and objectives prior to the development of an overview protocol. METHODS: Initial discussions and key concepts for this paper were formed during a workshop on overview methods at the 2016 UK Cochrane Symposium, at which all members of this author group presented work and contributed to wider discussions. Detailed descriptions of the various key features of overviews and their different objectives were created by the author group based upon current evidence (Higgins J, Green S. Cochrane Handbook Syst Rev Interv. 2011;4:5, Pollock M, et al. Sys Rev. 2016;5:190-205, Pollock A, et al. Cochrane overviews of reviews: exploring the methods and challenges. UK and Ireland: Cochrane Symposium; 2016, Pieper D, et al. Res Syn Meth. 2014;5:187-99, Lunny C, et al. Sys Rev. 2016;5:4-12, Hartling L, et al. Comparing multiple treatments: an introduction to overviews of reviews. In 23rd Cochrane Colloquium; 2015, Hartling L, et al. Plos One. 2012;7:1-8, Ballard M, Montgomery P. Res Syn Meth. 2017;8:92-108) and author experiences conducting overviews. RESULTS: Within this paper we introduce different types of overviews and suggest common research questions addressed by these overviews. We briefly reflect on the key features and objectives of the example overviews discussed. CONCLUSIONS: Clear decisions relating to the research questions and

objectives are a fundamental first step during the initial planning stages for an overview. Key stakeholders should be involved at the earliest opportunity to ensure that the planned overview is relevant and meaningful to the potential end users of the overview. Following best practice in common with other forms of systematic evidence synthesis, an overview protocol should be published, ensuring transparency and reducing opportunities for introduction of bias in the conduct of the overview

Krebs EE, Gravely A, Nugent S, Jensen AC, DeRonne B, Goldsmith ES, Kroenke K, Bair MJ, and Noorbaloochi S. Effect of opioid vs nonopioid medications on pain-related function in patients with chronic back pain or hip or knee osteoarthritis pain: the s randomized clinical trial. Journal of the American Medical Association. 2018; 319(9):872-882.
http://dx.doi.org/10.1001/jama.2018.0899
Abstract: Importance: Limited evidence is available regarding long-term outcomes of opioids compared with nonopioid medications for chronic pain. Objective: To compare opioid vs nonopioid medications over 12 months on pain-related function, pain intensity, and adverse effects. Design, Setting, and Participants: Pragmatic, 12-month, randomized trial with masked outcome assessment. Patients were recruited from Veterans Affairs primary care clinics from June 2013 through December 2015; follow-up was completed December 2016. Eligible patients had moderate to severe chronic back pain or hip or knee osteoarthritis pain despite analgesic use. Of 265 patients enrolled, 25 withdrew prior to randomization and 240 were randomized. Interventions: Both interventions (opioid and nonopioid medication therapy) followed a treat-to-target strategy aiming for improved pain and function. Each intervention had its own prescribing strategy that included multiple medication options in 3 steps. In the opioid group, the first step was immediate-release morphine, oxycodone, or hydrocodone/acetaminophen. For the nonopioid group, the first step was acetaminophen (paracetamol) or a nonsteroidal anti-inflammatory drug. Medications were changed, added, or adjusted within the assigned treatment group according to individual patient response. Main Outcomes and Measures: The primary outcome was pain-related function (Brief Pain Inventory [BPI] interference scale) over 12 months and the main secondary outcome was pain intensity (BPI severity scale). For both BPI scales (range, 0-10; higher scores = worse function or pain intensity), a 1-point improvement was clinically important. The primary adverse outcome was medication-related symptoms (patient-reported checklist; range, 0-19). Results: Among 240 randomized patients (mean age, 58.3 years; women, 32 [13.0%]), 234 (97.5%) completed the trial. Groups did not significantly differ on pain-related function over 12 months (overall P = .58); mean 12-month BPI interference was 3.4 for the opioid group and 3.3 for the nonopioid group (difference, 0.1 [95% CI, -0.5 to 0.7]). Pain intensity was significantly better in the nonopioid group over 12 months (overall P = .03); mean 12-month BPI severity was 4.0 for the opioid group and 3.5 for the nonopioid group (difference, 0.5 [95% CI, 0.0 to 1.0]). Adverse medication-related

symptoms were significantly more common in the opioid group over 12 months (overall P = .03); mean medication-related symptoms at 12 months were 1.8 in the opioid group and 0.9 in the nonopioid group (difference, 0.9 [95% CI, 0.3 to 1.5]). Conclusions and Relevance: Treatment with opioids was not superior to treatment with nonopioid medications for improving pain-related function over 12 months. Results do not support initiation of opioid therapy for moderate to severe chronic back pain or hip or knee osteoarthritis pain. Trial Registration: clinicaltrials.gov Identifier: NCT01583985

