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***Walker TJ, Tullar JM, Taylor WC, Roman R, and Amick BC, III. How do stages of change for physical activity relate to employee sign-up for and completion of a worksite physical activity competition? *Health Promotion Practice*. 2017; 18(1):93-101.**

<https://doi.org/10.1177/1524839916659846>

Abstract: INTRODUCTION: This study evaluated whether stages of change for physical activity (PA) predict sign-up, participation, and completion in a PA competition. METHOD: Deidentified data were provided to evaluate a PA competition between 16 different institutions from a public university system. Employees who completed a health assessment (HA) prior to the start of the PA competition (n = 6,333) were included in the study. Participants completed a self-report HA and logged their PA throughout the competition. Multivariable logistic regression models tested whether stages of change predicted PA competition sign-up and completion. An ordinal logistic regression model tested whether stages of change predicted number of weeks of PA competition participation. RESULTS: Stages of change predicted PA competition sign-up and completion, but not weeks of participation. The odds for PA competition sign-up were 1.64 and 1.98 times higher for employees in preparation and action/maintenance (respectively) compared with employees in precontemplation/contemplation. The odds for PA competition completion were 4.17 times higher for employees in action/maintenance compared with employees in precontemplation/contemplation/preparation. CONCLUSION: The PA competition was more likely to reach employees in preparation, action, or

maintenance stages than precontemplation/contemplation. Most of the completers were likely participating in regular PA prior to the competition

Buodo G, Patron E, Benvenuti SM, and Palomba D. Single-session attention bias modification training in victims of work-related accidents. *Frontiers in Psychology*. 2018; 9:1619.

<https://doi.org/10.3389/fpsyg.2018.01619> [open access]

Abstract: Individuals who experienced traumatic work-related accidents frequently show cognitive deficits and biased processing of trauma-relevant information, which, in turn, could increase the risk of further accidents. The attention bias modification training (ABMT) is designed to reduce hypervigilance toward and enhance attentional disengagement from threat stimuli. The aim of the present study was to assess whether it is possible to implicitly reduce the attentional bias toward trauma-related stimuli through a single session of ABMT in individuals who experienced a traumatic occupational accident. Nineteen individuals who had experienced a traumatic work-related accident and 11 workers who never experienced a work accident (control group) underwent a preliminary assessment of cognitive performance (executive functions and sustained attention) and an evaluation of the attentional bias toward accident-related pictures by means of a dot-probe task. The results showed that injured workers performed more poorly than controls in tasks of executive functions and concentration abilities. Also, injured workers showed an attentional bias toward trauma reminders (i.e., faster reaction times to probes replacing trauma-related pictures). Injured workers were then randomly allocated to a single-session of ABMT (N = 10) or to an Attention Control Condition (ACC; N = 9). After the training, the dot-probe task was administered again to assess changes in the attentional bias toward trauma-relevant pictures. Injured workers who underwent the ABMT, but not those who underwent the ACC, showed a significant reduction of the attentional bias from pre- to post-training. Overall, these results support previous findings reporting an association between traumatic occupational accidents and cognitive dysfunctions. More importantly, these preliminary findings add to a growing body of evidence suggesting the effectiveness of a short ABMT in reducing the attentional bias after a traumatic workplace accident

Chan APC, Yang Y, and Darko A. Construction accidents in a large-scale public infrastructure project: severity and prevention. *Journal of Construction Engineering and Management*. 2018; 144(10):05018010.

[https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0001545](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001545)

Coenen P, Healy GN, Winkler EAH, Dunstan DW, Owen N, Moodie M, LaMontagne AD, Eakin EA, O'Sullivan PB, and Straker LM. Associations of office workers' objectively assessed occupational sitting, standing and stepping time with musculoskeletal symptoms. *Ergonomics*. 2018; 61(9):1187-1195.

