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

***Banta-Green CJ, Owens MD, Williams JR, Sears JM, Floyd AS, Williams-Gilbert W, et al. The community-based medication-first program for opioid use disorder: a hybrid implementation study protocol of a rapid access to buprenorphine program in Washington State. *Addiction Science & Clinical Practice*. 2022; 17(1):34.**

<https://doi.org/10.1186/s13722-022-00315-4> [open access]

Abstract: BACKGROUND: Opioid use disorder (OUD) is a serious health condition that is effectively treated with buprenorphine. However, only a minority of people with OUD are able to access buprenorphine. Many access points for buprenorphine have high barriers for initiation and retention. Health care and drug treatment systems have not been able to provide services to all-let alone the majority-who need it, and many with OUD report extreme challenges starting and staying on buprenorphine in those care settings. We describe the design and protocol for a study of a rapid access buprenorphine program model in six Washington State communities at existing sites serving people who are unhoused and/or using syringe services programs. This study aimed to test the effectiveness of a Community-Based Medication-First Program model. METHODS: We are conducting a hybrid effectiveness-implementation study of a rapid access buprenorphine model of care staffed by prescribers, nurse care managers, and care navigators. The Community-Based Medication-First model of care was designed as a 6-month, induction-stabilization-transition model to be delivered between 2019 and 2022. Effectiveness outcomes will be tested by comparing the intervention group with a comparison group derived from state records of people who had OUD. Construction of the comparison group will align characteristics such as geography,

demographics, historical rates of arrests, OUD medication, and health care utilization, using restriction and propensity score techniques. Outcomes will include arrests, emergency and inpatient health care utilization, and mortality rates. Descriptive statistics for buprenorphine utilization patterns during the intervention period will be documented with the prescription drug monitoring program. DISCUSSION: Results of this study will help determine the effectiveness of the intervention. Given the serious population-level and individual-level impacts of OUD, it is essential that services be readily available to all people with OUD, including those who cannot readily access care due to their circumstances, capacity, preferences, and related systems barriers

***Carnide N, Lee H, Landsman V, Frone MR, Furlan AD, and Smith PM. Cannabis use and workplace cannabis availability, perceptions and policies among Canadian workers: a comparison before and after the legalisation of non-medical cannabis. Occupational and Environmental Medicine. 2022; [epub ahead of print].**

<https://doi.org/10.1136/oemed-2022-108316> [open access]

Abstract: OBJECTIVES: Little data exist examining the impact of non-medical (recreational) cannabis legalisation among a working population. The objective was to compare cannabis use patterns and workplace risk perceptions, cannabis availability and workplace use policies before and almost 1 year after legalisation in Canadian workers. METHODS: Two overlapping cross-sectional samples of Canadian workers were surveyed 4 months before legalisation (time 1 (T1), n=2011) and 9-11 months after legalisation (time 2 (T2), n=4032), gathering information on cannabis use (overall and workplace use), workers' perceptions regarding risks of workplace use, availability of cannabis at work and awareness of workplace substance use policies. The marginal distributions of these variables at T1 and T2 were compared, adjusting for sociodemographic, work and health and lifestyle factors. RESULTS: Cannabis use status changed from prelegalisation to postlegalisation ($p < 0.0001$), with fewer respondents reporting former use (ie, more than 1 year ago; 40.4% at T1, 33.0% at T2) and a greater proportion of workers reporting past-year use (30.4% at T1, 39.3% at T2). Never use remained stable (29.2% at T1, 27.6% at T2). Workplace cannabis use also remained stable (9.4% at T1, 9.1% at T2; $p = 0.4580$). At T1, 62.7% of respondents reported being aware of their workplace having a substance use policy, increasing to 79.0% at T2 ($p < 0.0001$). Small magnitude changes occurred in perceptions of risk and workplace availability. CONCLUSIONS: Results point to a lack of substantive changes in the short-term from prelegalisation to postlegalisation. Longer-term data among workers are needed given the evolving nature of this legislative policy

