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August 4, 2017

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***Tomba E, Kalcevich C, McLeod C, Lebeau M, Song C, McLeod K, Kim J, and Demers PA. The economic burden of lung cancer and mesothelioma due to occupational and para-occupational asbestos exposure. Occupational and Environmental Medicine. 2017; [Epub ahead of print]. <http://dx.doi.org/10.1136/oemed-2016-104173>**

Abstract: OBJECTIVES: To estimate the economic burden of lung cancer and mesothelioma due to occupational and para-occupational asbestos exposure in Canada. METHODS: We estimate the lifetime cost of newly diagnosed lung cancer and mesothelioma cases associated with occupational and para-occupational asbestos exposure for calendar year 2011 based on the societal perspective. The key cost components considered are healthcare costs, productivity and output costs, and quality of life costs. RESULTS: There were 427 cases of newly diagnosed mesothelioma cases and 1904 lung cancer cases attributable to asbestos exposure in 2011 for a total of 2331 cases. Our estimate of the economic burden is \$C831 million in direct and indirect costs for newly identified cases of mesothelioma and lung cancer and \$C1.5 billion in quality of life costs based on a value of \$C100 000 per quality-adjusted life year. This amounts to \$C356 429 and \$C652 369 per case, respectively. CONCLUSIONS: The economic burden of lung cancer and mesothelioma associated with occupational and para-occupational asbestos exposure is substantial. The estimate identified is for 2331 newly diagnosed, occupational and para-occupational exposure cases in 2011, so it is only a portion of the burden of existing cases in that year. Our findings provide important information for policy decision makers for priority setting, in particular the merits of banning the mining of asbestos and use of products containing asbestos in countries where they are

still allowed and also the merits of asbestos removal in older buildings with asbestos insulation

Burgel BJ and Elshatarat RA. Psychosocial work factors and low back pain in taxi drivers. American Journal of Industrial Medicine. 2017; 60(8):734-746.

<http://dx.doi.org/10.1002/ajim.22732>

Abstract: INTRODUCTION: Taxi drivers are at high risk for low back pain (LBP). AIM: Identify the association between psychosocial-work factors (Job strain, Iso-strain, effort-reward imbalance [ERI], unfairness, and mental exertion) and LBP in taxi drivers. METHODS: A cross-sectional study was done with 129 taxi drivers. RESULTS: Approximately 63% reported LBP in the prior 12 months. Chi square or t-test analyses identified the associations between demographic, work, health, and psychosocial work factors, and self-report of LBP in the prior 12 months. Depression, perceived physical exertion, dispatcher and manager support, unfair treatment at work, and unfair treatment due to nationality were significantly associated with LBP in bivariate analyses. Multivariate logistic regression was done to identify the predictors of LBP. High dispatcher support remained the sole significant predictor for lower prevalence of LBP (OR = 0.66, P = 0.017). CONCLUSION: Greater understanding of psychosocial work factors may aid in developing interventions to prevent LBP in taxi drivers

Feng Y, Wu P, Ye G, and Zhao D. Risk-compensation behaviors on construction sites: demographic and psychological determinants. Journal of Management in Engineering. 2017; 33(4):04017008-1-04017008-110.

[http://dx.doi.org/10.1061/\(ASCE\)ME.1943-5479.0000520](http://dx.doi.org/10.1061/(ASCE)ME.1943-5479.0000520)

Han KM, Chang J, Won E, Lee MS, and Ham BJ. Precarious employment associated with depressive symptoms and suicidal ideation in adult wage workers. Journal of Affective Disorders. 2017; 218:201-209.

