research alert

January 20, 2023

ABOUT RESEARCH ALERT

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

*Minh A, McLeod CB, Reijneveld SA, Veldman K, Van Zon SKR, and Bultmann U. The role of low educational attainment on the pathway from adolescent internalizing and externalizing problems to early adult labour market disconnection in the Dutch TRAILS cohort. SSM -Population Health. 2023; 21:101300.

https://doi.org/10.1016/j.ssmph.2022.101300 [open access]

Abstract: Mental health challenges in adolescence may affect labour market transitions in young adulthood. Policies addressing early labour market disconnection largely focus on early school-leaving and educational attainment; however, the role of low educational attainment on the path from adolescent mental health to labour market disconnection is unclear. Using the TRacking Adolescents' Individual Lives Survey from the Netherlands (n = 1,197), we examined the extent to which achieving a basic educational qualification (by age 22) in the contemporary Dutch education system, mediates the effect of adolescent mental health (age 11-19) on early adult labour market disconnection, defined as 'not in education, employment, or training' (NEET, age 26). We estimated the total effect, the natural direct and indirect effects, and the controlled direct effects of internalizing and externalizing symptoms on NEET by gender. Among young men, clinical levels of adolescent externalizing symptoms were associated with a 0.093 higher probability of NEET compared with no symptoms (95% confidence interval, CI: 0.001, 0.440). The indirect effect through educational attainment accounted for 15.1% of the total effect. No evidence of mediation was observed for the relationship between externalizing symptoms and NEET in young women. No evidence of mediation was observed for the relationship between adolescent internalizing symptoms and



NEET in either gender. The findings imply that adolescent externalizing symptoms disrupts the achievement of a basic educational qualification, leading to a higher probability of NEET in young men. This mechanism may play a smaller role in the risk of NEET associated with internalizing symptoms and in young women.

Ajslev JZN, Moller JL, and Nimb IEE. Occupational safety and health coordinators: puzzlepiece caretakers or necessary evils. Nordic Journal of Working Life Studies. 2022; 12(4):49-68.

https://doi.org/10.18291/njwls.132249 [open access]

Abstract: The construction industry continues to be high-risk in terms of occupational safety and health (OSH) issues. A pivotal instrument in preventing these risks at both European and Danish levels is the OSH coordinator. In spite of the important role of the coordinator, little research on their roles and functions exist, and critics have pointed out that OSH professionals in general may only confer limited impact on preventive OSH work. This study argues that professional identities and struggles to maintain preferred, as well as rejecting unwanted identities are highly important to understand OSH coordinators' practices. The study investigates OSH coordinators professional identities and their implications for practice through analysis of interviews with 12 experienced OSH coordinators in the Danish construction industry. The study reveals how struggles for maintaining a positive self-image and social recognition may explain why coordinators struggle to prioritize preventing OSH risks over legitimization and social practices.

Asfaw A, Quay B, Bushnell T, and Pana-Cryan R. Injuries that happen at work lead to more opioid prescriptions and higher opioid costs. Journal of Occupational and Environmental Medicine. 2022; 64(12):e823-e832.

https://doi.org/10.1097/JOM.000000000002709

Abstract: OBJECTIVES: This study aimed to compare opioid prescription incidence, supply days, and cost associated with occupational injury and other injury-caused conditions. METHODS: We used Medical Expenditure Panel Survey (MEPS) data for 2010-2019. The MEPS provides information on medical conditions and associated medical encounters, treatments, and treatment costs, as well as demographic, education, health, working status, income, and insurance coverage information. We used descriptive statistics and logistic and 2-part regressions. RESULTS: Controlling for covariates and compared with other injury-caused conditions, occupational injury-caused conditions resulted in 33% higher odds of opioid prescribing, 32.8 more opioid prescription supply days, and \$134 higher average cost. CONCLUSIONS: Occupational injuries were associated with higher opioid incidence and costs, and more opioid supply days. These findings point to the need to focus on making work safer and the role employers may play in supporting worker recovery from injury and opioid use disorders



Brooks SK and Greenberg N. Mental health and wellbeing of border security personnel: scoping review. Occupational Medicine. 2022; 72(9):636-640.

https://doi.org/10.1093/occmed/kqac108 [open access]