<https://doi.org/10.1080/00140139.2018.1462891>

Abstract: We examined the association of musculoskeletal symptoms (MSS) with

workplace sitting, standing and stepping time, as well as sitting and standing time accumulation (i.e. usual bout duration of these activities), measured objectively with the activPAL3 monitor. Using baseline data from the Stand Up Victoria trial (216 office workers, 14 workplaces), cross-sectional associations of occupational activities with self-reported MSS (low-back, upper and lower extremity symptoms in the last three months) were examined using probit regression, correcting for clustering and adjusting for confounders. Sitting bout duration was significantly ($p < 0.05$) associated, non-linearly, with MSS, such that those in the middle tertile displayed the highest prevalence of upper extremity symptoms. Other associations were non-significant but sometimes involved large differences in symptom prevalence (e.g. 38%) by activity. Though causation is unclear, these non-linear associations suggest that sitting and its alternatives (i.e. standing and stepping) interact with MSS and this should be considered when designing safe work systems. Practitioner summary: We studied associations of objectively assessed occupational activities with musculoskeletal symptoms in office workers. Workers who accumulated longer sitting bouts reported fewer upper extremity symptoms. Total activity duration was not significantly associated with musculoskeletal symptoms. We underline the importance of considering total volumes and patterns of activity time in musculoskeletal research

Cunningham TR and Jacobson CJ. Safety talk and safety culture: discursive repertoires as indicators of workplace safety and health practice and readiness to change. *Annals of Work Exposures and Health*. 2018; 62(suppl_1):S55-S64.

<https://doi.org/10.1093/annweh/wxy035>

Abstract: Background: Small construction businesses (SCBs) account for a disproportionate share of occupational injuries, days lost, and fatalities in the US and other modern economies. Owner/managers of SCBs confront risks associated with their own and workers' safety and business survival, and their occupational safety and health (OSH) related values and practices are key drivers of safety and business outcomes. Given owner/managers are the key to understanding and affecting change in smaller firms, as well as the pressing need for improved OSH in small firms particularly in construction, there is a critical need to better understand SCB owners' readiness to improve or adopt enhanced OSH activities in their business. Unfortunately, the social expectation to support safety can complicate efforts to evaluate owners' readiness.

Objectives: To get a more accurate understanding of the OSH values and practices of SCBs and the factors shaping SCB owners' readiness and intent to implement or improve safety and health programming by comparing their discourse on safety with their self-rated level of stage of change. **Methods:** In-depth, semi-structured interviews were conducted with 30 SCB owner managers. Respondents were asked to self-rate their safety program activity on a 5-point scale from unaware or ignorant ('haven't thought about it at all') to actively vigilant ('well-functioning safety and health program for at least 6 months'). They were also asked to discuss the role and meaning of OSH within their trade and

company, as well as attitudes and inclinations toward improving or enhancing business safety practices. Analysis and results: Respondents' self-rating of safety program activity was compared and contrasted with results from discourse analysis of their safety talk, or verbal descriptions of their safety values and activities. Borrowing from normative and stage theories of safety culture and behavioral change, these sometimes contradictory descriptions were taxonomized along a safety culture continuum and a range of safety cultures and stages of readiness for change were found. These included descriptions of strong safety cultures with intentions for improvement as well as descriptions of safety cultures with more reactive and pathological approaches to OSH, with indications of no intentions for improvement. Some owner/managers rated themselves as having an effective OSH program in place, yet described a dearth of OSH activity and/or value for OSH in their business. Conclusion: Assessing readiness to change is key to improving OSH performance, and more work is needed to effectively assess SCB OSH readiness and thus enable greater adoption of best practices

Du BB, Bigelow PL, Wells RP, Davies HW, Hall P, and Johnson PW. The impact of different seats and whole-body vibration exposures on truck driver vigilance and discomfort. *Ergonomics*. 2018; 61(4):528-537. <https://doi.org/10.1080/00140139.2017.1372638>

