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**March 19, 2021**

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**\*Van Eerd D, Irvin E, Harbin S, Mahood Q, and Tiong M.  
Occupational exposure and post-traumatic stress disorder: a rapid review. *Work*. 2021; [epub ahead of print].**

<https://doi.org/10.3233/WOR-203406>

**Abstract:** BACKGROUND: Post-traumatic Stress Disorder (PTSD) can result from occupational exposures and poses a considerable burden to workers, their families, workplaces and to society in general. OBJECTIVE: Our objective was to conduct a rapid review of the literature to answer the question: "Which occupations have exposures that may lead to a PTSD diagnosis?" METHODS: A rapid review was conducted in six steps: review question development, literature search, study selection (inclusion/exclusion), study characterization, data extraction, and data synthesis. RESULTS: The search identified 3428 unique references which were reviewed to find 16 relevant studies in 23 articles. The articles revealed associations between PTSD and rescue workers (police, firefighters, etc.), health care professionals, transit drivers, and bank employees which seem well supported by the literature. Some studies also suggest potential associations with PTSD and construction and extraction, electricians, manufacturing, installation, maintenance and repair, transportation



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and material moving, and clerical workers. **CONCLUSIONS:** A rapid review of the peer-reviewed scientific literature of PTSD prevalence or treatment suggests many occupations have exposures that could be associated with PTSD. Occupational traumatic events were most often associated with PTSD diagnosis. More research is needed to better understand the association between occupation and PTSD

**Aanesen F, Berg R, Lochting I, Tingulstad A, Eik H, Storheim K, et al. Motivational interviewing and return to work for people with musculoskeletal disorders: a systematic mapping review. Journal of Occupational Rehabilitation. 2021; 31(1):63-71.**

<https://doi.org/10.1007/s10926-020-09892-0>

**Abstract:** Purpose There is limited knowledge about motivational interviewing (MI) for people on sick leave with musculoskeletal disorders. Hence, our objective was to investigate what research on MI as a method to facilitate return to work for individuals who are on sick leave due to musculoskeletal disorders exists, and what are the results of the research? Methods We systematically searched MEDLINE, PsycINFO, EMBASE, Cochrane Library, CINAHL, Web of Science, Sociological Abstracts, Epistemonikos, SveMed + and DARE & HTA (covering 1983 to August 2019). We also searched the MINT bulletin and relevant web pages. Eligibility criteria: empirical studies investigating MI and return to work for people with musculoskeletal disorders. Two authors independently screened the records, critically appraised the studies and charted the data using a data extraction form. Results The searches identified 1264 records of which two studies were included. One randomized controlled trial (RCT) found no effect of MI on return to work for disability pensioner with back pain (n = 89, high risk of bias), while a cluster RCT found that MI increased return to work for claimants with chronic musculoskeletal disorders (n = 728, low risk of bias). Conclusions This mapping review identified a huge gap in research on MI to increase return to work for individuals with musculoskeletal disorders. Registration Current Research Information System in Norway, project id: 635823 ( <https://app.cristin.no/projects/show.jsf?id=635823> ).

**Baptista MC, Burton WN, Pawlecki B, and Pransky G. A physician's guide for workers' return to work during COVID-19 pandemic. Journal of Occupational & Environmental Medicine.**



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**2021; 63(3):199-220.**

<https://doi.org/10.1097/JOM.0000000000002118> [open access]

Abstract: OBJECTIVE: Higher probability of developing severe COVID-19 has been associated with health risk factors and medical conditions which are common among workers globally. For at risk workers, return to work may require additional protective policies and procedures. METHODS: A review of the medical literature was conducted on health risk factors and medical conditions associated with increased COVID-19 morbidity and mortality, standardized measures for community COVID transmission, and occupation-specific risk. RESULTS: The relative risk of acquiring and the severity of COVID-19 for workers is associated with three pillars: individual risk, workplace risk, and community risk. Matrices were developed to determine a worker's individual risk based on these three pillars. CONCLUSIONS: A practical decision tool is proposed for physicians evaluating and managing individual worker COVID-19 risk in the context of returning to work