Luger T, Maher CG, Rieger MA, and Steinhilber B. Work-break schedules for preventing musculoskeletal disorders in workers (Protocol). Cochrane Database of Systematic Reviews. 2017; 11:CD012886, http://dx.doi.org/10.1002/14651858.CD012886

Maestas N, Mullen KJ, Powell D, von Wachter T, and Wenger JB. Working conditions in the United States: results of the 2015 American working conditions survey. Santa Monica, CA: RAND Corporation; 2017. https://www.rand.org/pubs/research_reports/RR2014.html

van der Molen HF, Basnet P, Hoonakker PL, Lehtola MM, Lappalainen J, Frings-Dresen MH, Haslam R, and Verbeek JH. Interventions to prevent injuries in construction workers. Cochrane Database of Systematic Reviews. 2018; 2:CD006251. http://dx.doi.org/10.1002/14651858.CD006251.pub4
Abstract: BACKGROUND: Construction workers are frequently exposed to various types of injury-inducing hazards. There are a number of injury prevention interventions, yet their effectiveness is uncertain. OBJECTIVES: To assess the effects of interventions for preventing injuries in construction workers. SEARCH METHODS: We searched the Cochrane Injuries Group's specialised register, CENTRAL (issue 3), MEDLINE, Embase and PsycINFO up to April 2017. The searches were not restricted by language or publication status. We also handsearched the reference lists of relevant papers and reviews. SELECTION CRITERIA: Randomised controlled trials, controlled before-after (CBA) studies and interrupted time-series (ITS) of all types of interventions for preventing fatal and non-fatal injuries among workers at construction sites. DATA COLLECTION AND ANALYSIS: Two review authors independently selected studies, extracted data and assessed their risk of bias. For ITS studies, we re-analysed the studies and used an initial effect, measured as the change in injury rate in the year after the intervention, as well as a sustained effect, measured as the change in time trend before and after the intervention. MAIN RESULTS: Seventeen studies (14 ITS and 3 CBA studies) met the inclusion criteria in this updated version of the review. The ITS studies evaluated the effects of: introducing or changing regulations that laid down safety and health requirements for the construction sites (nine studies), a safety campaign (two studies), a drug-free workplace programme (one study), a training programme (one study), and safety inspections (one study) on fatal and non-fatal occupational injuries. One CBA

study evaluated the introduction of occupational health services such as risk assessment and health surveillance, one evaluated a training programme and one evaluated the effect of a subsidy for upgrading to safer scaffoldings. The overall risk of bias of most of the included studies was high, as it was uncertain for the ITS studies whether the intervention was independent from other changes and thus could be regarded as the main reason of change in the outcome. Therefore, we rated the quality of the evidence as very low for all comparisons.Compulsory interventionsRegulatory interventions at national or branch level may or may not have an initial effect (effect size (ES) of -0.33; 95% confidence interval (CI) -2.08 to 1.41) and may or may not have a sustained effect (ES -0.03; 95% CI -0.30 to 0.24) on fatal and non-fatal injuries (9 ITS studies) due to highly inconsistent results (I(2) = 98%). Inspections may or may not have an effect on non-fatal injuries (ES 0.07; 95% CI -2.83 to 2.97; 1 ITS study).Educational interventionsSafety training interventions may result in no significant reduction of non-fatal injuries (1 ITS study and 1 CBA study).Informational interventionsWe found no studies that had evaluated informational interventions alone such as campaigns for risk communication.Persuasive interventionsWe found no studies that had evaluated persuasive interventions alone such as peer feedback on workplace actions to increase acceptance of safe working methods.Facilitative interventionsMonetary subsidies to companies may lead to a greater decrease in non-fatal injuries from falls to a lower level than no subsidies (risk ratio (RR) at follow-up: 0.93; 95% CI 0.30 to 2.91 from RR 3.89 at baseline; 1 CBA study).Multifaceted interventionsA safety campaign intervention may result in an initial (ES -1.82; 95% CI -2.90 to -0.74) and sustained (ES -1.30; 95% CI -1.79 to -0.81) decrease in injuries at the company level (1 ITS study), but not at the regional level (1 ITS study). A multifaceted drug-free workplace programme at the company level may reduce non-fatal injuries in the year following implementation by -7.6 per 100 person-years (95% CI -11.2 to -4.0) and in the years thereafter by -2.0 per 100 person-years (95% CI -3.5 to -0.5) (1 ITS study). Introducing occupational health services may result in no decrease in fatal or non-fatal injuries (one CBA study). AUTHORS' CONCLUSIONS: The vast majority of interventions to adopt safety measures recommended by standard texts on safety, consultants and safety courses have not been adequately evaluated. There is very low-quality evidence that introducing regulations as such may or may not result in a decrease in fatal and non-fatal injuries. There is also very low-quality evidence that regionally oriented safety campaigns, training, inspections or the introduction of occupational health services may not reduce non-fatal injuries in construction companies. There is very low-quality evidence that company-oriented safety interventions such as a multifaceted safety campaign, a multifaceted drug workplace programme and subsidies for replacement of scaffoldings may reduce non-fatal injuries among construction workers. More studies, preferably cluster-randomised controlled trials, are needed to evaluate different strategies to increase the employers' and workers' adherence to the safety measures prescribed by regulation