<http://dx.doi.org/10.1016/j.jad.2017.04.049>

Abstract: BACKGROUND: Precarious employment is one of the most important indicators of social disadvantage and is associated with poor mental health. This study aimed to investigate the association of precarious employment with depressive mood and suicidal ideation in adult wage workers, and the possible mediating or moderating effect of socioeconomic factors in the association between precarious work and mental health status. METHOD: Data from the Fifth Korea National Health and Nutrition Examination Survey (KNHANES V) conducted between 2010 and 2012 were analyzed. Among the 24,173 participants, 6266 adult wage workers (3206 precarious and 3060 non-precarious workers) aged ≥ 19 years were included. Socioeconomic and health-related characteristics as well as depressive mood and suicidal ideation were investigated. RESULTS: Precarious employment was significantly associated with depressive mood in the logistic regression analyses adjusting for all potential confounding factors as covariates. The socioeconomic variables including age, gender, education level, marital status, household income, and occupation type

were significantly related with depressive mood and suicidal ideation in adult wage workers. We also found that gender and household income had possible moderating effects on the association between precarious employment and suicidal ideation. Precarious work was associated with suicidal ideation only for male workers and worker with low or middle-lower income levels. LIMITATIONS: Our study is based on a cross-sectional design, thus, we could not elucidate the causal relationship between the variables. CONCLUSIONS: Our study suggested that precarious employment plays a pivotal role in the mental health status of adult wage workers

Lowry V, Desjardins-Charbonneau A, Roy JS, Dionne CE, Fremont P, MacDermid JC, and Desmeules F. Efficacy of workplace interventions for shoulder pain: a systematic review and meta-analysis. Journal of Rehabilitation Medicine. 2017; 49(7):529-542.

<http://dx.doi.org/10.2340/16501977-2236> [open access]

Abstract: OBJECTIVE: To perform a systematic review and meta-analysis of randomized controlled trials on the efficacy of workplace-based interventions to prevent or treat shoulder pain. DATA SOURCES: A systematic review of 4 databases was performed up to January 2016. STUDY SELECTION: Randomized controlled trials were included if the intervention under study was a workplace-based intervention performed to prevent or reduce shoulder pain and disability in workers. DATA EXTRACTION: The methodological quality of the studies was evaluated and meta-analyses were conducted. Pooled mean differences and risk ratios were calculated. DATA SYNTHESIS: Data from 4 studies on strengthening exercises performed in the workplace for workers with shoulder pain (n = 368) were pooled. A statistically significant reduction in pain intensity was observed compared with different control interventions (mean differences (scale out of 10) 1.31 (95% confidence interval (95% CI) 0.86-1.76)). Pooled data from 5 studies on the efficacy of workstation modifications (n = 2,148) showed a statistically significant reduction in the prevalence of shoulder pain with a risk ratio of 1.88 (95% CI 1.20-2.96) compared with different control interventions. CONCLUSION: Low-grade evidence exists that a workplace exercise programme may reduce the intensity of shoulder pain, and that workstation modifications may reduce the prevalence of shoulder pain

Lyons BJ, Volpone SD, Wessel JL, and Alonso NM. Disclosing a disability: do strategy type and onset controllability make a difference? Journal of Applied Psychology. 2017; [Epub ahead of print].

<http://dx.doi.org/10.1037/apl0000230>

Abstract: In hiring contexts, individuals with concealable disabilities make decisions about how they should disclose their disability to overcome observers' biases. Previous research has investigated the effectiveness of binary disclosure decisions-that is, to disclose or conceal a disability-but we know little about how, why, or under what conditions different types of disclosure strategies impact observers' hiring intentions. In this article, we examine disability onset

controllability (i.e., whether the applicant is seen as responsible for their disability onset) as a boundary condition for how disclosure strategy type influences the affective reactions (i.e., pity, admiration) that underlie observers' hiring intentions. Across 2 experiments, we found that when applicants are seen as responsible for their disability, strategies that de-emphasize the disability (rather than embrace it) lower observers' hiring intentions by elevating their pity reactions. Thus, the effectiveness of different types of disability disclosure strategies differs as a function of onset controllability. We discuss implications for theory and practice for individuals with disabilities and organizations. (PsycINFO Database Record

MacDonald LA, Bertke S, Hein MJ, Judd S, Baron S, Merritt R, and Howard VJ. Prevalence of cardiovascular health by occupation: a cross-sectional analysis among U.S. workers aged ≥ 45 years. American Journal of Preventive Medicine. 2017; 53(2):152-161.