***Gignac MAM, Bowring J, Tonima S, Franche RL, Thompson A, Jetha A, Smith PM, MacDermid JC, Shaw WS, Van Eerd D, Beaton DE, Irvin E, Tompa E and Saunders R. A sensibility assessment of the Job Demands and Accommodation Planning Tool (JDAPT): a tool to help workers with an episodic disability plan workplace support. *Journal of Occupational Rehabilitation*. 2022; [epub ahead of print].**

<https://doi.org/10.1007/s10926-022-10057-4> [open access]

Abstract: Purpose Sensibility refers to a tool's comprehensiveness, understandability, relevance, feasibility, and length. It is used in the early development phase to begin assessing a new tool or intervention. This study examined the sensibility of the job demands and accommodation planning tool (JDAPT). The JDAPT identifies job demands related to physical, cognitive, interpersonal, and working conditions to better target strategies for workplace supports and accommodations aimed at assisting individuals with chronic health conditions. Methods Workers with a chronic health condition and workplace representatives were recruited from health charities, workplaces, and newsletters using convenience sampling. Cognitive interviews assessed the JDAPT's sensibility. A 70% endorsement rate was the minimum level of acceptability for sensibility concepts. A short screening tool also was administered, and answers compared to the complete JDAPT. Results Participants were 46 workers and 23 organizational representatives (n=69). Endorsements highly exceeded the 70% cut-off for understandability, relevance, and length. Congruence between screening questions and the complete JDAPT suggested both workers and organizational representatives overlooked job demands when completing the screener. Participants provided additional examples and three new items to improve comprehensiveness. The JDAPT was rated highly relevant and useful, although not always easy to complete for someone with an episodic condition. Conclusions This study highlights the need for tools that facilitate accommodations for workers with episodic disabilities and provides early evidence for the sensibility of the JDAPT

***Shadaan R. Healthier nail salons: from feminized to collective responsibilities of care. *Environmental Justice*. 2022; [epub ahead of print].**

<https://doi.org/10.1089/env.2021.0097> [open access]

Abstract: The nail salon is a site in which multiple hazards intersect. This includes exposure to toxicants, poor ergonomics, verbal abuses, and labor exploitation—harms that disproportionately impact newcomer and immigrant women workers. One response to toxic exposures in the nail salon is the Healthy Nail Salon model—a voluntary and incentive-based initiative to encourage salon owners to implement safer practices and products. While initiated with good intentions, the Healthy Nail Salon model reflects the tenets of neoliberal responsabilization. Responsibilities for protection are transferred to consumers, particularly women per feminized responsibilities for care-work and social reproduction. In contrast, this article puts forth the perspectives of 37 nail technicians primarily from Chinese, Vietnamese, and Korean communities in Toronto, Ontario. Participants were asked: "How do we create healthier workplaces?" In response, participants shared both individual-level and collective-

level solutions—the latter of which have the potential to positively transform the sector. Collective-oriented protections in this context reflect three interconnected "sites of resistance": Addressing systemic inequities in the Canadian labor market, promoting worker solidarities, and emphasizing the state's responsibilities in occupational health protection—all of which reflect a broadened politics of care. These broad-based and worker-defined interventions pose a challenge to neoliberal-oriented attacks on worker protection.

Arafa A, Shehata A, Youssef M, and Senosy S. Violence against healthcare workers during the COVID-19 pandemic: a cross-sectional study from Egypt. Archives of Environmental & Occupational Health. 2022; 77(8):621-627.

<https://doi.org/10.1080/19338244.2021.1982854>

Abstract: Workplace violence (WPV) is a serious endemic phenomenon in healthcare settings, and it has been escalating during the COVID-19 pandemic. In this cross-sectional study, healthcare workers (HCWs) (105 physicians and 104 nurses) working at two public hospitals accepting patients with COVID-19 in Egypt were included. Using a self-administered questionnaire distributed in January 2021, data about HCWs' sociodemographic and occupational characteristics and their exposure to psychological and physical WPV during the past six months were collected. The results showed that the prevalence of psychological and physical WPV was 42.6% and 9.6%, respectively. Relatives of patients were the perpetrators in most WPV incidents. HCWs did not report 57.3% of psychological and 10.0% of physical WPV incidents. Female sex, having physical contact with patients, and working rotational shifts were associated with the increased exposure to psychological and physical WPV. In conclusion, this study showed a high prevalence of WPV against HCWs in Egyptian public hospitals during the COVID-19 pandemic

Badarin K, Hemmingsson T, Hillert L, and Kjellberg K. The impact of musculoskeletal pain and strenuous work on self-reported physical work ability: a cohort study of Swedish men and women. International Archives of Occupational & Environmental Health. 2022; 95(5):939-952.

