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November 30, 2018

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Anand P and Ben-Shalom Y. Pathways taken by new social security disability insurance and supplemental security income awardees. *Journal of Disability Policy Studies*. 2018; 29(3):153-165.
<https://doi.org/10.1177/1044207318779987>

Bethge M, Markus M, Streibelt M, Gerlich C, and Schuler M. Implementing the German model of work-related medical rehabilitation: did the delivered dose of work-related treatment components increase? *Archives of Physical Medicine & Rehabilitation*. 2018; 99(12):2465-2471.
<https://doi.org/10.1016/j.apmr.2018.06.018>

Abstract: OBJECTIVES: Work-related components are an essential part of rehabilitation programs to support return to work of patients with musculoskeletal disorders. In Germany, a guideline for work-related medical rehabilitation was developed to increase work-related treatment components. In addition, new departments were approved to implement work-related medical rehabilitation programs. The aim of our study was to explore the state of implementation of the guideline's recommendations by describing the change in the delivered dose of work-related treatments. DESIGN: Nonrandomized controlled trial (cohort study). SETTING: Fifty-nine German rehabilitation centers. PARTICIPANTS: Patients (N=9046) with musculoskeletal disorders were treated in work-related medical rehabilitation or common medical rehabilitation. Patients were matched one-to-one by propensity scores. INTERVENTIONS: Work-related medical rehabilitation in 2014 and medical rehabilitation in 2011. MAIN OUTCOME MEASURES: Treatment dose of work-related therapies. RESULTS: The mean dose of work-related therapies increased from 2.2 hours (95% confidence interval [CI], 1.6-2.8)

to 8.9 hours (95% CI, 7.7-10.1). The mean dose of social counseling increased from 51 to 84 minutes, the mean dose of psychosocial work-related groups from 39 to 216 minutes, and the mean dose of functional capacity training from 39 to 234 minutes. The intraclass correlation of 0.67 (95% CI, 0.58-0.75) for the total dose of work-related therapies indicated that the variance explained by centers was high. CONCLUSIONS: The delivered dose of work-related components was increased. However, there were discrepancies between the guideline's recommendations and the actual dose delivered in at least half of the centers. It is very likely that this will affect the effectiveness of work-related medical rehabilitation in practice

Bokenberger K, Sjolander A, Dahl Aslan AK, Karlsson IK, Akerstedt T, and Pedersen NL. Shift work and risk of incident dementia: a study of two population-based cohorts. European Journal of Epidemiology. 2018; 33(10):977-987.

<https://doi.org/10.1007/s10654-018-0430-8> [open access]

Abstract: This study aimed to investigate the association between shift work and incident dementia in two population-based cohorts from the Swedish Twin Registry (STR). The STR-1973 sample included 13,283 participants born 1926-1943 who received a mailed questionnaire in 1973 that asked about status (ever/never) and duration (years) of shift work employment. The Screening Across the Lifespan Twin (SALT) sample included 41,199 participants born 1900-1958 who participated in a telephone interview in 1998-2002 that asked about night work status and duration. Dementia diagnoses came from Swedish patient registers. Cox proportional-hazards regression was used to estimate hazard ratios (HR) with 95% confidence intervals (CI). Potential confounders such as age, sex, education, diabetes, cardiovascular disease and stroke were included in adjusted models. In genotyped subsamples (n = 2977 in STR-1973; n = 10,366 in SALT), APOE epsilon4 status was considered in models. A total of 983 (7.4%) and 1979 (4.8%) dementia cases were identified after a median of 41.2 and 14.1 years follow-up in the STR-1973 and SALT sample, respectively. Ever shift work (HR 1.36, 95% CI 1.15-1.60) and night work (HR 1.12, 95% CI 1.01-1.23) were associated with higher dementia incidence. Modest dose-response associations were observed, where longer duration shift work and night work predicted increased dementia risk. Among APOE epsilon4 carriers, individuals exposed to ≥ 20 years of shift work and night work had increased dementia risk compared to day workers. Findings indicate that shift work, including night shift work, compared to non-shift jobs is associated with increased dementia incidence. Confirmation of findings is needed

Ciccarelli N and Van Soest A. Informal caregiving, employment status and work hours of the 50+ population in Europe. De Economist. 2018; 166(3):363-396.

<https://doi.org/10.1007/s10645-018-9323-1>

Abstract: Using panel data on the age group 50-70 in 15 European countries, we

analyze the effects of providing informal care to parents, parents-in-law, stepparents, and grandparents on employment status and work hours. We account for fixed individual effects and test for endogeneity of caregiving using moments exploiting standard instruments (e.g., parental death) as well as higher-order moment conditions (Lewbel instruments). Specification tests suggest that informal care provision and daily caregiving can be treated as exogenous variables. We find a significant and negative effect of daily caregiving on employment status and work hours. This effect is particularly strong for women. On the other hand, providing care at a weekly (or less than weekly) frequency does not significantly affect paid work. We do not find evidence of heterogeneous effects of caregiving on paid work across European regions

Gilbertson M and Brophy J. Causality advocacy: workers' compensation cases as resources for identifying and preventing diseases of modernity. *New Solutions*. 2018; [epub ahead of print]
<https://doi.org/10.1177/1048291118810900>