<http://dx.doi.org/10.1016/j.amepre.2017.02.022>

Abstract: INTRODUCTION: Identification of groups with poor cardiovascular health (CVH) can inform where and how to target public health efforts. National prevalence estimates of CVH were derived for clinical (blood glucose, total cholesterol, blood pressure) and behavioral (BMI, diet quality, physical activity, smoking) factors among U.S. workers aged ≥ 45 years. METHODS: This cross-sectional analysis included 6,282 employed black and white men and women aged ≥ 45 years enrolled in the national population-based REasons for Geographic And Racial Differences in Stroke study from 2003 to 2007. Each CVH factor was scored as ideal (2); intermediate (1); or poor (0) according to American Heart Association criteria, and summed to define optimal composite scores: CVH (sum, 10-14); clinical (sum, 5-6); and behavioral (sum, 6-8) health. Occupational data were collected 2011-2013. Analyses were conducted in 2016. RESULTS: Only 14% met ideal criteria for all three clinical health factors, and none met ideal criteria for all four behavioral health factors. Sales and low status office workers had a low prevalence of optimal CVH. Service workers in protective services and the food preparation and serving occupations had a low prevalence of optimal clinical health; computer and healthcare support workers had a low prevalence of optimal behavioral health. CONCLUSIONS: The prevalence of optimal CVH among middle-aged and older workers in the U.S. is low, but considerable differences exist by occupation. Targeted public health interventions may improve the CVH of at-risk older workers with different clinical and behavioral risk factor profiles employed in diverse occupational settings

Okun AH, Watkins JP, and Schulte PA. Trade associations and labor organizations as intermediaries for disseminating workplace safety and health information. American Journal of Industrial Medicine. 2017; 60(9):766-775.

<http://dx.doi.org/10.1002/ajim.22746>

Abstract: BACKGROUND: There has not been a systematic study of the nature and extent to which business and professional trade associations and labor

organizations obtain and communicate workplace safety and health information to their members. These organizations can serve as important intermediaries and play a central role in transferring this information to their members. METHODS: A sample of 2294 business and professional trade associations and labor organizations in eight industrial sectors identified by the National Occupational Research Agenda was surveyed via telephone. RESULTS: A small percent of these organizations (40.9% of labor organizations, 15.6% of business associations, and 9.6% of professional associations) were shown to distribute workplace safety and health information to their members. Large differences were also observed between industrial sectors with construction having the highest total percent of organizations disseminating workplace safety and health information. CONCLUSION: There appears to be significant potential to utilize trade and labor organizations as intermediaries for transferring workplace safety and health information to their members. Government agencies have a unique opportunity to partner with these organizations and to utilize their existing communication channels to address high risk workplace safety and health concerns

Rasmussen-Barr E, Grooten WJA, Hallqvist J, Holm LW, and Skillgate E. Are job strain and sleep disturbances prognostic factors for low-back pain? A cohort study of a general population of working age in Sweden. Journal of Rehabilitation Medicine. 2017; 49(7):591-597.

<http://dx.doi.org/10.2340/16501977-2249> [open access]

Abstract: The aim of this study was to determine whether job strain, i.e. a combination of job demands and decision latitude (job control), and sleep disturbances among persons with occasional low-back pain are prognostic factors for developing troublesome low-back pain; and to determine whether sleep disturbances modify the potential association between job strain and troublesome low-back pain. A population-based cohort from the Stockholm Public Health Cohort surveys in 2006 and 2010 (= 25,167) included individuals with occasional low-back pain at baseline 2006 (= 6,413). Through logistic regression analyses, potential prognostic effects of job strain and sleep disturbances were studied. Stratified analyses were performed to assess modification of sleep disturbances on the potential association between job strain and troublesome low-back pain. Those exposed to job strain; active job (odds ratio (OR) 1.3, 95% confidence interval (95% CI) 1.1-1.6), or high strain (OR 1.5, 95% CI 0.9-2.4) and those exposed to severe sleep disturbances (OR 3.0, 95% CI 2.3-4.0), but not those exposed to passive jobs (OR 1.1, 95% CI 0.9-1.4) had higher odds of developing troublesome low-back pain. Sleep disturbances did not modify the association between job strain and troublesome low-back pain. These findings indicate that active job, high job strain and sleep disturbances are prognostic factors for troublesome low-back pain. The odds of developing troublesome low-back pain due to job strain were not modified by sleep disturbance

Schulte PA, Pana-Cryan R, Schnorr T, Schill AL, Guerin R, Felknor S, and Wagner GR. An approach to assess the burden of work-related injury, disease, and distress. American Journal of Public Health. 2017; 107(7):1051-1057.