<https://doi.org/10.1007/s00420-021-01816-6> [open access]

Abstract: OBJECTIVE: We investigated the separate and combined effects of musculoskeletal pain (MSP) and strenuous work (heavy physical workload (PWL)/low-decision authority) on poor physical work ability (WA). METHODS: This study uses baseline data from the 2010 Stockholm Public Health Questionnaire (SPHQ) including 9419 workers with good physical WA. Exposure to PWL and decision authority were estimated using sex-specific job-exposure matrices linked to occupations. Exposures (high/low) were combined with the presence of MSP. Follow-up data on physical WA were taken from the 2014 SPHQ and dichotomised (the responses: "moderate", "rather poor" and "very poor" indicated poor WA). Logistic regression models calculated sex-specific odds ratios adjusting for age, education and health and lifestyle factors. Interaction between MSP and strenuous work was examined using the synergy index (SI). Analyses were conducted using SPSS.27. RESULTS: MSP, heavy PWL and

low-decision authority were separately associated with poor WA. MSP was associated with higher odds of poor WA than strenuous work for women, the opposite for men. Combinations of MSP and strenuous work often resulted in higher risks of poor WA than when adding the effects of the single exposures (e.g., MSP and heavy PWL men: AOR 4.04 95% CI 2.00-8.15, women: AOR: 3.25 95% CI 1.81-5.83). The SI was non-significant for both sexes. CONCLUSION: Workers with MSP and strenuous work often had higher risks of poor WA than would be expected from adding the effects of the single exposures. To decrease poor WA in this group, strenuous work should be lowered, and MSP addressed in workplaces

Fabiano B, Pettinato M, Curro F, and Reverberi AP. A field study on human factor and safety performances in a downstream oil industry. Safety Science. 2022; 153:105795.

<https://doi.org/10.1016/j.ssci.2022.105795> [open access]

Abstract: Safety culture and awareness by workers are pivotal tools for the implementation of systematic procedures aiming to risk mitigation in the process industry. The evaluation of human factors on safety performance can reveal unsafe attitudes and failures in training, supervision and management, whose correction greatly contribute to the enhancement of safety program. In this work, the role of human factors in an oil industry was studied by the collection of field data through a structured questionnaire filled by shift, daily and outsourced workers. A deep investigation on the variables involved in the process was carried out, firstly quantifying three conceptual key dimensions (individual, human resource management, equipment and technology) and then analyzing data by means of Response Surface Methodology (RSM), to identify the statistical significant factors and the overall level of safety awareness, behaviour and risk perception of the respondents.

Holmlund L, Hellman T, Engblom M, Kwak L, Sandman L, Tornkvist L, et al. Coordination of return-to-work for employees on sick leave due to common mental disorders: facilitators and barriers. Disability and Rehabilitation. 2022; 44(13):3113-3121.

<https://doi.org/10.1080/09638288.2020.1855263> [open access]

Abstract: Purpose To identify facilitators of and barriers to the coordination of return-to-work between the primary care services, the employee, and the employers from the perspective of coordinators and employees on sick leave due to common mental disorders (CMDs). Material and methods Descriptive qualitative study. Semi-structured interviews were conducted with eighteen coordinators and nine employees on sick leave due to CMDs. The Consolidated Framework for Implementation Research (CFIR) was used as a starting point for the interview guides and in the thematic analysis of data. Results The results show facilitators and barriers related to the CFIR domains "intervention characteristics," "outer setting," "inner setting," and "characteristics of individuals." Positive attitudes, an open dialogue in a three-party meeting, and a common ground for the sick leave process at the primary care centre facilitated coordination, while an unclear packaging, conflicts at the employee's workplace, and a lack of team-based packaging were examples of barriers. Conclusion The results indicate a need for the detailed packaging of coordination; formalization of coordinators' qualifications

