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Journal articles marked with an asterisk indicate an IWH scientist or adjunct scientist is included in the list of authors.

Accetturo A, Modena F, and Ziglio G. Subsidies for permanent employment in the time of COVID-19. *Labour*. 2025; 39(1):23-42.

<https://doi.org/10.1111/labr.12283>

Badarin K, Mangot-Sala L, Matilla SN, Kreshpaj B, Hernando Rodriguez JC, Aronsson AE, et al. Precarious employment, strenuous working conditions and the long-term risk of diagnosed chronic musculoskeletal disorders. *Occupational & Environmental Medicine*. 2025; 81(12):595-602.

<https://doi.org/10.1136/oemed-2024-109867> [open access]

Abstract: Objectives: To investigate the effect of precarious employment (PE) on the risk of diagnosed chronic musculoskeletal disorders (MSDs) among Swedish workers in occupations with strenuous working conditions. Methods: This nationwide register-based cohort study included workers registered as living in Sweden in 2005, aged 21-60 at the 2010 baseline. Three samples were included: workers with high biomechanical workload (n=680 841), repetitive work (n=659 422) or low job control (n=703 645). PE was evaluated using the SWE-ROPE (2.0) construct, which includes: contractual insecurity, temporariness, multiple jobs, income and collective bargaining agreement from 2010. Three exposure groups were created: PE, substandard and standard employment (SE). MSD data were obtained from outpatient registers (2011-2020). Cox proportional-hazards models estimated crude and adjusted sex-specific HRs with 95% CIs. Various outcomes were investigated for the different samples. Results: Among workers with heavy biomechanical workload, results suggest increased risks of back MSDs in PE compared with those in SE. No association was found between PE and tendonitis in repetitive work, but PE was associated with an increased Carpal Tunnel Syndrome risk among men. Among workers with low job control, PE was associated with increased risks of soft tissue disorders among men and fibromyalgia among women. Conclusions: PE was associated with an increased risk of MSDs among workers with strenuous working conditions, with variations depending on disorder and sex. The findings suggest a

differential exposure to biomechanical workload within occupations. Targeted interventions and strengthened workplace safety regulations are needed to protect the musculoskeletal health of workers in PE.

Chen J, Zhao Z, Zheng Y, Hu J, Zhu H, Wang H, et al. Study on the effect of occupational exposure on hypertension of steelworkers based on Lasso-Logistic regression model. *Public Health*. 2025; 239:15-21.

<https://doi.org/10.1016/j.puhe.2024.12.006>

Abstract: Objectives: This study aimed to use a stable and predictive method: Lasso regression model to analyze hypertension's influencing factors and explore the interactions between occupational exposures. Study design: This has been a nested case-control study. Methods: The case group consisted of 959 patients with high blood pressure found during the study. 959 hypertensive patients, matched 1:1 from the cohort based on the age \pm 2 years and same gender distribution, served as the control group. Logistic regression has been performed to analyze the relationship between occupational exposures and hypertension after the variables were screened by the Lasso regression model and to explore the interactions between the various occupational exposures. Results: The incidence rate of hypertension among steelworkers was 33.95 %. Noise, dust, high temperature, carbon monoxide (CO), and shift work have been found to be significantly associated with the risk of hypertension, which is 1.329, 1.370, 1.900, 1.309, and 1.427 times higher than that of the control group, respectively. In addition, a multiplicative interaction between dust and noise has been found ($P = 0.038$). Conclusion: The study suggested that exposure to dust, high temperature, CO, noise, and shift work increases the risk of hypertension among steelworkers and that the risk of hypertension is more pronounced among workers exposed to both dust and noise.

Giazitzoglu A. Men at work: how are masculinities constituted and performed in work and employment settings? *Work, Employment and Society*. 2025; 39(1):248-255.

<https://doi.org/10.1177/09500170241294221> [open access]

Abstract: This collection addresses the question: how are masculinities constituted and performed in work and employment settings? *Work, Employment and Society* has published many studies which show people performing, engaging and resisting constitutions of masculinities in employment settings. This collection brings 11 of these publications together to show how and why masculinities – as culturally constructed constitutions and performances – are reproduced, consolidated and contested in work and employment contexts. Three categories are used to order the selected publications: (1) precariousness, (2) embodiment and (3) symbolic interactions. The collection provides a body of work showing what we know (and do not know) about how masculinities are constituted and performed in employment settings, which contemporary scholars can consult, engage with and build on as the sociological intersection of gender, masculinities and work evolves, especially at the empirical level.