Pachito DV, Eckeli AL, Desouky AS, Corbett MA, Partonen T, Rajaratnam SM, and Riera R. Workplace lighting for improving alertness and mood in daytime workers. Cochrane Database of Systematic Reviews. 2018; 3:CD012243.
http://dx.doi.org/10.1002/14651858.CD012243.pub2
Abstract: BACKGROUND: Exposure to light plays a crucial role in biological processes, influencing mood and alertness. Daytime workers may be exposed to insufficient or inappropriate light during daytime, leading to mood disturbances and decreases in levels of alertness. OBJECTIVES: To assess the effectiveness and safety of lighting interventions to improve alertness and mood in daytime workers. SEARCH METHODS: We searched the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, Embase, seven other databases; ClinicalTrials.gov and the World Health Organization trials portal up to January 2018. SELECTION CRITERIA: We included randomised controlled trials (RCTs), and non-randomised controlled before-after trials (CBAs) that employed a cross-over or parallel-group design, focusing on any type of lighting interventions applied for daytime workers. DATA COLLECTION AND ANALYSIS: Two review authors independently screened references in two stages, extracted outcome data and assessed risk of bias. We used standardised mean differences (SMDs) and 95% confidence intervals (CI) to pool data from different questionnaires and scales assessing the same outcome across different studies. We combined clinically homogeneous studies in a meta-analysis. We used the GRADE system to rate quality of evidence. MAIN RESULTS: The search yielded 2844 references. After screening titles and abstracts, we considered 34 full text articles for inclusion. We scrutinised reports against the eligibility criteria, resulting in the inclusion of five studies (three RCTs and two CBAs) with 282 participants altogether. These studies evaluated four types of comparisons: cool-white light, technically known as high correlated colour temperature (CCT) light versus standard illumination; different proportions of indirect and direct light; individually applied blue-enriched light versus no treatment; and individually applied morning bright light versus afternoon bright light for subsyndromal seasonal affective disorder.We found no studies comparing one level of illuminance versus another.We found two CBA studies (163 participants) comparing high CCT light with standard illumination. By pooling their results via meta-analysis we found that high CCT light may improve alertness (SMD -0.69, 95% CI -1.28 to -0.10; Columbia Jet Lag Scale and the Karolinska Sleepiness Scale) when compared to standard illumination. In one of the two CBA studies with 94 participants there was no difference in positive mood (mean difference (MD) 2.08, 95% CI -0.1 to 4.26) or negative mood (MD -0.45, 95% CI -1.84 to 0.94) assessed using the Positive and Negative Affect Schedule (PANAS) scale. High CCT light may have fewer adverse events than standard lighting (one CBA; 94 participants). Both studies were sponsored by the industry. We graded the quality of evidence as very low.We found no studies comparing light of a particular illuminance and light spectrum or CCT versus another combination of illuminance and light spectrum or CCT.We found no studies comparing daylight versus artificial light.We found