and levels of training; and acknowledgement of the role of organizational factors in the implementation of coordination. This is important to further develop and evaluate the efficacy of coordination. **IMPLICATIONS FOR REHABILITATION** Positive attitudes to coordination, an open dialogue in a three-party meeting, leadership engagement, routines for the return to work (RTW) process at the primary care centre, and collegial alliances were identified as facilitators. An unclear packaging of the intervention, conflicts at the employee's workplace, lack of team-based work, and lack of coordinator training were identified as barriers. A detailed intervention packaging adapted for the specific setting and formalization of coordinators' qualifications and training is necessary for coordination of RTW. Recognizing organizational factors were identified as being important for the implementation of coordination of RTW for persons on sick leave due to CMDs.

Hoosain M, Bosa F, Conolly NB, Janse van Rensburg H, Mayet N, and Titus T. Workplace-based rehabilitation with garment workers: a multiple case study. *Work*. 2022; 72(2):453-462.

<https://doi.org/10.3233/WOR-210540>

Abstract: Background: Garment workers are at risk of developing work-related upper limb disorders (WRULD) due to the highly repetitive nature of their work. Workplace-based rehabilitation (WBR) facilitates improvement in work performance by providing intervention at the worker's place of work. Objective: This study aims to determine the documented outcomes of workplace-based occupational therapy rehabilitation of garment workers with upper limb conditions. Methods: A multiple case study design was used through a retrospective record review. All garment workers with upper limb conditions who were treated at a student occupational therapy practice in Cape Town, South Africa, with pre- and post-intervention outcome assessment, were included in the study (n = 7). Data were extracted from occupational therapy and medical files. Results: 70% of the cases (n = 5) improved after WBR while 30% of cases showed no improvement or deterioration. Participants received 3- 5 individual WBR sessions of approximately 30 minutes each, over a period of 4 to 6 weeks. Interventions included workstation adaptations, job rotation, psychoeducation, work task modification, assistive technology and exercise programmes. Outcome measures most commonly used were the RULA, DASH, Boston Carpal Tunnel Questionnaire and pain intensity using the VAS. Conclusion: Workplace-based occupational therapy can be effective at improving upper limb function, pain and ergonomic risk amongst garment workers with upper limb conditions.

Lindgren I, Brogardh C, Pessah-Rasmussen H, Jonasson SB, and Gard G. Work conditions, support, and changing personal priorities are perceived important for return to work and for stay at work after stroke: a qualitative study. Disability and Rehabilitation. 2022; 44(11):2500-2506.

<https://doi.org/10.1080/09638288.2020.1836522>

Abstract: Purpose: To explore work related and personal facilitators and barriers for return to work (RTW) and stay at work after stroke. Materials and methods: Twenty individuals post-stroke (median age 52 years; seven women) were interviewed in focus groups. Data were analyzed by using qualitative content analysis. Results: An overall theme "Work conditions, support and changed personal priorities influenced RTW and stay at work after stroke" emerged and covered three categories: "Adjustments and flexibility at the work place facilitated RTW and a sustainable work situation", "Psychosocial support and knowledge about stroke consequences facilitated work and reduced stress", and "Changed view of work and other personal priorities". Physical adjustments at the work place and flexibility in the work schedule were perceived facilitators. Support from family and colleagues were important, whereas lack of knowledge of stroke disabilities at the work place was perceived a barrier. Also changed personal priorities in relation to the work and the current life situation influenced RTW in various ways. Conclusions: The individual's opportunities to influence the work situation is a key factor for RTW and the ability to stay at work after stroke.

Adjustments, flexibility, support, knowledge of stroke, and receptivity to a changed view of work are important for a sustainable work situation. Implications for rehabilitation Physical adjustments at the work place, a flexible work schedule and support increase the individual's possibility to RTW and maintain a sustainable work situation after stroke. Changed work and life priorities after a stroke need attention in the RTW process. Rehabilitation professionals have an important role in providing knowledge about the disabilities following stroke, and how they impact work ability. Individually tailored recommendations for work place adjustments which enable RTW and a sustainable work situation are warranted.