Abstract: BACKGROUND: Whilst the wellbeing of law enforcement personnel has been widely researched, border security personnel as a discrete group appear to be far less discussed, despite their roles frequently exposing them to potentially traumatic and challenging events such as contact with criminals or witnessing personal tragedies due to trafficking or smuggling. AIMS: This scoping review aimed to explore existing literature to better understand the mental health of border security personnel and the factors affecting their wellbeing. METHODS: Four electronic databases and grey literature were systematically searched for studies relevant to the review's aims. Following the extraction of relevant data from each study, thematic analysis was used to synthesize findings. RESULTS: Thirteen studies included relevant data and were included in the review, identifying stressors including poor management; fatigue; negative public attitudes; inadequate staffing levels, resources, and training; poor opportunities for promotion; low pay; work overload; dangerous working environments; and work-related moral dilemmas. CONCLUSIONS: The review found that there has been little academic attention paid to border security personnel as a specific branch of law enforcement. Many of the stressors identified in this review are those also reported by law enforcement generally, although negative attitudes from the public and exposure to moral dilemmas appear to be more relevant for border security staff. Directly addressing work-related stress (e.g. by fostering a supportive organizational culture, addressing mental health stigma, and encouraging help-seeking) may be useful in enhancing the resilience of border security personnel

Butte KT, Cannavan D, Hossler J, Travis C, and Geiger J. The relationship between objectively measured sitting time, posture, and low back pain in sedentary employees during COVID-19. Sport Sciences for Health. 2022; [epub ahead of print].

https://doi.org/10.1007/s11332-022-01031-x [open access]

Abstract: Purpose: The purpose of this study was to examine the relationship between objectively measured sitting time, posture, and low back pain (LBP) in adults with full-time (= 40 h/week) sedentary "desk" jobs. Physical activity (PA) and sedentary behavior (SB) between work environments (home vs. office) were also compared during COVID-19. Methods: Participants (N = 53; M age = 41 ± 12years) were full-time employees in sedentary jobs during COVID-19. A survey with demographic, work environment, and LBP questions was completed; Thomas Test assessed poor hip posture. ActivPAL devices were worn for = 4 valid days (= 10 h/d) to assess waking sitting time (min/d). Binomial logistic regressions examined sitting as a predictor of poor posture and LBP; ANOVAs compared PA and SB between work environments. Results: Objectively measured sitting (min/day) predicted poor hip posture (ß = - 0.01, p < 0.046) but was not significant for LBP (ß = 0.002, p < 0.43). Participants who worked from home had significantly higher sitting time (569 ± 111 vs. 477 ± 46 min/d; p < 0.04), higher muscle strengthening PA (2.2 ± 2 vs. 0.5 ± 1.2d/week p < 0.02), but no

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difference in aerobic PA (p < 0.15), than those who worked from an office. Conclusion: Given the shift to remote work during COVID-19, employees are at high risk for postural compensations that lead to LBP due to high SB and poor work ergonomics at home. There is a need to develop home-based behavioral and exercise interventions to reduce sitting, help improve posture, and invest in proper ergonomic homework equipment.

Colin R, Wild P, Paris C, and Boini S. Co-exposures to physical and psychosocial work factors increase the occurrence of workplace injuries among French care workers. Front Public Health. 2022; 10:1055846.

https://doi.org/10.3389/fpubh.2022.1055846 [open access]

Abstract: OBJECTIVE: The aim of this study was to analyze the effect of co-exposures to physical and psychosocial factors (PSF) regarding the incidence of workplace injuries (WI) among care workers. Additional objective was to identify the work factors associated with the co-exposure combinations leading to the highest rates of WI. METHODS: The study sample consisted of 4,418 care workers participating to the French Working Conditions Survey both in 2013 and 2016. WI were assessed during the 4-year follow-up by matching the databases of the National Health Insurance Funds' compensation system. We assessed exposure for physical factors and PSF using factorial analyses and hierarchical clustering. We implemented a Poisson regression model with the WI incidence as the outcome and the clusters as independent variables of interest. Logistic regression model allowed identifying the work factors that predicted co-exposure combinations with a WI rate > 40%. RESULTS: WI were highly related to both physical and psychosocial exposures. With low exposure to one or the other, there was no increased risk of WI. Physical factors and PSF potentiated each other and their co-exposure significantly increased the risk of WI, with model predicted rates per 1,000 persons-year for those most exposed to physical risk of 14.6 [4.5-24.8] with low PSF and 38.0 [29.8-46.3] with high PSF. Work factors that predicted co-exposure combinations with a rate > 40 WI% were: working as nursing assistant or hospital services officer, lack of predictability and flexibility of schedules, overtime, controlled schedules, work-family imbalance and insufficient preventive measures. CONCLUSIONS: Our findings highlight the need to take into account psychosocial factors in addition of only considering physical factors when analyzing WI occurrence, as usually done. Prevention actions must be taken to reduce both physical and psychosocial exposure. These results provide keys points for the prevention of WI among care workers