Hara S, Aasdahl L, Salvesen O, Solberg T, Gulati S, and Hara KW. Return to work after surgery for lumbar disk herniation: a nationwide registry-based study. *Spine*. 2025; 50(4):217-223.

<https://doi.org/10.1097/BRS.0000000000005082>

Abstract: STUDY DESIGN: An observational registry-based study. OBJECTIVE: We investigated the long-term patterns of sick leave among patients undergoing surgery for lumbar disk herniation using two nationwide databases to study the achievement of postsurgery return to work (RTW). SUMMARY OF BACKGROUND DATA: The ability to RTW is increasingly recognized as an essential outcome measure for

spine surgery. **MATERIALS AND METHODS:** The study included 13,698 patients aged 18 to 60 on sick leave undergoing surgery for lumbar disk herniation from January 2007 through January 2019. Data from the Norwegian Registry for Spine Surgery (NORspine) and the Norwegian Labour and Welfare Administration (NAV) were linked. Certified sick leave around the time of surgery was assessed. The patients were further categorized according to the length of presurgery sick leave, and the rate of sustainable RTW for the different groups was compared using survival analysis. The association between successful surgical outcomes, defined by a 30% improvement in Oswestry Disability Index score, and achievement of sustainable RTW was analyzed using a logistic regression model. **RESULTS:** Two years after surgery, 76% of the patients had returned to work. Shorter presurgery sick leave was associated with a higher proportion and rate of achieved sustainable RTW: Among patients with sick leave of <30 days, a total of 99% achieved sustainable RTW (median: 46 days); only 40% of patients with longer lasting work assessment allowance achieved the same goal within 2 years. Successful surgical outcomes were associated with sustainable RTW for all patient groups, but the impact of surgical success on RTW declined as sick leave extended beyond 180 days. **CONCLUSIONS:** Most patients had returned to work 2 years after lumbar disk herniation surgery. Shorter presurgery sick leave was associated with achieving faster and more sustainable RTW. Successful surgical outcomes had less impact on patients with extended sick leave. **LEVEL OF EVIDENCE:** Level III

Koehoorn M, McLeod CB, Fan J, Arrandale VH, Davies HW, Dement JM, et al. Occupational asbestos exposure and gastrointestinal cancers: systematic review and meta-analyses. Occupational & Environmental Medicine. 2025; 81(12):639-646.

<https://doi.org/10.1136/oemed-2024-109707> [open access]

Abstract: **OBJECTIVE:** To conduct meta-analyses of occupational asbestos exposure and oesophageal, stomach and colorectal cancer risk, including a critical exposure assessment approach. **METHODS:** The search strategy was executed on MEDLINE, Embase, CINAHL, Scopus and Web of Science databases (March 2022, March 2024). Effect estimates (ORs, HRs, standardised incidence ratio and standardised mortality ratio) from eligible cohort and case-control studies were combined in random effects models. Meta-relative risks (mRRs) were calculated by cancer site and exposure characteristics. Investigators with occupational epidemiology and hygiene expertise came to a consensus on the estimates where there was confidence in significant asbestos exposure. **RESULTS:** A total of 82 (oesophageal), 153 (stomach) and 144 (colorectal) papers met the inclusion criteria. Elevated mRRs were observed for any occupational asbestos exposure for oesophageal (1.17 (95% CI 1.07 to 1.29)), stomach (1.14 (95% CI 1.05 to 1.23)) and colorectal cancer (1.16 (95% CI 1.08 to 1.24)). There was consistency of mRR estimates and higher mRRs in meta-analyses where there was increased confidence in the categorisation of highly exposed workers, including among the highest exposed workers in exposure-response studies (oesophageal: 1.63 (95% CI 1.29 to 2.06); stomach: 1.28 (95% CI 1.09 to 1.52); colorectal: 1.29 (95% CI 1.09 to 1.53)), among asbestos insulation workers (oesophageal: 1.68 (95% 1.19 to 2.36); stomach: 1.53 (95% 0.93 to 2.51); colorectal: 1.59 (95% 1.14 to 2.23)) and among workers in cohorts with a twofold or greater risk of asbestos-related lung cancer (oesophageal: 1.40 (95% CI 1.14 to 1.71); stomach: 1.33 (95% CI 1.14 to 1.56); colorectal: 1.47 (95% CI 1.34 to 1.61)). **CONCLUSION:** The meta-analyses support a causal link between occupational asbestos exposure and the risk of oesophageal, stomach and colorectal cancer

Li ACM, Chio FHN, Mak WWS, Fong TH, Chan SHW, Tran YHR, et al. Compassion fatigue, compassion satisfaction and mindfulness among healthcare professionals: a meta-analysis of correlational studies and randomized controlled trials. *Social Science & Medicine*. 2025; 367:117749.