Louzado-Feliciano P, Santiago KM, Ogunsina K, Kling HE, Murphy LA, Schaefer SN, et al. Characterizing the health and safety concerns of U.S. rideshare drivers: a qualitative pilot study. Workplace Health & Safety. 2022; 70(7):310-318.

<https://doi.org/10.1177/21650799221076873>

Abstract: Background: Despite the growth and popularity of gig work, limited information exists about the occupational health and safety concerns faced by individuals who are employed through ridesharing online applications. In this qualitative study, we characterized the perceived health and safety concerns of drivers employed by rideshare companies.

Methods: During September-October 2019, we requested car rides, using digital rideshare platforms. During the ride, drivers responded verbally to a brief closed-end sociodemographic and work characteristics survey. A semi-structured interview script was used to collect rideshare driver perceptions on health and safety risks. Findings: A total of 35 rideshare drivers of group mean age of 43.1 ± 11.2 years were interviewed, of whom 77.1%

were male and 82.9% identified as Latino. Sixty percent of participants reported rideshare as their primary job, working an average of 47.9 ± 19.6 hours weekly (minimum = 6 hours, maximum = 84 hours). Drivers enjoyed job autonomy yet faced stressors such as passenger risky behavior, car accidents, and lack of policies that protect the driver. Rideshare drivers also raised concerns about their current health status, economic pressures, and worker safety. Conclusion/application to practice: Drivers are forced to extend work hours to support themselves financially, exacerbating their current health concerns and safety risks as it means more time spent working in their sedentary job, compromising their mental and physical health as well as their safety. Occupational health and safety programs geared toward workers in the gig economy are needed.

Moretti Anfossi C, Ahumada MM, Tobar Fredes C, Perez RF, Ross J, Head J, et al. Work exposures and development of cardiovascular diseases: a systematic review. *Annals of Work Exposures and Health*. 2022; 66(6):698-713.

<https://doi.org/10.1093/annweh/wxac004> [open access]

Abstract: INTRODUCTION: Cardiovascular diseases (CVDs) are the number one cause of death, and there is evidence that work exposures could be associated with their development. This study aimed to systematically review observational studies of adults exposed to job strain, effort-reward imbalance, long working hours, job insecurity, shift work, and occupational noise, and assess the association of those work exposures with CVDs. METHODS: The Navigation Guide framework was applied. The population were adults of working age (18-65), and cohort and case-control studies were included. The work exposures were job strain, effort-reward imbalance, long working hours, job insecurity, shift work, and occupational noise. The outcomes were cerebrovascular diseases, ischaemic heart disease, and hypertensive diseases. The selection, data extraction, risk of bias assessment, and quality assessment were carried out by two reviewers independently and disagreements were solved by a third reviewer or by consensus. The synthesis of the results was done by applying the 'vote counting based on direction' method, and the results were summarized in an effect direction plot. The strength of the evidence for every risk factor and CVD was defined by consensus. RESULTS: A total of 17 643 papers were initially identified in the literature search, but after applying the filters by title and abstract, and full text, 86 studies were finally included. From the included studies, sufficient evidence was found of the harmfulness of job strain for cerebrovascular disease and ischemic heart disease. Furthermore, there was sufficient evidence of the harmfulness of shift work for ischemic heart disease. Evidence of no relationship was found between long working hours and shift work with ischaemic heart disease and hypertensive disease, respectively. The other associations of work exposures and CVDs had limited or inadequate evidence of harmfulness. CONCLUSIONS: In this comprehensive review, there was sufficient evidence of a harmful relationship between job strain, shift work, and CVDs. For the other work exposures, more high-quality studies are needed. In order to improve current prevention strategies for CVDs, the findings of this review imply that job strain and shift work are work exposures that constitute additional risk

factors that could be approached as targets for worksite interventions. SYSTEMATIC REVIEW REGISTRATION: PROSPERO CRD42020179972

Navarro KM, Butler CR, Fent K, Toennis C, Sammons D, Ramirez-Cardenas A, et al. The Wildland Firefighter Exposure and Health Effect (WFFEHE) study: rationale, design, and methods of a repeated-measures study. *Annals of Work Exposures and Health*. 2022; 66(6):714-727.