**Bezyak J, Iwanaga K, Moser E, and Chan F. Assessing employers' stigmatizing attitudes toward people with disabilities: a brief report. Journal of Vocational Rehabilitation. 2021; 54(2):185-191.**

<https://doi.org/10.3233/JVR-201129>

**Duan X, Sun H, He Y, Yang J, Li X, Taparia K, et al. Personal protective equipment in COVID-19: impacts on health performance, work-related injuries, and measures for prevention. Journal of Occupational & Environmental Medicine. 2021; 63(3):221-225.**

<https://doi.org/10.1097/JOM.0000000000002123> [open access]

Abstract: OBJECTIVE: To assess impact of personal protective equipment (PPE) on healthcare providers (HCPs) in caring for COVID-19 patients. METHODS: A cross-sectional survey was conducted over 50 hospitals in China. Descriptive analyses and Chi-square tests were performed on the collected data. RESULTS: All 104 frontline HCPs report negative impacts of PPE on their clinical performance, 97% of them experienced discomfort and injuries caused by wearing PPE for long hours. Frontline HCPs provided suggestions to alleviate the negative impacts and to enhance



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communication between healthcare staff and patients. Two hundred eighty two non-frontline HCPs also revealed similar problems; however, we recorded a few discrepancies between answers given by frontline and non-frontline HCPs. CONCLUSIONS: Wearing PPE for long hours degrades health performance. Measures were suggested to improve the design of PPE for protecting HCPs and enhancing their services to COVID patients

**Durand MJ, Coutu MF, Tremblay D, Sylvain C, Gouin MM, Bilodeau K, et al. Insights into the sustainable return to work of aging workers with a work disability: an interpretative description study. Journal of Occupational Rehabilitation. 2021; 31(1):92-106.**

<https://doi.org/10.1007/s10926-020-09894-y>

**Abstract:** Purpose A sustainable return to work (S-RTW) following prolonged work disability poses particular challenges as workers age. This article provides a synthesis of the factors and issues involved in a S-RTW process for aging workers following such a disability. **Methods** Using interpretive description methods, a critical review was conducted of the literature specifying return-to-work factors and issues for aging workers with regard to four major causes of work disability (musculoskeletal disorders, common mental disorders, cancer or other chronic diseases). The initial review concerned the 2000-2016 literature, and was subsequently updated for November 2016-December 2018. To further explore and contextualise the results of this literature review, four focus groups were held with stakeholders, representing the workplace, insurance, and healthcare systems and workers. Qualitative thematic analysis was performed. **Results** Fifty-five articles were reviewed and 35 stakeholders participated in the focus groups. Returning to work and staying at work appear to be particularly challenging for aging workers, who face notable issues and stigma concerning their ability to meet work demands, as well as their mobilisation and engagement in these processes. Such findings echo in many ways the main assertions of the literature on aging at work, except those regarding the transformation of capacities with aging, which is not mentioned in relation to workers with a work disability. The influence of healthcare and compensation systems on the S-RTW of aging work-disabled workers has also received little attention to date. **Conclusions** The



results underscore that aging workers with a disability are frequently vulnerable in terms of their health or their jobs. Intersectoral efforts are needed to remedy this situation to keep them at work

**Fragala MS, Hunter JL, Satish A, Jelovic NA, Carr S, Bailey AM, et al. Workplace mental health: application of a population health approach of proactive screening to identify risk and engage in care. Journal of Occupational & Environmental Medicine. 2021; 63(3):244-250.**

<https://doi.org/10.1097/JOM.0000000000002116> [open access]

Abstract: OBJECTIVE: To evaluate a proactive, voluntary screening program designed to identify employees with emerging mental health risk and engage them in care. METHODS: Risk was proactively identified through online screening of 344 participants. At-risk participants were offered a mental health care concierge to provide support, develop a care plan, and connect to care. RESULTS: Risk for common mental health conditions was identified in 244 (71%) participants, of whom 66 (27%) connected with a care concierge. Compared with participants who did not connect to a care concierge, those who did were more likely to report a financial crisis (68.2% vs 50.8%) and less likely to report verbal abuse (9.1% vs 19.6%) and difficulty meeting daily needs (12.1% vs 25.1%). CONCLUSION: Implementation of this screening program identified employees at risk for mental health conditions and facilitated connection to care