Abstract: Laboratory studies have shown that exposure to whole-body vibration (WBV) increases physical and mental fatigue, which are common issues professional drivers face. The objective of this study was to determine whether altering WBV exposures had any effect on driver vigilance and discomfort. A repeated measures crossover design of five truck drivers with regular 10-h routes was used. Active and passive suspension truck seats were evaluated. For each seat, WBV exposures were measured. Participants completed a discomfort questionnaire and a reaction time task before and after their shift for two weeks, one week per seat. Compared with the passive seat, the active seat significantly reduced WBV exposures, decrements in the optimal and mean reaction times ($p = 0.02, 0.047$, respectively), and discomfort in the lower back and wrist(s)/forearm(s) ($p < 0.01, 0.01$, respectively). Study results indicated that reducing WBV helps reduce discomfort and maintain vigilance, which may improve drivers' health and reduce the risk of truck collisions. Practitioner Summary: The active suspension seat used in this study reduced truck drivers' exposure to whole-body vibration (WBV) by over 33% in relation to their current industry standard passive suspension seat. This study demonstrated that reducing truck drivers' exposure to WBV reduced fatigue and discomfort development over a workday

Fleischmann M, Carr E, Xue B, Zaninotto P, Stansfeld SA, Stafford M, and Head J. Changes in autonomy, job demands and working hours after diagnosis of chronic disease: a comparison of employed and self-employed older persons using the English Longitudinal Study of Ageing

(ELSA). Journal of Epidemiology & Community Health. 2018; 72(10):951-957.

<https://doi.org/10.1136/jech-2017-210328> [open access]

Abstract: BACKGROUND: Modifications in working conditions can accommodate changing needs of chronically ill persons. The self-employed may have more possibilities than employees to modify their working conditions. We investigate how working conditions change following diagnosis of chronic disease for employed and self-employed older persons. METHODS: We used waves 2-7 from the English Longitudinal Study of Ageing (ELSA). We included 1389 participants aged 50-60 years who reported no chronic disease at baseline. Using fixed-effects linear regression analysis, we investigated how autonomy, physical and psychosocial job demands and working hours changed following diagnosis of chronic disease. RESULTS: For employees, on diagnosis of chronic disease autonomy marginally decreased (-0.10, 95% CI -0.20 to 0.00) and physical job demands significantly increased (0.13, 95% CI 0.01 to 0.25), whereas for the self-employed autonomy did not significantly change and physical job demands decreased on diagnosis of chronic disease (-0.36, 95% CI -0.64 to -0.07), compared with prediagnosis levels. Psychosocial job demands did not change on diagnosis of chronic disease for employees or the self-employed. Working hours did not change for employees, but dropped for self-employed (although non-significantly) by about 2.8 hours on diagnosis of chronic disease (-2.78, 95% CI -6.03 to 0.48). CONCLUSION: Improvements in working conditions after diagnosis of chronic disease were restricted to the self-employed. This could suggest that workplace adjustments are necessary after diagnosis of chronic disease, but that the self-employed are more likely to realise these. Policy seeking to extend working life should consider work(place) adjustments for chronically ill workers as a means to prevent early exit from work

Hasle P and Refslund B. Intermediaries supporting occupational health and safety improvements in small businesses: development of typology and discussion of consequences for preventive strategies. Annals of Work Exposures and Health. 2018; 62(suppl_1):S65-S71.

<https://doi.org/10.1093/annweh/wxy046>

Abstract: Intermediaries have been suggested as a potential source for improving Occupational Health and Safety (OHS) in small businesses (SBs), because SB due to their sheer number and limited managerial and financial resources typically have weak OHS management and higher occupational risks. SB furthermore typically has a reactive approach to OHS and do not seek out OHS assistance on their own. We propose, based on a large comparative study of SB and intermediaries, a general typology for intermediaries in relation to SB, and further, discuss the implications for preventive strategies in SB. We argue that there is a strong potential for improving OHS by including various intermediaries, however, the inclusion is not enough in itself. The interests of the intermediaries and the OHS improvement must be aligned, and the efforts across various

intermediaries should be orchestrated among the key actors to maximize the outcome

van den Heuvel SG, Vergeer R, and de Weerd M. The effect of a policy measure on work-related health risks: combine the quantitative and the qualitative. Policy and Practice in Health and Safety. 2018; 16(1):43-56. <https://doi.org/10.1080/14773996.2017.1415421>