<https://doi.org/10.1093/annweh/wxab117>

Abstract: The wildland firefighter exposure and health effect (WFFEHE) study was a 2-year repeated-measures study to investigate occupational exposures and acute and subacute health effects among wildland firefighters. This manuscript describes the study rationale, design, methods, limitations, challenges, and lessons learned. The WFFEHE cohort included fire personnel ages 18-57 from six federal wildland firefighting crews in Colorado and Idaho during the 2018 and 2019 fire seasons. All wildland firefighters employed by the recruited crews were invited to participate in the study at preseason and postseason study intervals. In 2019, one of the crews also participated in a 3-day midseason study interval where workplace exposures and pre/postshift measurements were collected while at a wildland fire incident. Study components assessed cardiovascular health, pulmonary function and inflammation, kidney function, workplace exposures, and noise-induced hearing loss. Measurements included self-reported risk factors and symptoms collected through questionnaires; serum and urine biomarkers of exposure, effect, and inflammation; pulmonary function; platelet function and arterial stiffness; and audiometric testing. Throughout the study, 154 wildland firefighters participated in at least one study interval, while 144 participated in two or more study interval. This study was completed by the Centers for Disease Control and Prevention's National Institute for Occupational Safety and Health through a collaborative effort with the U.S. Department of Agriculture Forest Service, Department of the Interior National Park Service, and Skidmore College. Conducting research in the wildfire environment came with many challenges including collecting study data with study participants with changing work schedules and conducting study protocols safely and operating laboratory equipment in remote field locations. Forthcoming WFFEHE study results will contribute to the scientific evidence regarding occupational risk factors and exposures that can impact wildland firefighter health over a season and across two wildland fire seasons. This research is anticipated to lead to the development of preventive measures and policies aimed at reducing risk for wildland firefighters and aid in identifying future research needs for the wildland fire community

Noel C, Scharf D, Hawkins J, Lund J, Kozik J, and Pefoyo Kone A. Experiences, impacts and service needs of injured and ill workers in the WSIB process: evidence from Thunder Bay and District (Ontario, Canada). *Health Promotion and Chronic Disease Prevention in Canada*. 2022; 42(7):272-287.

<https://doi.org/10.24095/hpcdp.42.7.02> [open access]

Abstract: INTRODUCTION: Individuals experience negative physical, social and psychological ramifications when they are hurt or become ill at work. Ontario's Workplace Safety and Insurance Board (WSIB) is intended to mitigate these effects, yet the WSIB process can be difficult. Supports for injured workers can be fragmented and scarce, especially in underserved areas. We describe the experiences and mental health needs of injured and ill Northwestern Ontario workers in the WSIB process, in order to promote system improvements. METHODS: Community-recruited injured and ill workers (n = 40) from Thunder Bay and District completed an online survey about their mental health, social service and legal system needs while involved with WSIB. Additional Northwestern Ontario injured and ill workers (n = 16) and community service providers experienced with WSIB processes (n = 8) completed interviews addressing similar themes. RESULTS: Northwestern Ontario workers described the impacts of workplace injury and illness on their professional, family, financial and social functioning, and on their physical and mental health. Many also reported incremental negative impacts of the WSIB processes themselves, including regional issues such as "small town" privacy concerns and the cost burden of travel required by the WSIB, especially during COVID-19. Workers and service providers suggested streamlining and explicating WSIB processes, increasing WSIB continuity of care, and region-specific actions such as improving access to regional support services through arm's-length navigators. CONCLUSION: Northwestern Ontario workers experienced negative effects from workplace injuries and illness and the WSIB process itself. Stakeholders can use these findings to improve processes and outcomes for injured and ill workers, with special considerations for the North

Pollack R, Kreshpaj B, Jonsson J, Bodin T, Gunn V, Orellana C, et al. Low-quality employment trajectories and the risk of common mental health disorders among individuals with Swedish and foreign background: a register-based cohort study. *Scandinavian Journal of Work, Environment & Health*. 2022; 48(5):351-360.