**Frentzel E, Geyman Z, Rasmussen J, Nye C, and Murphy KM. Pre-employment transition services for students with disabilities: a scoping review. Journal of Vocational Rehabilitation. 2021; 54(2):103-116.**

<https://doi.org/10.3233/JVR-201123>

**Halonen JI, Lallukka T, Kujanpaa T, Lahti J, Kanerva N, Pietilainen O, et al. The contribution of physical working conditions to sickness absence of varying length among employees with and without common mental disorders. Scandinavian Journal of Public Health. 2021; 49(2):141-148.**

<https://doi.org/10.1177/1403494820901411> [open access]

Abstract: Aims: The aim was to examine whether the contribution of physical work exposures to the risk of sickness absence (SA) is



different between those with and without common mental disorders (CMD). Methods: We used questionnaire data on four work exposures and CMD from 6159 participants of the Helsinki Health Study cohort with 12,458 observations from three surveys (2000-2002, 2007 and 2012). We formed combination exposures for the work exposures (hazardous exposures, physical workload, computer and shift work) with CMD. Associations with SA of different length were examined with negative binomial regression models. Results: We observed stronger associations for CMD with SA than for the individual work exposures. The strength of the associations for hazardous exposures and physical workload increased with length of SA, especially when the participant also had CMD. The strongest associations for the combined exposures were observed for SA  $\geq 15$  days, the rate ratios being 2.63 (95% CI 2.27-3.05) among those with hazardous exposure and CMD, and 3.37 (95% CI 2.93-3.88) among those with heavy physical workload and CMD. Conclusions: Employees with hazardous exposures or physical workload combined with CMD were at the highest risk of SA compared with those without these exposures or with only one exposure.

**Koskenvuori M, Pietilainen O, Elovainio M, Rahkonen O, and Salonsalmi A. A longitudinal study of changes in interactional justice and subsequent short-term sickness absence among municipal employees. *Scandinavian Journal of Work, Environment & Health*. 2021; 47(2):136-144.**

<https://doi.org/10.5271/sjweh.3927> [open access]

**Abstract:** Objectives Level of perceived interactional justice has been shown to be associated with sickness absence, but less is known about the effects of changes in interactional justice. It is also unknown to what extent unmeasured, time-invariant differences contribute to the association. We investigated the association between interactional justice changes and subsequent short-term (1-3 days) sickness absences over a 12-year follow-up using between- and within-individual modeling among ageing municipal employees. Methods The data was derived from Helsinki Health Study cohort with baseline survey in 2000-2002 (N=8960, response rate 67%) and follow-up surveys in 2007 and 2012 (response rates 79% and 83%, respectively). At baseline, participants were 40-60-year-old employees of the City of Helsinki, Finland. Sickness absences from



the employer's registry were linked with the responses (78%). The analytic sample was 2109 and 2070 individuals for between-individual and 4433 individuals and 8425 observations for within-individual associations. Results Negative change in interactional justice was associated with an increased risk of short-term sickness absence in between-individual models after adjusting for age and gender. Adjustment for sickness absence history attenuated the association. In within-individual models, a negative change in perceived interactional justice was associated with an increased risk of short-term sickness absence spells [incidence rate ratios (IRR) 1.05 (95% confidence interval 1.01-1.09)]. This association was robust to adjustments for gender, age, health behaviors and sickness absence history. Conclusions Paying attention to management principles - especially managerial behavior and treatment of employees to avoid the deterioration of the level of interactional justice - may provide a way of reducing self-certified short-term sickness absence spells

**Manttari S, Oksa J, Lusa S, Korhakangas E, Punakallio A, Oksanen T, et al. Interventions to promote work ability by increasing physical activity among workers with physically strenuous jobs: a scoping review. *Scandinavian Journal of Public Health*. 2021; 49(2):206-218.**

<https://doi.org/10.1177/1403494820917532> [open access]