Ioannidis JPA. Rethink funding. Scientific American. 2018; 319(4):52-55. [doi unavailable as of Sept 28, 2018]

Lewkowski K, Li IW, Fritschi L, Williams W, and Heyworth JS. A systematic review of full-shift, noise exposure levels among construction workers: are we improving? Annals of Work Exposures and Health. 2018; 62(7):771-782. <https://doi.org/10.1093/annweh/wxy051>

Abstract: Context: Construction industry workers are at high risk of occupational noise exposure. Although regulations and guidelines for this industry specify the use of noise controls, workers continue to be exposed to hazardous noise levels. Objectives: The objectives of this study were (i) to collate and describe full-shift noise exposure experienced by construction workers; (ii) to review trends in full-shift exposure over time and between countries; and (iii) to identify any occupational categories within the construction industries that have higher levels of exposure. Results: Of the 1171 studies found using key terms, 25 contained noise exposure measurements that met our inclusion criteria. Sample populations were predominantly from large construction sites and primarily comprised occupations known to engage in noisy workplace activities. Studies spanned over 36 years with all having average full-shift noise exposure over 85 A-weighted decibels (dBA). No time trend in full-shift noise exposure levels for construction workers was observed. Construction workers in the subgroup occupations of mason, sheet metal workers, carpenters, concrete workers, and operating engineers consistently had mean LAeq,8h over the 85 dBA limit. Conclusion: Studies spanning 36 years in 10 countries consistently show construction workers have been exposed to hazardous noise levels. There has been no significant change over time of the average full-shift exposure levels of construction workers, including in all occupational subgroups except iron-workers. Some variability in full-shift measures is due to sampling methods and population characteristics and to a lesser extent, methods used to derive exposure levels

Malekinejad M, Horvath H, Snyder H, and Brindis CD. The discordance between evidence and health policy in the United States: the science of translational research and the critical role of diverse stakeholders. Health Research Policy and Systems. 2018; 16(1):81. <https://doi.org/10.1186/s12961-018-0336-7> [open access]

Abstract: BACKGROUND: There is often a discordance between health research evidence and public health policies implemented by the United States federal

government. In the process of developing health policy, discordance can arise through subjective and objective factors that are unrelated to the value of the evidence itself, and can inhibit the use of research evidence. We explore two common types of discordance through four illustrative examples and then propose a potential means of addressing discordance. **DISCUSSION:** In Discordance 1, public health authorities make recommendations for policy action, yet these are not based on high quality, rigorously synthesised research evidence. In Discordance 2, evidence-based public health recommendations are ignored or discounted in developing United States federal government policy. Both types could lead to serious risks of public health and clinical patient harms. We suggest that, to mitigate risks associated with these discordances, public health practitioners, health policy-makers, health advocates and other key stakeholders should take the opportunity to learn or expand their knowledge regarding current research methods, as well as improve their skills for appropriately considering the strengths and limitations of research evidence. This could help stakeholders to adopt a more nuanced approach to developing health policy. Stakeholders should also have a more insightful contextual awareness of these discordances and understand their potential harms. In Discordance 1, public health organisations and authorities need to acknowledge their own historical roles in making public health recommendations with insufficient evidence for improving health outcomes. In Discordance 2, policy-makers should recognise the larger impact of their decision-making based on minimal or flawed evidence, including the potential for poor health outcomes at population level and the waste of huge sums. In both types of discordance, stakeholders need to consider the impact of their own unconscious biases in championing evidence that may not be valid or conclusive. **CONCLUSION:** Public health policy needs to provide evidence-based solutions to public health problems, but this is not always done. We discuss some of the factors inhibiting evidence-based decision-making in United States federal government public health policy and suggest ways these could be addressed