<https://doi.org/10.1016/j.socscimed.2025.117749>

Abstract: BACKGROUND: Compassion fatigue is a pressing concern for healthcare professionals, impacting their well-being and the quality of service they deliver to service users. Mindfulness has emerged as a potential strategy to mitigate compassion fatigue among healthcare professionals. This meta-analysis aims to investigate the correlation between mindfulness and compassion fatigue/compassion satisfaction and the effect of mindfulness-based interventions (MBI) on compassion fatigue/compassion satisfaction. METHOD: 7568 papers were identified through a systematic search in ProQuest, Web of Science, PsycINFO, Embase, and MEDLINE. 78 correlational studies and 29 randomized controlled trials were screened-in for analysis. Study quality and data were coded for analysis. RESULTS: Significant moderate negative correlation between mindfulness and compassion fatigue was found. Significant moderate positive correlation was also observed between mindfulness and compassion satisfaction. Older healthcare professionals and professionals working in non-acute settings were found to have stronger correlations between mindfulness and compassion satisfaction. From randomized controlled trial studies of MBI, moderate effect size was found for compassion fatigue, and small effect size was found for compassion satisfaction. Effects were found to be similar across settings. CONCLUSIONS: This meta-analysis is the first synthesis of the relationship between compassion fatigue and compassion satisfaction with mindfulness, as well as the effectiveness of mindfulness-based interventions on these two variables among healthcare professionals. Future studies could consider investigating mediators of mindfulness-based interventions to understand possible mechanisms

Liu NYG, Triantis K, Madsen P, and Roets B. The relationships among workload, automation reliance, and human errors in safety-critical monitoring roles. *Safety Science*. 2025; 185:106775.

<https://doi.org/10.1016/j.ssci.2024.106775>

Martino SC, Dembosky JW, Hambarsoomian K, Haviland AM, Weech-Maldonado R, Beckett MK, et al. Comparison of alternative approaches to using race-and-ethnicity data in estimating differences in health care and social determinants of health. *Medical Care*. 2025; 63(3):241-248.

<https://doi.org/10.1097/MLR.0000000000002108>

Abstract: OBJECTIVE: The objective of this study was to compare 2 approaches for representing self-reported race-and-ethnicity, additive modeling (AM), in which every race or ethnicity a person endorses counts toward measurement of that category, and a commonly used mutually exclusive categorization (MEC) approach. The benchmark was a gold-standard, but often impractical approach that analyzes all combinations of race-and-ethnicity as distinct groups. METHODS: Data came from 313,739 respondents to the 2021 Medicare Consumer Assessment of Healthcare Providers and Systems (CAHPS) surveys who self-reported race-and-ethnicity. We used regression to estimate how accurately AM and MEC approaches predicted racial-and-ethnic differences in 5 CAHPS patient experience measures and 4 patient characteristics that we considered proxies for social determinants of health (SDOH): age, educational attainment, and self-reported general and mental health. We calculated average residual error proportions for AM and MEC estimates relative to all-combination estimates. RESULTS: In predicting CAHPS scores by race-and-ethnicity, on average 0.9% of the variance across groups in the AM and MEC approaches represented a departure from the gold standard. In predicting proxy SDOH

variables, on average 4.7% of the AM variance across groups and 7.1% of the MEC variance across groups represented departures from the gold standard. CONCLUSION: Researchers may want to consider AM over MEC when modeling outcomes by race-and-ethnicity given that AM outperforms MEC in predicting racial-and-ethnic differences in proxy SDOH characteristics and is comparably accurate in predicting differences in patient experience. Unlike MEC, AM does not assume that every multiracial person has similar outcomes and that Hispanic persons have similar outcomes irrespective of race

Michaels D and Wagner GR. OSHA injury data: an opportunity for improving work injury prevention. *American Journal of Public Health*. 2025; [epub ahead of print].