<http://dx.doi.org/10.2105/AJPH.2017.303765>

Abstract: The true burden (morbidity, mortality, disability, cost, pain, distress) of occupational and work-related diseases and injuries is unknown, and what is reported as burden is significantly underestimated. This underestimation affects the way decision-makers view investments in research and worker protection, which in turn has a substantial impact on national welfare and public health. To better describe the societal and individual burdens of occupational and work-related diseases and injuries, we propose an approach to gauge what is known about burden and where new assessments may be made. This approach consists of 4 elements to consider in burden assessments: (1) utilizing multiple domains, including the individual worker, the worker's family, the community in which the workplace is located, the employer, and society as a whole; (2) taking a broader view of the work-relatedness of disease and injury; (3) assessing the impact of the entire working-life continuum; and (4) applying the comprehensive concept of "well-being" as an indicator in addressing contemporary changes in the nature of work, the workplace, and the workforce. Further research on burden and enhanced surveillance is needed to develop these elements

Shockey TM, Zack M, and Sussell A. Health-related quality of life among US workers: variability across occupation groups. American Journal of Public Health. 2017; 107(8):1316-1323.

<http://dx.doi.org/10.2105/AJPH.2017.303840>

Abstract: OBJECTIVES: To examine the health-related quality of life among workers in 22 standard occupation groups using data from the 2013-2014 US Behavioral Risk Factor Surveillance System. METHODS: We examined the health-related quality of life measures of self-rated health, frequent physical distress, frequent mental distress, frequent activity limitation, and frequent overall unhealthy days by occupation group for 155 839 currently employed adults among 17 states. We performed multiple logistic regression analyses that accounted for the Behavioral Risk Factor Surveillance System's complex survey design to obtain prevalence estimates adjusted for potential confounders. RESULTS: Among all occupation groups, the arts, design, entertainment, sports, and media occupation group reported the highest adjusted prevalence of frequent physical distress, frequent mental distress, frequent activity limitation, and frequent overall unhealthy days. The personal care and service occupation group had the highest adjusted prevalence for fair or poor self-rated health. CONCLUSIONS: Workers' jobs affect their health-related quality of life

Skolarus TA, Lehmann T, Tabak RG, Harris J, Lecy J, and Sales AE. Assessing citation networks for dissemination and implementation research frameworks. Implementation Science. 2017; 12(1):97.

<http://dx.doi.org/10.1186/s13012-017-0628-2> [open access]

Abstract: **BACKGROUND:** A recent review of frameworks used in dissemination and implementation (D&I) science described 61 judged to be related either to dissemination, implementation, or both. The current use of these frameworks and their contributions to D&I science more broadly has yet to be reviewed. For these reasons, our objective was to determine the role of these frameworks in the development of D&I science. **METHODS:** We used the Web of Science Core Collection and Google Scholar to conduct a citation network analysis for the key frameworks described in a recent systematic review of D&I frameworks (Am J Prev Med 43(3):337-350, 2012). From January to August 2016, we collected framework data including title, reference, publication year, and citations per year and conducted descriptive and main path network analyses to identify those most important in holding the current citation network for D&I frameworks together. **RESULTS:** The source article contained 119 cited references, with 50 published articles and 11 documents identified as a primary framework reference. The average citations per year for the 61 frameworks reviewed ranged from 0.7 to 103.3 among articles published from 1985 to 2012. Citation rates from all frameworks are reported with citation network analyses for the framework review article and ten highly cited framework seed articles. The main path for the D&I framework citation network is presented. **CONCLUSIONS:** We examined citation rates and the main paths through the citation network to delineate the current landscape of D&I framework research, and opportunities for advancing framework development and use. Dissemination and implementation researchers and practitioners may consider frequency of framework citation and our network findings when planning implementation efforts to build upon this foundation and promote systematic advances in D&I science

Turner T, Green S, Tovey D, McDonald S, Soares-Weiser K, Pestrige C, and Elliott J. Producing Cochrane systematic reviews: a qualitative study of current approaches and opportunities for innovation and improvement. Systematic Reviews. 2017; 6(1):147.