Pereira E, Hermann U, Han S, and AbouRizk S. Case-based reasoning approach for assessing safety performance using safety-related measures. Journal of Construction Engineering and Management. 2018; 144(9):04018088. [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0001546](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001546)

Purtle J, Le-Scherban F, Wang X, Shattuck PT, Proctor EK, and Brownson RC. Audience segmentation to disseminate behavioral health evidence to legislators: an empirical clustering analysis. Implementation Science. 2018; 13(1):121. <https://doi.org/10.1186/s13012-018-0816-8> [open access]

Abstract: BACKGROUND: Elected officials (e.g., legislators) are an important but understudied population in dissemination research. Audience segmentation is essential in developing dissemination strategies that are tailored for legislators

with different characteristics, but sophisticated audience segmentation analyses have not been conducted with this population. An empirical clustering audience segmentation study was conducted to (1) identify behavioral health (i.e., mental health and substance abuse) audience segments among US state legislators, (2) identify legislator characteristics that are predictive of segment membership, and (3) determine whether segment membership is predictive of support for state behavioral health parity laws. METHODS: Latent class analysis (LCA) was used. Data were from a multi-modal (post-mail, e-mail, telephone) survey of state legislators fielded in 2017 (N = 475). Nine variables were included in the LCA (e.g., perceptions of behavioral health treatment effectiveness, mental illness stigma). Binary logistic regression tested associations between legislator characteristics (e.g., political party, gender, ideology) and segment membership. Multi-level logistic regression assessed the predictive validity of segment membership on support for parity laws. A name was developed for each segment that captured its most salient features. RESULTS: Three audience segments were identified. Budget-oriented skeptics with stigma (47% of legislators) had the least faith in behavioral health treatment effectiveness, had the most mental illness stigma, and were most influenced by budget impact. This segment was predominantly male, Republican, and ideologically conservative. Action-oriented supporters (24%) were most likely to have introduced a behavioral health bill, most likely to identify behavioral health issues as policy priorities, and most influenced by research evidence. This was the most politically and ideologically diverse segment. Passive supporters (29%) had the greatest faith in treatment effectiveness and the least stigma, but were also least likely to have introduced a behavioral health bill. Segment membership was a stronger predictor of support for parity laws than almost all other legislator characteristics. CONCLUSIONS: State legislators are a heterogeneous audience when it comes to behavioral health. There is a need to develop and test behavioral health evidence dissemination strategies that are tailored for legislators in different audience segments. Empirical clustering approaches to audience segmentation are a potentially valuable tool for dissemination science

Remen T, Richardson L, Pilorget C, Palmer G, Siemiatycki J, and Lavoue J. Development of a coding and crosswalk tool for occupations and industries. *Annals of Work Exposures and Health*. 2018; 62(7):796-807. <https://doi.org/10.1093/annweh/wxy052>

Abstract: Introduction: Job coding into a standard occupation or industry classification is commonly performed in occupational epidemiology and occupational health. Sometimes, it is necessary to code jobs into multiple classifications or to convert job codes from one classification to another. We developed a generic tool, called CAPS-Canada (<http://www.caps-canada.ca/>), that combines a computer-assisted coding tool covering seven International, Canadian and US occupation and industry classifications and an assistant facilitating crosswalks from one classification to another. The objectives of this paper are to present the different functions of the CAPS-Canada tool and to