<https://doi.org/10.2105/AJPH.2024.307934>

Abstract: Millions of US workers are seriously injured on the job annually. These injuries have a significant and deleterious impact on injured workers, their families, and their communities. The limitations of the historical work injury surveillance systems have constrained research into the distribution and determinants of work injuries and efforts to improve allocation of limited injury prevention resources. Most work injury data sets suffer from significant limitations and fail to include a sizable proportion of work injuries. In recent years, the Occupational Safety and Health Administration has begun to collect and make available to the public more detailed data on work injuries at thousands of high hazard establishments. These data sets provide the opportunity to greatly improve our work injury surveillance system. Researchers are now using these data to investigate and compare injury risk in industries and high-hazard firms where workers are at increased risk of musculoskeletal disorders. However, these rich data sets are underused. Maintaining and facilitating access to accurate, current data can contribute to improved prevention of work-related injuries and deaths. (*Am J Public Health*. Published online ahead of print February 13, 2025:e1-e8. <https://doi.org/10.2105/AJPH.2024.307934>)

O'Neill S and Thornthwaite L. Does legislating safety duties across the labour supply chain ensure contingent workers have equitable access to safety training? *Safety Science*. 2025; 185:106805.

<https://doi.org/10.1016/j.ssci.2025.106805> [open access]

Abstract: Increasing demand for labour flexibility and the rise of the gig-economy has led increasingly to fractured labour supply chains. Recent legislative reforms in Australia and New Zealand place obligations on employers to ensure the health and safety of all workers whose work they control or direct, including, but not limited to employees. These reforms recognise the crucial role of OHS training. However, they expose an important gap in our understanding as to whether workers engaged in high-risk work across corporate boundaries now have equitable access to training. This exploratory study surveyed 543 Australian permanent, casual and contract heavy vehicle drivers, comparing their access to various forms of OHS training and their experience and perceptions of hazardous events most commonly associated with fatal and high consequence injury in their industry. The reforms appear to improve access to external safety training courses, although significant differences in training participation mix and risk perceptions remain across employment types and some workers report multiple, often conflicting safety training messages. The findings offer a novel and important contribution to the extensive literature on OHS training. Despite significant employer investment in training, efforts to absorb a cohort of (non-employee) workers into existing, corporate training systems appear largely unsuccessful and demonstrates a structural misalignment between (organisational) training models and (individuals') training needs. However, resolving this mismatch will require a re-

imagining of OHS training delivery to a more integrated model that can better identify and address gaps in the OHS knowledge and experience of an increasingly disparate group of workers.

Rahman A, Leifels K, and Adakporia KO. Risk and causative factors of psychological harm among construction workers: a systematic review. *Workplace Health & Safety*. 2025; [epub ahead of print]. <https://doi.org/10.1177/21650799241303529> [open access]

Abstract: BACKGROUND: The construction industry, known for its high-risk environment, increasingly acknowledges the psychological risks to workers. Despite well-documented physical hazards, mental health challenges within this workforce have garnered attention. This systematic review provides a scholarly synthesis of literature on psychological risks and their causative factors affecting construction workers, adhering to PRISMA protocols. METHODS: An exhaustive literature search was conducted across PubMed, Scopus, PsycINFO, and Google Scholar using relevant keywords. Rigorous screening of selected studies focused on the psychological aspects of construction work, with systematic data extraction and analysis. FINDINGS: From 1992 to 2022, 68 studies met inclusion criteria, identifying key psychological harm factors: job insecurity, long working hours, high demands, poor work-life balance, and workplace bullying. A lack of mental health support and awareness in the sector was noted, with a significant correlation between these factors and increased stress, anxiety, and depression levels among workers. CONCLUSIONS: The review highlights the urgent need for industry recognition of psychological hazards and the relationship between work conditions and mental health issues. It calls for supportive policies, awareness programs, and counseling services, with a suggestion for future longitudinal research on the long-term impacts and intervention efficacy. APPLICATION TO PRACTICE: This study provides an overview of psychological risks in the construction sector from 1994 to 2022, aiming to identify causative factors for mental health issues. It seeks to pave the way for targeted interventions and policy changes to improve mental health outcomes in the industry

Seo JY, Han I, Au E, Li A, Tomas C, and Chao YY. Evaluating occupational workforce and practices in New York metropolitan nail salons. *New Solutions*. 2025; 34(4):268-277.

<https://doi.org/10.1177/10482911241290554>

Abstract: This study investigated workforce characteristics, work practices, protective measures, and health symptoms among nail salon workers in New York and New Jersey following the implementation of local exhaust ventilation (LEV) regulations in New York. An online survey conducted from 2022 to 2023 targeted registered nail salons and manicurists in both states (N = 146). The majority of respondents were Asian, primarily Korean (52.1%) and Chinese (26%). In New York, 79% of salons had a mechanical ventilation system, including LEV, while in New Jersey, where no ventilation regulation exists, only 52% of nail salons had mechanical ventilation systems. A substantial proportion of manicurists reported health-related concerns (40.5%) and symptoms related to chemical exposure (67.6%). The study emphasizes the need for continuous and improved illness prevention strategies, including the use of safer products, comprehensive health and safety training, and effective ventilation practices, to better protect nail salon workers.