<http://dx.doi.org/10.1186/s13643-017-0542-3> [open access]

Abstract: **BACKGROUND:** Producing high-quality, relevant systematic reviews and keeping them up to date is challenging. Cochrane is a leading provider of systematic reviews in health. For Cochrane to continue to contribute to improvements in health, Cochrane Reviews must be rigorous, reliable and up to date. We aimed to explore existing models of Cochrane Review production and emerging opportunities to improve the efficiency and sustainability of these processes. **METHODS:** To inform discussions about how to best achieve this, we conducted 26 interviews and an online survey with 106 respondents. **RESULTS:** Respondents highlighted the importance and challenge of creating reliable, timely systematic reviews. They described the challenges and opportunities presented by current production models, and they shared what they are doing to improve review production. They particularly highlighted significant challenges with increasing complexity of review methods; difficulty keeping authors on board

and on track; and the length of time required to complete the process. Strong themes emerged about the roles of authors and Review Groups, the central actors in the review production process. The results suggest that improvements to Cochrane's systematic review production models could come from improving clarity of roles and expectations, ensuring continuity and consistency of input, enabling active management of the review process, centralising some review production steps; breaking reviews into smaller "chunks", and improving approaches to building capacity of and sharing information between authors and Review Groups. Respondents noted the important role new technologies have to play in enabling these improvements. **CONCLUSIONS:** The findings of this study will inform the development of new Cochrane Review production models and may provide valuable data for other systematic review producers as they consider how best to produce rigorous, reliable, up-to-date reviews

Uttley L and Montgomery P. The influence of the team in conducting a systematic review. *Systematic Reviews*. 2017; 6(1):149.

<http://dx.doi.org/10.1186/s13643-017-0548-x> [open access]

Abstract: There is an increasing body of research documenting flaws in many published systematic reviews' methodological and reporting conduct. When good systematic review practice is questioned, attention is rarely turned to the composition of the team that conducted the systematic review. This commentary highlights a number of relevant articles indicating how the composition of the review team could jeopardise the integrity of the systematic review study and its conclusions. Key biases require closer attention such as sponsorship bias and researcher allegiance, but there may also be less obvious affiliations in teams conducting secondary evidence-syntheses. The importance of transparency and disclosure are now firmly on the agenda for clinical trials and primary research, but the meta-biases that systematic reviews may be at risk from now require further scrutiny

Yamamoto SH and Alverson CY. Individuals with disabilities in self-employment through vocational rehabilitation. *Journal of Career Assessment*. 2016; 25(3):450-466.

<http://dx.doi.org/10.1177/1069072716639862>

Zierold KM. Youth doing dangerous tasks: supervision matters. *American Journal of Industrial Medicine*. 2017; 60(9):789-797.

<http://dx.doi.org/10.1002/ajim.22745>

Abstract: **BACKGROUND:** Supervisors are partially responsible for ensuring that teens are safe at work. The purpose of this study was to explore whether supervision is related to teens' willingness to do a dangerous task at work. **METHODS:** A mixed-methods study consisting of focus groups and a cross-sectional survey was conducted with teens from two public high schools. **RESULTS:** If asked by a supervisor, 21% of working teens would do a dangerous task. After controlling for gender and age, teens whose supervisor did not establish weekly goals (AOR = 3.54, 95%CI = 1.55-8.08), teens who perceived

their supervisors as not approachable (AOR = 2.35, 95%CI = 1.34-4.13), and teens who were not comfortable talking about safety issues (AOR = 1.97, 95%CI = 1.08-3.61) were more likely to do a dangerous task if asked by their supervisors. CONCLUSION: This study indicates that how teens perceive their supervisor may be associated with whether teens do a dangerous task when asked by their supervisor

*IWH authored publication.