Abstract: Aims: The potential benefits of workplace physical activity (PA) interventions are in improving both health and important workplace outcomes. Despite the differences in PA level between physically strenuous and inactive work, the literature reporting the effectiveness of the interventions does not usually differentiate physically active and inactive jobs. The aim of the current study was therefore to collect and synthesise research evidence on workplace PA interventions to promote work ability specifically among workers in physically strenuous jobs by means of a scoping review. Methods: The databases Medline, Cochrane Central and Scopus were used to identify interventions to promote work ability by increasing PA among workers in physically strenuous jobs. An iterative method was used to obtain an overview of the study elements and to extract details on the study design, sample, intervention, outcomes and effectiveness. Results: A total of 47 studies evaluating eight categories of interventions were found. Out of these, 18 reported significant effects



on work ability. Positive results came from a range of different interventions, including aerobic exercise, strength training, combined aerobic exercise and strength training, stretching, yoga, consultation and tailored physical exercise programmes. Conclusions: Few interventions were effective in promoting work ability by increasing PA among workers in physically strenuous jobs. In particular, trials based on the demands of work, multimodal interventions and applying wearable technology are needed

**McIlroy TD, Parker SL, and McKimmie BM. The effects of unanswered supervisor support on employees' well-being, performance, and relational outcomes. Journal of Occupational Health Psychology. 2021; 26(1):49-68.**

<https://doi.org/10.1037/ocp0000270>

Abstract: While the consequences of not having access to supervisor support have been well established, little is known about the repercussions of actively asking a supervisor for social support but failing to receive it. Our research examines this phenomenon, termed unanswered support. Drawing from Self-Determination Theory, we expected that lower need satisfaction would mediate the negative relationship between unanswered support and its predicted outcomes (well-being, performance, and relational outcomes). We also expected that attributions for the lack of support would moderate these indirect effects. In Study 1, 280 employees in the United Kingdom took part in a quasi-experimental field study, where we examined the nature of the relationships between the variables. In Study 2, we recruited 267 undergraduate students at an Australian university and experimentally manipulated unanswered support during a work simulation to investigate its causal effects. Across both studies, unanswered support indirectly affected the outcomes through lower need satisfaction. There was minimal evidence for the hypothesized moderating role of attributions. Unanswered supervisor support appears to reduce employees' psychological need satisfaction, negatively impacting how they feel, behave, and connect with others. Our research highlights the importance of leaders answering requests for support, and the findings have implications for employees, supervisors, and organizations. (PsycInfo Database Record (c) 2021 APA, all rights reserved)



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**Nielsen RA and Midtsundstad TI. Do workplace health-promotion interventions targeting employees with poor health reduce sick-leave probability and disability rates? Scandinavian Journal of Public Health. 2021; 49(2):219-227.**

<https://doi.org/10.1177/1403494820946543> [open access]

Abstract: AIMS: This study aimed to investigate whether introducing workplace health-promotion interventions targeting employees with health problems or reduced work ability affected overall sick leave and disability risk. METHODS: The study population comprised data from an establishment survey from 2010 identifying who had introduced workplace health promotion (the intervention) linked to register data on all employees and their sickness absence and disability pension uptake from 2000 through 2010. RESULTS: Interventions had moderate effects due to varying efficacy in different parts of the labour market. Intervention success was more likely among white-collar workers (e.g. in public administration) compared to blue-collar workers (e.g. in manufacturing), probably due to variations in both organisational and technological constraints. Effects were small among men and moderate among older workers, particularly among women. Overall, disability risk reduction was accompanied by an increase in sickness absence. Sometimes, sickness absence increased in groups with no change in disability risk, suggesting that presenteeism in one group may increase absenteeism in other groups. CONCLUSIONS: Introducing workplace health-promotion interventions may prolong work careers in some labour-market segments. Financial incentives for Norwegian establishments to continue offering workplace health-promotion interventions may be improved, given the current financial model for disability pension and sickness benefits

**Rydz E, Harper A, Leong B, Arrandale VH, Kalia S, Forsman-Phillips L, et al. Sun protection use at work and leisure by outdoor workers in Alberta, Canada. Journal of Occupational & Environmental Medicine. 2021; 63(3):e138-e144.**