assess their contribution through an inter-rater reliability study. Method: The crosswalk assistant was built based on a database of >30,000 jobs coded during a previous project. We evaluated to what extent it would allow automatic translation between pairs of classifications. The influence of CAPS-Canada on agreement between coders was assessed through an inter-rater reliability study comparing three approaches: manual coding, coding with CAPS-Canada without the crosswalk assistant, and coding with the complete tool. The material for this trial consisted of a random sample of 1000 jobs extracted from a case-control study and divided into three subgroups of equivalent size. Results: Across the classification systems, the crosswalk assistant would provide useful information for 83-99% of jobs (median 95%) in a population similar to ours. Eighteen to eighty-one percent of jobs (median 56%) could be entirely automatically recoded. Based on our sample of 1000 jobs, inter-rater reliability in occupation coding ranged from 35.7 to 66.5% (median 53.7%) depending on the combination of classification/resolution. Compared with manual coding, the use of CAPS-Canada substantially improved inter-rater reliability. Conclusion: CAPS-Canada is an attractive alternative to manual coding and is particularly relevant for coding a job into multiple classifications or for recoding jobs into other classifications

Rohlman DS, Campo S, Hall J, Robinson EL, and Kelly KM. What could Total Worker Health look like in small enterprises? *Annals of Work Exposures and Health*. 2018; 62(suppl_1):S34-S41.

<https://doi.org/10.1093/annweh/wxy008>

Abstract: Small enterprises have fewer resources, are more financially precarious, and have higher rates of occupational injury and illness compared with larger enterprises. Interventions that address the promotion of health and well-being in addition to traditional occupational safety and health hazards, a Total Worker Health(R) (TWH) approach, may be effective in reducing injuries and preventing illness. However, little research has examined the impact of TWH interventions in small enterprises. The aim of this research was to explore and characterize health and safety practices, policies, and programs in small Midwestern enterprises from a TWH perspective. Utilizing a case studies approach, site visits were conducted with small business, between 10 and 250 employees, from 2014 through 2016 and included workplace audits and interviews with multiple employees in varying roles within each organization. Both open and closed coding were used to identify specific themes. Eight themes emerged from the site visits: value and return on investment, organizational factors, program design, engaging employees, low-cost strategies, evaluation, and integration. These themes overlapped with both the National Institute for Occupational Safety and Health's (NIOSH) Essential Elements of TWH and the NIOSH Fundamentals. Industry sector and enterprise size also affect resources and integration of these resources. As TWH expands to organizations of all sizes, it is necessary to address the unique needs of smaller enterprises

Sandhu H, Underwood M, Furlan AD, Noyes J, and Eldabe S. What interventions are effective to taper opioids in patients with chronic pain? British Medical Journal. 2018; 362:k2990. <https://doi.org/10.1136/bmj.k2990>

Sevak P, O'Neill J, Houtenville A, and Brucker D. State and local determinants of employment outcomes among individuals with disabilities. Journal of Disability Policy Studies. 2018; 29(2):119-128. <https://doi.org/10.1177/1044207318782676>

Visser S, van der Molen HF, Sluiter JK, and Frings-Dresen MHW. The process evaluation of two alternative participatory ergonomics intervention strategies for construction companies. Ergonomics. 2018; 61(9):1156-1172. <https://doi.org/10.1080/00140139.2018.1454514>

Abstract: To gain insight into the process of applying two guidance strategies - face-to-face (F2F) or e-guidance strategy (EC) - of a Participatory Ergonomics (PE) intervention and whether differences between these guidance strategies occur, 12 construction companies were randomly assigned to a strategy. The process evaluation contained reach, dose delivered, dose received, precision, competence, satisfaction and behavioural change of individual workers. Data were assessed by logbooks, and questionnaires and interviews at baseline and/or after six months. Reach was low (1%). Dose delivered (F2F: 63%; EC: 44%), received (F2F: 42%; EC: 16%) were not sufficient. The precision and competence were sufficient for both strategies and satisfaction was strongly affected by dose received. For behavioural change, knowledge (F2F) and culture (EC) changed positively within companies. Neither strategy was delivered as intended. Compliance to the intervention was low, especially for EC. Starting with a face-to-face meeting might lead to higher compliance, especially in the EC group. Practitioner Summary: This study showed that compliance to a face-to-face and an e-guidance strategy is low. To improve the compliance, it is advised to start with a face-to-face meeting to see which parts of the intervention are needed and which guidance strategy can be used for these parts. TRIAL REGISTRATION: ISRCTN73075751