<https://doi.org/10.5271/sjweh.4029> [open access]

Abstract: OBJECTIVE: This study aimed to examine the effects of low-quality employment trajectories on severe common mental disorders (CMD) according to Swedish and foreign background. METHODS: In this longitudinal study based on Swedish population registries (N=2703 687), low- and high-quality employment trajectories were the main exposures observed across five years (2005-2009), with severe CMD as outcome variable (2010-2017). Adjusted hazard ratios (HR) were calculated by means of Cox regression models and stratified according to Swedish and foreign background [first-generation (i) EU migrants, (ii) non-EU migrants, (iii) second-generation migrants, (iv) Swedish-born of Swedish background] and sex.

The reference group was Swedish-born of Swedish background in a constant high-quality employment trajectory. RESULTS: Second-generation migrants had an increased risk of CMD compared to Swedish-born of Swedish background when following low-quality employment trajectories [eg, male in constant low-quality HR 1.54, 95% confidence interval (CI) 1.41-1.68]. Female migrant workers, especially first-generation from non-EU countries in low-quality employment trajectories (eg, constant low-quality HR 1.66, 95% CI 1.46-1.88), had a higher risk of CMD compared to female Swedish-born of Swedish background. The risk for CMD according to employment trajectories showed little differences between first- and second-generation migrants. CONCLUSION: Low-quality employment trajectories appear to be determinants of risk for CMD in association with Swedish or foreign background of origin and sex. Our study shows a higher risk for severe CMD in second-generation and non-EU migrant compared to Swedish-born of Swedish background in constant low-quality employment. Further qualitative research is recommended to understand the mechanism behind the differential mental health impact of low-quality employment trajectories according to foreign background

De Rijk A, Carrasco-Negue K, and Houkes I. The Cross-Country Comparison Model for Labor Participation (CCC Model for LP) of persons with chronic diseases. Journal of Occupational Rehabilitation. 2022; 32(2):225-240.

<https://doi.org/10.1007/s10926-022-10041-y> [open access]

Abstract: Purpose To design a model based on the three pillars of new institutional theory (NIT), that facilitates cross-country comparison of labor participation (LP) of people with chronic diseases. This model should support getting a comprehensive overview of factors representing country differences, understanding these differences and should support estimating cross-country transferability of policies and interventions in the context of Work Disability Prevention. Methods Based on NIT, a draft model was designed by means of (1) a literature review of empirical studies; (2) theoretical books and articles; (3) a focus group with six expert researchers. This draft model was (4) adapted in the context of academic education. Literature was searched on Web of Science and EBSCO host. Feedback on (use of) the model was received from the focus group, four different academic courses at 28 occasions and two international conferences. Results The cross-country comparison model for labor participation (CCC model for LP) of persons with chronic diseases is proposed consisting of five factors: (1) Legislation; (2) Norms & values in practice; (3) Culture; (4) Organization of WDP in practice; (5) Labor market characteristics. Within these factors and based on (in)direct empirical evidence, subfactors are distinguished. The feedback received led to renaming (sub) factors, improved visual representation and a tool for estimating transferability. Conclusions The CCC model for LP of persons with chronic diseases allows for a comprehensive understanding of country differences and cross-country transferability of policies and interventions. The CCC model can be used for other populations when population-specific subfactors are included

Ringen K, Dement JM, Quinn P, Cloeren M, Chen A, Cranford K, et al. Hearing impairment and tinnitus among older construction workers employed at DOE facilities. American Journal of Industrial Medicine. 2022; 65(8):644-651.