<https://doi.org/10.1097/JOM.0000000000002133> [open access]

Abstract: OBJECTIVE: To assess the prevalence and determinants of sun protection behaviours among outdoors workers at work and leisure in Alberta, Canada. METHODS: We collected outdoor workers' demographics, skin cancer risk factors, job information, and



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sun habits at work and leisure using self-completed questionnaires. For both settings, we compared use of specific behaviours and modelled determinants of sun protection behaviour scores. RESULTS: At work, wearing a sleeved shirt (81% often/always) and hat (73%) were most prevalent, while seeking shade (12%) and applying sunscreen (36%) were least prevalent. Workers had higher sun protection scores at work than leisure. Hours spent outdoors was a strong determinant for both models. Additional leisure model predictors were eye colour, sex, skin type, and job group. CONCLUSIONS: Differences in behaviours across settings were observed and should be considered when developing solar UVR exposure reduction initiatives

**Topper L, Rosas VM, Aarkoti M, Doucette J, and Nabeel I. The prescription of long-acting opioids for working-age patients with workers' compensation or chronic illness diagnoses in the United States: from the National Ambulatory Medical Care Survey (NAMCS), 2010 to 2016. Journal of Occupational & Environmental Medicine. 2021; 63(3):251-255.**

<https://doi.org/10.1097/JOM.0000000000002119>

Abstract: Objective: To examine associations of workers' compensation, chronic conditions, age, sex, and race/ethnicity with primary prescription of long-acting opioids (LAO) among working-age patients in ambulatory care. Methods: Using the National Ambulatory Medical Care Survey (2010 to 2016), we conducted descriptive, bivariate, and multivariate logistic regression analyses of patients aged 18 to 64 with an LAO as their primary medication. Results: Those prescribed an LAO were more likely to be men (adjusted odds ratio [aOR] = 1.48, 95% CI 1.13, 1.91), have workers' compensation (aOR = 2.00, 95% CI 1.12, 3.57), or have diagnoses of lower back pain (aOR = 4.70, 95% CI 3.51, 6.29), arthritis (aOR = 1.53, 95% CI 1.11, 2.09), or depression (aOR = 1.69; 95% CI 1.24, 2.31). Hispanic ethnicity/race had a lower likelihood of LAO use compared with non-Hispanic White (aOR = 0.58; 95% CI 0.37, 0.90). Conclusions: Male sex, workers' compensation, and diagnoses of lower back pain, arthritis, or depression were independently associated with increased LAO prescription odds.



**Zack B, Arrandale VH, and Holness DL. A qualitative study to identify characteristics of a desirable training program for prevention of occupational skin disease. *Annals of Work Exposures and Health*. 2021; 65(2):230-238.**

<https://doi.org/10.1093/annweh/wxaa111>

Abstract: **BACKGROUND:** Training and education may be effective strategies for the prevention of work-related contact dermatitis. While there is some information in the literature related to skin-specific training experiences, there is very little information available on workers' preferences related to content and format and to barriers and facilitators to training. **OBJECTIVES:** To understand workers' experiences and preferences for workplace training and barriers and facilitators to training. **METHODS:** Following ethics approval, 24 patients with work-related contact dermatitis participated in semi-structured interviews obtaining information on training experiences, perceived training effectiveness, desired training characteristics, and barriers and facilitators to training. An inductive thematic analysis was used to identify themes. **RESULTS:** Though many workers had received general workplace health and safety training, none reported training about skin exposure and disease prevention. Examples of what the workers perceived as good training included first aid training, while Workplace Hazardous Materials Information System training was felt to be ineffective. Desired content of training for preventing skin exposures included information on the hazards, short- and long-term health impacts, and potential symptoms and personal protective equipment. They desired multi-modal presentation (e.g. in-person and online supplement), hands-on training with visual content and suggested the use of personal stories and negative messaging. Training that could be applied outside the workplace was also valued. Barriers and facilitators to implementation included factors related to the training program itself, the organization, and the regulatory landscape. **CONCLUSIONS:** These findings can help to shape more effective workplace training programs for skin protection

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