Wickizer TM, Franklin GM, and Fulton-Kehoe D. Innovations in occupational health care delivery can prevent entry into permanent disability: 8-year follow-up of the Washington State Centers for Occupational Health and Education. Medical Care. 2018; [Epub ahead of print]. <https://doi.org/10.1097/MLR.0000000000000991>

Abstract: BACKGROUND: Long-term work disability is known to have an adverse effect on the nation's labor force participation rate. To reduce long-term work disability, the Washington State Department of Labor and Industries established a quality improvement initiative that created 2 pilot Centers of Occupational Health and Education (COHE). OBJECTIVES: To document the level of work disability in a sample of injured workers with musculoskeletal injuries and to examine (8-y) work disability outcomes associated with the COHE health care

model. RESEARCH DESIGN: Prospective nonrandomized intervention study with nonequivalent comparison group using difference-in-difference regression models. SUBJECTS: Intervention group represents 18,790 workers with musculoskeletal injuries treated by COHE providers. Comparison group represents 20,992 workers with similar injuries treated within the COHE catchment area by non-COHE providers. MEASURES: Long-term disability outcomes include: (1) on disability 5 years after injury; (2) received a state pension for total permanent disability; (3) received total disability income support through the Social Security Disability Insurance program; or (4) a combined measure including any one of the 3 prior measures. RESULTS: COHE patients had a 30% reduction in the risk of experiencing long-term work disability (odds ratio=0.70, P=0.02). The disability rate (disability days per 1000 persons) over the 8-year follow-up for the intervention and comparison groups, respectively, was 49,476 disability days and 75,832 disability days. CONCLUSIONS: Preventing long-term work disability is possible by reorganizing the delivery of occupational health care to support effective secondary prevention in the first 3 months following injury. Such interventions may have promising beneficial effects on reversing the nation's progressively worsening labor force participation rate. This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal. <http://creativecommons.org/licenses/by-nc-nd/4.0/>

Yang L, Hu L, Hipp JA, Imm KR, Schutte R, Stubbs B, Colditz GA, and Smith L. Cross-sectional associations of active transport, employment status and objectively measured physical activity: analyses from the National Health and Nutrition Examination Survey. *Journal of Epidemiology & Community Health*. 2018; 72(9):764-769. <https://doi.org/10.1136/jech-2017-210265>

Abstract: BACKGROUND: To investigate associations between active transport, employment status and objectively measured moderate-to-vigorous physical activity (MVPA) in a representative sample of US adults. METHODS: Cross-sectional analyses of data from the National Health and Nutrition Examination Survey. A total of 5180 adults (50.2 years old, 49.0% men) were classified by levels of active transportation and employment status. Outcome measure was weekly time spent in MVPA as recorded by the Actigraph accelerometer. Associations between active transport, employment status and objectively measured MVPA were examined using multivariable linear regression models adjusted for age, body mass index, race and ethnicity, education level, marital status, smoking status, working hour duration (among the employed only) and self-reported leisure time physical activity. RESULTS: Patterns of active transport were similar between the employed (n=2897) and unemployed (n=2283), such that 76.0% employed and 77.5% unemployed engaged in no active transport. For

employed adults, those engaging in high levels of active transport (≥ 90 min/week) had higher amount of MVPA than those who did not engage in active transport. This translated to 40.8 (95% CI 15.7 to 65.9) additional minutes MVPA per week in men and 57.9 (95% CI 32.1 to 83.7) additional minutes MVPA per week in women. Among the unemployed adults, higher levels of active transport were associated with more MVPA among men (44.8 min/week MVPA, 95% CI 9.2 to 80.5) only. **CONCLUSIONS:** Findings from the present study support interventions to promote active transport to increase population level physical activity. Additional strategies are likely required to promote physical activity among unemployed women

*IWH authored publication.