<https://doi.org/10.1002/ajim.23406>

Abstract: BACKGROUND: Few studies have defined the risk of hearing impairment and tinnitus after retirement. This report measures hearing impairment and tinnitus prevalence among older construction trades workers. METHODS: The study cohort included 21,340 participants in a national medical screening program (www.btmed.org). Audiometric hearing impairment was classified according to the Global Burden of Disease Study. Tinnitus was determined by self-report. An internal subcohort of nonconstruction trades workers served as a reference group. Stratified analyses and multivariate analyses were used to measure the prevalence of hearing impairment and tinnitus by age, sex, and job category. RESULTS: Prevalence of any hearing impairment was 55.2% (males, 57.7%; females, 26.8%) and increased rapidly with age. Construction trades workers were 40% more likely to have hearing impairment than the reference group. The overall prevalence of tinnitus was 46.52% and followed patterns similar to hearing impairment. Workers with hearing impairment were more likely to also have tinnitus, but tinnitus was frequently reported in the absence of measured hearing impairment. CONCLUSIONS: Hearing impairment and tinnitus prevalence were much higher in this study than in previous research. A significant reason for the difference is that BTMed follows participants after they have retired. To draw conclusions about the risk for work-related chronic diseases and disorders it is important to monitor workers through their lifetimes. Also, tinnitus by itself should be given greater significance. These findings reinforce the need to promote noise reduction and hearing conservation in construction

Taeger D, Wichert K, Lehnert M, Casjens S, Pesch B, Weber DG, et al. Lung cancer and mesothelioma risks in a prospective cohort of workers with asbestos-related lung or pleural diseases. American Journal of Industrial Medicine. 2022; 65(8):652-659.

<https://doi.org/10.1002/ajim.23401>

Abstract: BACKGROUND: Asbestos causes mesothelioma and lung cancer. In the European Union, asbestos was banned in 2005, but it is still in use in many other countries. The aim of this study was to estimate the lung cancer and mesothelioma incidence risk of men with benign asbestos-related lung or pleural diseases. METHODS: Between 2008 and 2018, 2439 male participants of a German surveillance program for asbestos workers were included in the cohort. All participants had a recognized occupational asbestos-related disease of the pleura or lung. We estimated the mesothelioma and lung cancer risks by calculating standardized incidence ratios (SIR) with corresponding 95% confidence intervals (95% CI). RESULTS: We observed 64 incident lung cancer and 40 mesothelioma cases in the cohort. An SIR of 17.60 (95% CI: 12.57-23.96) was estimated for mesothelioma and 1.27 (95% CI: 0.98-1.62) for lung cancer. The presence of pleural plaques was associated with a strongly increased risk (SIR: 13.14; 95% CI: 8.51-19.40) for mesothelioma, but not for lung cancer (SIR:

1.05; 95% CI: 0.76-1.41). The highest lung-cancer risk (SIR: 2.56; 95% CI 1.10-5.04) was revealed for cohort members with less than 40 years since first asbestos exposure. Lung cancer risks by duration of asbestos exposure did not show a consistent time trend, but for time since last exposure a trend for mesothelioma was seen. CONCLUSIONS: Compared to the general population, we demonstrated an association between benign asbestos-related lung or pleural disease and mesothelioma risk in workers with a history of occupational asbestos exposure. Because lung-cancer risk is dominated by smoking habits, a possible effect of asbestos exposure may have been masked. Efforts should be made to ban production and use of asbestos worldwide and to establish safe handling rules of legacy asbestos

Witkoski Stimpfel A, Ghazal L, Goldsamt L, and Vaughan Dickson V. Individual and work factors associated with psychosocial health of registered nurses during the COVID-19 pandemic: a mixed methods study. *Journal of Occupational & Environmental Medicine*. 2022; 64(6):515-524.

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Abstract: OBJECTIVE: To describe the initial influence of the Covid-19 pandemic on U.S. nurses' psychosocial health, and to identify factors associated with poor psychosocial health outcomes. METHODS: We conducted a convergent (QUAN+qual) mixed methods study. From June to August 2020, we administered surveys (N = 629) and conducted semi-structured interviews (N = 34) among nurses working across healthcare settings in 18 states. We developed separate multivariable logistic regression models for three psychosocial outcomes (anxiety, depressive symptoms, insomnia). We used content analysis to process and analyze qualitative data, and integrated results in the final analysis step. RESULTS: Nurses reported high rates of depressive symptoms (22%), anxiety (52%), and insomnia (55%). Disturbances to sleep were both a contributing factor to, and an outcome of, poor psychosocial health. CONCLUSIONS: Evidence-based interventions addressing work stress and sleep, and proactive monitoring of nurses' psychosocial health by employers are urgently needed

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