Davis M, Koroloff N, Mizrahi R, and Morrison E. Collaboration between mental health and vocational rehabilitation programs for transition-age youth vocational outcomes. Psychiatric Rehabilitation Journal. 2022; 45(4):303-313.

https://doi.org/10.1037/prj0000539

Abstract: Transition-age youth (TAY) with serious mental health conditions (SMHC) face many challenges as they establish adult employment. Mental health (MH) programs and vocational rehabilitation (VR) programs each provide key supports toward this goal, but collaboration is



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required. OBJECTIVE: The present study's objective was to assess the extent of collaboration between VR programs and MH programs that serve this age group and to identify interorganizational factors associated with collaboration levels. METHOD: Participants were 100 key informants from VR, and child mental health (CMH), transition-age youth MH (TAYMH), and adult mental health (AMH) programs in communities that received federal funding to improve services for TAY with or at risk of SMHC. Participants completed web surveys that queried four interorganizational factors and employed a modified social network analysis methodology to assess collaboration levels. RESULTS: The interorganizational factor, depth of knowledge, had a strong and consistent association with collaboration levels. There was little difference in MH-VR collaboration levels between MH programs serving different age groups. However, VR programs and CMH programs had both lower depth of knowledge of each other and lower collaboration levels, compared to TAY and AMH programs. CONCLUSIONS AND IMPLICATIONS FOR PRACTICE: Collaboration between VR and MH programs is instrumental to making sure that TAY with SMHC receive appropriate career development and employment services. Increasing the depth of knowledge that programs have about each other may enhance collaboration and appears particularly needed between VR and CMH programs. (PsycInfo Database Record (c) 2023 APA, all rights reserved)

van der Feltz S, Peters S, Pronk A, Schlunssen V, Stokholm ZA, Kolstad HA, et al. Validation of a COVID-19 Job Exposure Matrix (COVID-19-JEM) for occupational risk of a SARS-CoV-2 infection at work: using data of Dutch workers. Annals of Work Exposures and Health. 2023; 67(1):9-20.

https://doi.org/10.1093/annweh/wxac032 [open access]

Abstract: Objectives: A COVID-19 Job Exposure Matrix (COVID-19-JEM) has been developed, consisting of four dimensions on transmission, two on mitigation measures, and two on precarious work. This study aims to validate the COVID-19-JEM by (i) comparing risk scores assigned by the COVID-19-JEM with self-reported data, and (ii) estimating the associations between the COVID-19-JEM risk scores and self-reported COVID-19. Methods: Data from measurements 2 (July 2020, n = 7690) and 4 (March 2021, n = 6794) of the Netherlands Working Conditions Survey-COVID-19 (NWCS-COVID-19) cohort study were used. Responses to questions related to the transmission risks and mitigation measures of Measurement 2 were used to calculate self-reported risk scores. These scores were compared with the COVID-19-JEM attributed risk scores, by assessing the percentage agreement and weighted kappa (κ). Based on Measurement 4, logistic regression analyses were conducted to estimate the associations between all COVID-19-JEM risk scores and self-reported COVID-19 (infection in general and infected at work). Results: The agreement between the COVID-19-JEM and questionnaire-based risk scores was good ($\kappa \ge 0.70$) for most dimensions, except work location (κ = 0.56), and face covering (κ = 0.41). Apart from the precarious work dimensions, higher COVID-19-JEM assigned risk scores had higher odds ratios (ORs; ranging between 1.28 and 1.80) on having had COVID-19. Associations were stronger when the infection were thought to have happened at work (ORs between 2.33 and 11.62).