Uttley L, Weng Y, and Falzon L. Yet another problem with systematic reviews: a living review update. *Journal of Clinical Epidemiology*. 2025; 177:111608.

<https://doi.org/10.1016/j.jclinepi.2024.111608>

Abstract: BACKGROUND: In February 2023, the *Journal of Clinical Epidemiology* published 'The Problems with Systematic Reviews: A Living Systematic Review.' In updating this living review for the first time a

new problem and several themes relating to research culture have emerged. **METHODS:** Literature searches were rerun to identify articles published or indexed between May 2022 and May 2023. Thematic analysis coded articles and problems across four domains of systematic review conduct (1. comprehensive, 2. rigour, 3. transparent, 4. objective). **RESULTS:** One hundred fifty-two newly included articles bring the total number of relevant articles to 637. A new problem (the lack of gender diversity of systematic review author teams) brings the total number of problems with systematic reviews up to 68. This update also reveals emerging themes such as: fast science from systematic reviews on COVID-19; the failure of citation of methodological or reporting guidelines to predict high-quality methodological or reporting quality; and the influence of vested interests on systematic review conclusions. These findings coupled with a proliferation of research waste from "me-too" meta-research articles highlighting well-established problems in systematic reviews underscores the need for reforms in research culture to address the incentives for producing and publishing research papers. This update also reports where the identified flaws in systematic reviews affect their conclusions drawing on 77 meta-epidemiological studies from the total 637 included articles. These meta-meta-analytic studies begin the important work of examining which problems threaten the reliability and validity of treatment effects or conclusions derived from systematic reviews. **CONCLUSION:** This living review has captured an emerging theme in the published literature relating to the composition of the review author team and highlights a potential effect on the equity reporting of the systematic reviews. We recommend that meta-research endeavors evolve from merely documenting well-established issues to understanding lesser-known problems or consequences to systematic reviews

Wightman A, Gawaziuk JP, Spiwak R, Burton L, Comaskey B, Chateau D, et al. Workplace injury and mental health outcomes. *JAMA Network Open*. 2025; 8(2):e2459678.

<https://doi.org/10.1001/jamanetworkopen.2024.59678> [open access]

Abstract: Importance: Workplace injury is a widespread problem that impacts mental health and quality of life and places a substantial burden on employers and the health care system. Objective: To determine whether mental disorder rates differ following workplace injury compared with injuries outside the workplace. Design, setting, and participants: This retrospective cohort study assessed individuals hospitalized for an injury requiring surgery between January 1, 2002, and December 31, 2018, with a 2-year follow-up period using population-based administrative data in Manitoba, Canada. Analyses were completed June to July 2021. This study compared 2 cohorts: individuals with a workplace injury matched 1:5 on sex, age, geographical region, and surgical procedure code with individuals with a nonworkplace injury in the general population. Exposure: Traumatic physical injury that required surgery with anesthetic. Main outcomes and measures: The outcome of interest was a diagnosis of mental disorder (anxiety, depression, substance abuse, suicide attempt, and any mental disorder), measured 2 years prior to and following injury. Results: In this cohort study, 7556 individuals (mean [SD] age, 44.8 [13.3] years; 5721 [75.7%] male; 4624 individuals [61.2%] with urban residence; 4545 individuals [60.1%] with low income) with a workplace injury were compared with 28 901 matches from the general population. The workplace cohort had lower rates of all mental disorders (anxiety: adjusted rate ratio [ARR], 0.82; 95% CI, 0.77-0.87; depression: ARR, 0.78; 95% CI, 0.72-0.84; substance abuse: ARR, 0.63; 95% CI, 0.55-0.72; suicide attempt: ARR, 0.28; 95% CI, 0.11-0.70; and any mental disorder: ARR, 0.82; 95% CI, 0.78-0.86; all $P < .0006$) before their injury and for depression (ARR, 0.89; 95% CI, 0.82-0.95) and substance abuse (ARR, 0.83; 95% CI, 0.73-0.94) after their injury. The group \times care period interaction term was significant for anxiety ($P < .0001$) and any mental disorder ($P < .0001$),

suggesting that individuals with workplace injuries had worse mental disorder outcomes over time than individuals with nonworkplace injuries. Conclusions and relevance: This cohort study found that the mental health trajectory from the preinjury to postinjury period was worse for individuals with a workplace injury compared with those injured outside the workplace. These findings suggest that there may be features unique to the workplace and/or injury claims and compensation processes that contribute to this pattern, which warrant further examination.

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