one RCT (64 participants) comparing the effects of different proportions of direct and indirect light: 100% direct lighting, 70% direct lighting plus 30% indirect lighting, 30% direct lighting plus 70% indirect lighting and 100% indirect lighting. There was no substantial difference in mood, as assessed by the Beck Depression Inventory, or in adverse events, such as ocular, reading or concentration problems, in the short or medium term. We graded the quality of evidence as low.We found two RCTs comparing individually administered light versus no treatment. According to one RCT with 25 participants, blue-enriched light individually applied for 30 minutes a day may enhance alertness (MD -3.30, 95% CI -6.28 to -0.32; Epworth Sleepiness Scale) and may improve mood (MD -4.8, 95% CI -9.46 to -0.14; Beck Depression Inventory). We graded the quality of evidence as very low. One RCT with 30 participants compared individually applied morning bright light versus afternoon bright light for subsyndromal seasonal affective disorder. There was no substantial difference in alertness levels (MD 7.00, 95% CI -10.18 to 24.18), seasonal affective disorder symptoms (RR 1.60, 95% CI 0.81, 3.20; number of participants presenting with a decrease of at least 50% in SIGH-SAD scores) or frequency of adverse events (RR 0.53, 95% CI 0.26 to 1.07). Among all participants, 57% had a reduction of at least 50% in their SIGH-SAD score. We graded the quality of evidence as low.Publication bias could not be assessed for any of these comparisons. AUTHORS' CONCLUSIONS: There is very low-quality evidence based on two CBA studies that high CCT light may improve alertness, but not mood, in daytime workers. There is very low-quality evidence based on one CBA study that high CCT light may also cause less irritability, eye discomfort and headache than standard illumination. There is low-quality evidence based on one RCT that different proportions of direct and indirect light in the workplace do not affect alertness or mood. There is very low-quality evidence based on one RCT that individually applied blue-enriched light improves both alertness and mood. There is low-quality evidence based on one RCT that individually administered bright light during the afternoon is as effective as morning exposure for improving alertness and mood in subsyndromal seasonal affective disorder

Robb D and Barnes T. Accident rates and the impact of daylight saving time transitions. Accident Analysis & Prevention. 2018; 111:193-201. http://dx.doi.org/10.1016/j.aap.2017.11.029

Abstract: One-third of nations have adopted some form of Daylight Saving Time (DST). Associated costs and benefits include impacts on accident rates. Using data from 12.6 million accident claims in New Zealand during 2005-2016, we model accident rates as a function of various date-based predictors including days before/after the start and end of DST, holidays, day of week, and month of year. This is the first study to consider multiple accident categories (Road, Work, Falls and Home & Community), and the first in the southern hemisphere. The start of DST is associated with significantly higher rates of road accidents (first day +16% and second day +12%). Evidence that accident rates for Falls and Home & Community decline (increase) prior to the start (end) of DST suggest

potential behavioural adaption from anticipating the change. While Work accidents show limited impact from DST changes, they exhibit a significant decline over the course of the week (Friday 13% lower than Monday), whereas Road accidents exhibit a significant increase (Friday 19% higher than Monday). Our results have implications for both DST implementation and policy

Savych B, Neumark D, and Lea R. The impact of opioid prescriptions on duration of temporary disability. Cambridge, MA: Workers Compensation Research Institute; 2018.

Theis KA, Roblin DW, Helmick CG, and Luo R. Prevalence and causes of work disability among working-age U.S. adults, 2011-2013, NHIS. Disability and Health Journal. 2018; 11(1):108-115.
http://dx.doi.org/10.1016/j.dhjo.2017.04.010
Abstract: BACKGROUND: Chronic conditions are among the major causes of work disability (WD), which is associated with lower employment, less economic activity, and greater dependence on social programs, while limiting access to the benefits of employment participation. OBJECTIVE/HYPOTHESIS: We estimated the overall prevalence of WD among working-age (18-64 years) U.S. adults and the most common causes of WD overall and by sex. Next, we estimated the prevalence and most common causes of WD among adults with 12 common chronic conditions by sex and age. We hypothesized that musculoskeletal conditions would be among the most common causes of WD overall and for individuals with other diagnosed chronic conditions. METHODS: Data were obtained from years 2011, 2012, and 2013 of the National Health Interview Survey. WD was defined by a "yes" response to one or both of: "Does a physical, mental, or emotional problem NOW keep you from working at a job or business?" and "Are you limited in the kind OR amount of work you can do because of a physical, mental or emotional problem?" RESULTS: Overall, 20.1 million adults (10.4% (95% CI = 10.1-10.8) of the working-age population) reported WD. The top three most commonly reported causes of WD were back/neck problems 30.3% (95% CI = 29.1-31.5), depression/anxiety/emotional problems 21.0% (19.9-22.0), and arthritis/rheumatism 18.6 (17.6-19.6). Musculoskeletal conditions were among the three most common causes of WD overall and by age- and sex-specific respondents across diagnosed chronic conditions. CONCLUSIONS: Quantifying the prevalence and causes of work disability by age and sex can help prioritize interventions