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Research Excellence Safe Work Healthy Workers Conclusions: Generally, the COVID-19-JEM showed a good agreement with self-reported infection risks and infection rates at work. The next step is to validate the COVID-19-JEM with objective data in the Netherlands and beyond.

Grifoni D, Betti G, Bogi A, Bramanti L, Chiarugi A, Gozzini B, et al. Protective measures from solar ultraviolet radiation for beach lifeguards in Tuscany (Italy): shade and clothing strategies. Safety and Health at Work. 2022; 13(4):421-428.

https://doi.org/10.1016/j.shaw.2022.08.009 [open access]

Abstract: BACKGROUND: The exposure to solar ultraviolet radiation is a significant risk factor generally underestimated by outdoor workers and employers. Several studies have pointed out that occupational solar exposure increased eye and skin diseases with a considerable impact on the lives and productivity of affected workers. The main purpose of this study was to evaluate the effectiveness against ultraviolet radiation of some measures recently undertaken for the protection of lifeguards in a coastal area of Tuscany. METHODS: Different shading structures (gazebos and beach umbrella) were tested during a sunny summer's day on a sandy beach by means of two radiometers; the UV protection offered by some T-shirts used by lifeguards was also tested in the laboratory with a spectrophotometer. RESULTS: The analysed shading structures strongly reduced the ultraviolet radiation by up to 90%, however a not always negligible diffuse radiation is also present in the shade, requiring further protective measures (T-shirt, sunglasses, sunscreen, etc.); the tested T-shirts showed a very good-excellent protection according to the Australian/New Zealand standard. CONCLUSION: Results obtained in this study suggest how the adoption and dissemination of good practices, including those tested, could be particularly effective as a primary prevention for lifeguards who are subjected to very high levels of radiation for long periods

Hashemian SM and Triantis K. Production pressure and its relationship to safety: a systematic review and future directions. Safety Science. 2023; 159:106045. https://doi.org/10.1016/j.ssci.2022.106045

Holmgren R, Sorensen K, Dalsager L, Rugulies R, Ostberg V, and Magnusson Hanson LL. Workplace bullying, symptoms of anxiety and the interaction with leadership quality: a longitudinal study using dynamic panel models with fixed effects. Scandinavian Journal of Work, Environment & Health. 2023; 49(1):64-74.

https://doi.org/10.5271/sjweh.4060 [open access]

Abstract: OBJECTIVES: Workplace bullying has been suggested to increase symptoms of anxiety. A reverse relationship has also been proposed. However, so far only few earlier studies have investigated this topic and the reported associations might partly be explained by unmeasured individual characteristics. In this study, we aim to examine the temporality and directionality between workplace bullying and anxiety symptoms, taking time-invariant characteristics into account. Furthermore, we aim to examine whether leadership quality modifies these associations. METHODS: We included 13 491 individuals from two nationwide



cohort studies in Sweden and Denmark. Using cross-lagged structural equation models (SEM) and dynamic panel models with fixed effects, we examined contemporaneous and lagged associations between self-reported workplace bullying and anxiety. Cohort-specific results were estimated and combined using fixed-effect meta-analysis. RESULTS: The cross-lagged SEM models supported contemporaneous and lagged relationships in both directions (from workplace bullying to symptoms of anxiety and vice versa). In contrast, only contemporaneous relationships remained statistically significant and of considerable magnitude in the dynamic panel models with fixed effects. Specifically, exposure to workplace bullying was related to a concurrent increase in anxiety symptoms (b=0.61, 95% confidence interval 0.32-0.90). No support of interaction with leadership quality was found. CONCLUSIONS: The results indicate that onset of workplace bullying is associated with an immediate or short-term increase in anxiety symptoms. This study provides novel insights regarding temporal aspects and causal inference of the bullying-anxiety relationship useful for managing psychological hazards and preventing mental illness at work

Modji KKS, Morris CR, Creswell PD, McCoy K, Aiello T, Grajewski B, et al. Lost time: COVID-19 indemnity claim reporting and results in the Wisconsin workers' compensation system from March 12 to December 31, 2020. American Journal of Industrial Medicine. 2022; 65(12):1006-1021.

https://doi.org/10.1002/ajim.23428 [open access]

Abstract: Background: The COVID-19 pandemic introduced a new compensable infectious disease to workplaces. Methods: This was a descriptive analysis of Wisconsin COVID workers' compensation (WC) claims between March 12 and December 31, 2020. The impact of the presumption law (March 12 to June 10, 2020) was also evaluated. Results: Less than 1% of working-age residents with COVID-19 filed a claim. COVID-19 WC claim rates (per 100,000 FTE) were notably low for frontline industry sectors such as Retail Trade (n = 115), Manufacturing (n = 88), and Wholesale Trade (n = 31). Healthcare workers (764 claims per 100,000 FTE) comprised 73.2% of COVID-19 claims. Most claims (52.8%) were denied and the proportion of denied claims increased significantly after the presumption period for both first responders and other occupations. Conclusion: The presumption law made benefits accessible primarily to first responders. Further changes to WC systems are needed to offset the individual and collective costs of infectious diseases.

Molaug I, Engdahl B, Degerud E, Mehlum IS, and Aarhus L. Occupation and 20-year hearing decline: findings from The HUNT Study. Occupational Medicine. 2022; 72(9):622-628. https://doi.org/10.1093/occmed/kqac085 [open access]

Abstract: Background: Studies show that certain occupations are associated with an increased risk of hearing loss. However, many studies are cross-sectional, and the few longitudinal studies are mostly small or focus on only one occupation. Aims: We aimed to quantify the long-term hearing decline among workers in different occupations and assess whether the change differs between the occupations. Methods: The study population was



& Research Excellence Safe Work Healthy Workers 4525 adults who participated in two population-based health studies in Norway, HUNT2 1996-1998 and HUNT4 2017-2019. Linear regression models assessed the association between occupations (clerks as reference) and 20-year hearing decline (hearing thresholds at 3-6 kHz, averaged over both ears) from HUNT2 to HUNT4. Models were adjusted for age, sex, recurrent ear infections, smoking and ear pathology. Results: Among the participants (40% men), the mean age at HUNT2 was 31.2 ± 5.4 years (range 20-39) and the average 20-year hearing decline was 11.3 ± 9.8 dB. Occupations that were associated with larger hearing decline included other craft and related trades workers (3.9 dB, 95% confidence interval [CI] 0.2-7.7) and building frame and related trades workers (3.4 dB, 95% CI 1.3-5.4). Among occupations with larger hearing decline, a higher proportion of the workers reported exposure to noise. Conclusions: This large longitudinal study shows a larger long-term hearing decline among building frame workers and craft and related trades workers. Differences between occupations were modest, which may indicate successful preventive measures in Norway during the last two decades.

Nowrouzi-Kia B, Gohar B, Sithamparanathan G, Sun RY, and Casole J. Workplace mental health characteristics of the Indigenous workforce in Canada: a descriptive study. Work. 2023; 4:129-136.

https://doi.org/10.3233/WOR-210927

Abstract: Background: The Indigenous workforce in Canada is challenged by a history of Euro-Canadian colonialism that has presented deleterious health outcomes, including those in the workplace. Objective: The aim of this study was to describe the workplace mental health of Indigenous workers. Methods: We used the Canadian Community Health Survey (CCHS) between 2015 to 2016. Data were analyzed using the Public Use Microdata Files to profile the workplace mental health characteristics of First Nation Canadians (n = 6,297) and Canadians (n = 84,155). We utilized secondary data analysis design. The analyses included descriptive statistics (e.g., means and standard deviations) of self-reported mood disorders (depression, bipolar, mania, dysthymia), anxiety (phobia, OCD, panic) and occupational factors (e.g., demographic, days off work due to an acute mental health condition, job type, and job stress) in indigenous peoples living off-reserve and other Aboriginal settlements in the provinces. Results: We examined the indigenous cohort between the ages of 18-64 who were employed. The sample was 53.1% male, married (34.8%), and obtained a post-secondary diploma or university degree (57.9%). The study reported statistically significant gender and age differences across mood and anxiety disorders (p < 0.05), job stress (p < 0.05) and workload (p < 0.05). Conclusion: To the best of our knowledge, this is the first study to describe the work profile of indigenous populations in Canada across various occupational mental health (e.g., mood disorders, anxiety) and demographic (e.g., age, education attainment) outcomes.