Vincent GE, Kinchin I, Ferguson SA, and Jay SM. The cost of inadequate sleep among on-call workers in Australia: a workplace perspective. International Journal of Environmental Research and Public Health. 2018; 15(3):E398.
http://dx.doi.org/10.3390/ijerph15030398 **[open access]**
Abstract: On-call or stand-by is becoming an increasingly prevalent form of work scheduling. However, on-call arrangements are typically utilised when workloads are low, for example at night, which can result in inadequate sleep. It is a matter

of concern that on-call work is associated with an increased risk of workplace injury. This study sought to determine the economic cost of injury due to inadequate sleep in Australian on-call workers. The prevalence of inadequate sleep among on-call workers was determined using an online survey, and economic costs were estimated using a previously validated costing methodology. Two-thirds of the sample (66%) reported obtaining inadequate sleep on weekdays (work days) and over 80% reported inadequate sleep while on-call. The resulting cost of injury is estimated at $2.25 billion per year ($1.71-2.73 billion). This equates to $1222 per person per incident involving a short-term absence from work; $2.53 million per incident classified as full incapacity, and $1.78 million for each fatality. To the best of our knowledge this is the first study to quantify the economic cost of workplace injury due to inadequate sleep in on-call workers. Well-rested employees are critical to safe and productive workplace operations. Therefore, it is in the interest of both employers and governments to prioritise and invest far more into the management of inadequate sleep in industries which utilise on-call work arrangements

Wagner S, Buys N, Yu I, Geisen T, Harder H, Randall C, Fraess-Phillips A, Hassler B, Scott L, Lo K, Tang D, and Howe C. International employee perspectives on disability management. Disability and Rehabilitation. 2018; 40(9):1049-1058.
http://dx.doi.org/10.1080/09638288.2017.1284907
Abstract: PURPOSE: To provide an international analysis of employees' views of the influence of disability management (DM) on the workplace. METHODOLOGY: An international research team with representation from Australia, Canada, China, and Switzerland collected survey data from employees in public and private companies in their respective regions. Due to lack of availability of current measures, a research team-created survey was used and a total of 1201 respondents were collected across the four countries. ANALYSIS: Multiple linear (enter) regression was also employed to predict DM's influence on job satisfaction, physical health, mental health, workplace morale and reduced sickness absence, from respondents' perceptions of whether their company provided disability prevention, stay-at-work, and return-to-work initiatives within their organization. One-way ANOVA comparisons were used to examine differences on demographic variables including company status (public versus private), union status (union versus nonunion), and gender. RESULTS: The perceived influence of DM programs was related to perceptions of job satisfaction; whereas, relationships with mental health, physical health, morale, and sickness absence were variable according to type of DM program and whether the response was related to self or others. Difference analyses (ANOVA) revealed significantly more positive perceptions for private and nonunion organizations; no gender effects were found. CONCLUSIONS: There is perceived value of DM from the perspective of employees, especially with respect to its value for coworkers. Implications for Rehabilitation Rehabilitation efforts should continue to focus attention on the value of disability management

(DM). In particular, DM that is fully committed to the biopsychosocial model would be supported by this research. Employees reported the most value in the psychosocial variables addressed by DM, such that rehabilitation professionals could focus on these valued aspects to improve buy-in from employees. The interest in coworker value may provide another avenue for rehabilitation efforts to increase uptake, by highlighting the value of intervention efforts for employee coworkers. Rehabilitation professionals in union environments may need to be particularly cognizant of the need for encouraging psychosocial and coworker value potentially seen by employees in order to increase acceptance and participation for organizational DM efforts

*IWH authored publications.