Poirier S, Allard-Gaudreau N, Gendron P, Houle J, and Trudeau F. Health, safety, and wellness concerns among law enforcement officers: an inductive approach. Workplace Health & Safety. 2023; 71(1):34-42.

https://doi.org/10.1177/21650799221134422

Abstract: Background: Although studies have assessed the impact of occupational risk factors on the health of law enforcement officers (LEO's), few have involved (LEO's) as informants in ways that allow their points of view to be heard directly. Thus, the objective of this study is to explore the occupational health, safety, and wellness (OHSW) concerns of (LEO's). Methods: (LEO's) working in Quebec, Canada were invited to answer an open-ended question regarding their OHSW concerns. Using a multi-stage content analysis, the collected answers were analyzed and coded by two members of the research team to identify the most recurrent concerns of (LEO's). Findings: Five themes relating to the OHSW concerns of (LEO's) were identified, namely, the work schedule, occupational stress, work equipment, workplace health promotion, and operational risks. Furthermore, our analyses highlighted differences in the concerns of (LEO's) based on their level of experience and sex. Conclusions/Application to Practice: This study addresses a gap in the literature on the OHSW concerns from the perspective of (LEO's). Overall, our results support that the work schedule and occupational stress associated with law enforcement are the two most recurrent concerns of (LEO's). Thus, the results of this study further stress the need for police organizations to implement strategies and policies, which could mitigate the deleterious effects of these hazards on the overall wellness of (LEO's)

Ropponen A, Gluschkoff K, Ervasti J, Kivimaki M, Koskinen A, Krutova O, et al. Working hour patterns and risk of occupational accidents. An optimal matching analysis in a hospital employee cohort. Safety Science. 2023; 159:106004.

https://doi.org/10.1016/j.ssci.2022.106004 [open access]

Abstract: Background Hypothesis-free studies applying advanced statistical analysis of objective working hour patterns and occupational accidents are lacking. This study aimed to identify patterns of working hours among hospital employees and to investigate the associations between the identified patterns and the risk of an occupational accident. Method In this cohort study of 4419 hospital employees, we collected electronic payroll-based working hour data (i.e., timing and duration) for each participant and linked them to records of occupational accident register between 2008 and 2018. We used optimal matching to assess similarity between individual working hour patterns for a period of 7 days preceding an accident or, for employees without an accident, a random pseudo-accident date. Using cluster analysis, we categorized employees into working hour pattern clusters. Log-binomial regression was used to examine risk ratios (RR) with 95 % confidence intervals (CI) of an occupational accident which took place either at the workplace (65 %) or while commuting (35 %). Six clusters of working hour patterns were identified. Compared to the cluster with the fewest accidents, clusters with a higher proportion of accidents were characterized by

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late work shifts and a high proportion of quick returns (<11-hour shift interval,) and long work shifts (>12-hour shift), RR 1.31, 95 %CI 1.13–1.52 for the cluster with the most accidents. Conclusions This data-driven study suggests that working late and long with insufficient rest is associated with increased probability of occupational accidents. Working hour arrangements in 24/7 care of hospital merit attention to regularity and sufficient rest to support occupational safety.

Mohamad Sabri MQ, Judd J, Roslan NFA, and Che Daud AZ. Hand characteristics and functional abilities in predicting return to work in adult workers with traumatic hand injury. Work. 2022; 73(4):1245-1253.

https://doi.org/10.3233/WOR-205164

Abstract: Background: Hand injuries affect a person's functioning, thus impeding their abilities to return to work. There is a limited understanding in return to work of the overall predictors when including hand characteristics and functional abilities. Therefore, it is essential to identify the most relevant predictors in return to work among individuals with a hand injury. Objectives: (1) To compare hand function characteristics and functional abilities of injured workers who have or have not returned to work. (2) To estimate hand function characteristics and functional abilities as predictors to return to work. Methods: One hundred and fifteen adult workers with hand injuries aged 18-59 years old from five general hospitals in Malaysia participated in a cross-sectional study. Predictors were estimated using logistic regression. Results: There was a significant association between occupational sector (p =(0.012), injury duration (p = 0.024), occupational performance (p = 0.009) and satisfaction with performance (p < 0.001), grip strength of injured hand (p = 0.045 - 0.002) and the Disability of Arm, Shoulder and Hand (DASH) disability/symptom (p = 0.001) with the person's return to work status. Significant predictors of return to work were identified using the Canadian Occupational Performance Measure (COPM) satisfaction's score, DASH disability/symptoms' score and duration of the injury. Conclusion: As two main predictors of return to work were COPM satisfaction and DASH disability/symptoms, occupational therapists working in rehabilitation should focus on achieving functional performance and satisfaction within the optimal time.

Sachse T, Mathes T, Dorando E, He β S, Thurmann P, Schmiedl S, et al. A review found heterogeneous approaches and insufficient reporting in overviews on adverse events. Journal of Clinical Epidemiology. 2022; 151:104-112.

https://doi.org/10.1016/j.jclinepi.2022.08.004

Abstract: OBJECTIVES: To investigate reporting and methodological characteristics of overviews on adverse (drug-associated) events (AEs) of pharmacological interventions. STUDY DESIGN AND SETTING: We searched MEDLINE, Embase, Epistemonikos, and the Cochrane Database of Systematic Reviews from inception to May 17, 2021 for overviews exclusively investigating AEs of pharmacological interventions. We extracted general, reporting, and methodological characteristics and analyzed data descriptively. RESULTS: We



k Research Excellence Safe Work Healthy Workers included 27 overviews, 70% of which were published in 2016 or later. The most common nomenclature in the title was "overview" (56%), followed by "umbrella review" (26%). The median number of included systematic reviews (SRs) in each overview was 15 (interquartile range 7-34). Study selection methods were reported in 52%, methods for data extraction in 67%, and methods for critical appraisal in 63% of overviews. An assessment of methodological quality of included SRs was performed in 70% of overviews. Only 22% of overviews reported strategies for dealing with overlapping SRs. An assessment of the certainty of the evidence was performed in 33% of overviews. CONCLUSION: To ensure methodological rigor, authors of overviews on AEs should follow available guidance for the conduct and reporting of overviews

Toren K, Albin M, Alderling M, Schioler L, and Aberg M. Transmission factors and exposure to infections at work and invasive pneumococcal disease. American Journal of Industrial Medicine. 2023; 66(1):65-74.

https://doi.org/10.1002/ajim.23439

Abstract: BACKGROUND: Working in close contacts with coworkers or the general public may be associated with transmission of invasive pneumococcal disease (IPD). We investigated whether crowded workplaces, sharing surfaces, and exposure to infections were factors associated with IPD. METHODS: We studied 3,968 cases of IPD, and selected six controls for each case from the Swedish population registry with each control being assigned the index date of their corresponding case. We linked job histories to job-exposure matrices to assess different transmission dimensions of pneumococci, as well as occupational exposure to fumes. We used adjusted conditional logistic analyses to estimate the odds ratios (ORs) for IPD with 95% confidence intervals (95% CI). RESULTS: ORs for IPD for the different transmission dimensions were increased moderately but were statistically significant. Compared to home-working or working alone, the highest odds was for Working mostly outside, or partly inside (OR 1.19, 95% CI 1.04-1.38). Estimates were higher in men for all dimensions, compared to women. The odds for IPD for Working mostly outside, or partly inside were 1.33 (95% Cl 1.13-1.56) and 0.79 (95% Cl 0.55-1.14) for men and women, respectively. Higher odds were seen for all transmission dimensions among those exposed to fumes, although CIs included unity. Contact with ill or infected patients did not increase the odds for IPD. CONCLUSION: IPD was associated with working in close contact with coworkers or the general public, and with outside work, especially for men. Contact with infected patients or persons was not associated with IPD

Zermane A, Mohd Tohir MZ, Zermane H, Baharudin MR, and Mohamed Yusoff H. Predicting fatal fall from heights accidents using random forest classification machine learning model. Safety Science. 2023; 159:106023.

https://doi.org/10.1016/j.ssci.2022.106023



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