Abstract: An appeal process for an injured worker compensation case is a unique opportunity to debate and integrate evidence concerning a potential causal relationship between observations of occupational disease and exposures to various putative risk factors that may also be of significance in public health protection. Through application of Hill's indicia to the evidence presented in a recent appeal process concerning a breast cancer case for a female border guard, a novel epidemic, tentatively called "occupational BRCAness" has been identified and a causal relationship with exposures to traffic-related air pollution and shift work and possibly secondhand tobacco smoke is inferred. Application of the audit method by worker advocates to other compensation appeals processes for other diseases might similarly yield causal relations with exposures to occupational risk factors with relevance to public health

Godderis L, Boonen E, Cabrera Martimbianco AL, Delvaux E, Ivanov ID, Lambrechts MC, et al. WHO/ILO work-related burden of disease and injury: protocol for systematic reviews of exposure to long working hours and of the effect of exposure to long working hours on alcohol consumption and alcohol use disorders. *Environment International*. 2018; 120:22-33.
<https://doi.org/10.1016/j.envint.2018.07.025>

Abstract: BACKGROUND: The World Health Organization (WHO) and the International Labour Organization (ILO) are developing a joint methodology for estimating the national and global work-related burden of disease and injury (WHO/ILO joint methodology), with contributions from a large network of experts. In this paper, we present the protocol for two systematic reviews of parameters for estimating the number of deaths and disability-adjusted life years from alcohol consumption and alcohol use disorder attributable to exposure to long working hours, to inform the development of the WHO/ILO joint methodology. OBJECTIVES: We aim to systematically review studies on exposure to long working hours (Systematic Review 1) and systematically review and meta-

analyse estimates of the effect of exposure to long working hours on alcohol consumption and alcohol use disorder (Systematic Review 2), applying the Navigation Guide systematic review methodology as an organizing framework. DATA SOURCES: Separately for Systematic Reviews 1 and 2, we will search electronic academic databases for potentially relevant records from published and unpublished studies, including MEDLINE, Embase, Web of Science, CISDOC and PsychINFO. We will also search electronic grey literature databases, Internet search engines and organizational websites; hand-search reference list of previous systematic reviews and included study records; and consult additional experts. STUDY ELIGIBILITY AND CRITERIA: We will include working-age (≥ 15 years) workers in the formal and informal economy in any WHO and/or ILO Member State but exclude children (< 15 years) and unpaid domestic workers. For Systematic Review 1, we will include quantitative prevalence studies of relevant levels of exposure to long working hours (i.e., 35-40, 41-48, 49-54 and ≥ 55 h/week) stratified by country, sex, age and industrial sector or occupation. For Systematic Review 2, we will include randomized controlled trials, cohort studies, case-control studies and other non-randomized intervention studies with an estimate of the relative effect of a relevant level of exposure to long working hours on total amount of alcohol consumed and on the incidence of, prevalence of or mortality from alcohol use disorders, compared with the theoretical minimum risk exposure level (i.e., worked 35-40 h/week). STUDY APPRAISAL AND SYNTHESIS METHODS: At least two review authors will independently screen titles and abstracts at a first stage and full texts of potentially eligible records at a second stage, followed by extraction of data from qualifying studies. At least two review authors will assess risk of bias and quality of evidence, using the most suited tools currently available. For Systematic Review 2, if feasible, we will combine relative risks using meta-analysis. We will report results using the guidelines for accurate and transparent health estimates reporting (GATHER) for Systematic Review 1 and the preferred reporting items for systematic reviews and meta-analyses guidelines (PRISMA) for Systematic Review 2. PROSPERO registration number: CRD42018084077

Gray SE and Collie A. Comparing time off work after work-related mental health conditions across Australian workers' compensation systems: a retrospective cohort study. *Psychiatry, Psychology and Law*. 2018; 25(5):675-692.

<https://doi.org/10.1080/13218719.2018.1473176>

Hauser W, Finn DP, Kalso E, Krcevski-Skvarc N, Kress HG, Morlion B, et al. European Pain Federation (EFIC) position paper on appropriate use of cannabis-based medicines and medical cannabis for chronic pain management. *European Journal of Pain*. 2018; 22(9):1547-1564.

<https://doi.org/10.1002/ejp.1297>

Abstract: Cannabis-based medicines are being approved for pain management in an increasing number of European countries. There are uncertainties and

controversies on the role and appropriate use of cannabis-based medicines for the management of chronic pain. EFIC convened a European group of experts, drawn from a diverse range of basic science and relevant clinical disciplines, to prepare a position paper to empower and inform specialist and nonspecialist prescribers on appropriate use of cannabis-based medicines for chronic pain. The expert panel reviewed the available literature and harnessed the clinical experience to produce these series of recommendations. Therapy with cannabis-based medicines should only be considered by experienced clinicians as part of a multidisciplinary treatment and preferably as adjunctive medication if guideline-recommended first- and second-line therapies have not provided sufficient efficacy or tolerability. The quantity and quality of evidence are such that cannabis-based medicines may be reasonably considered for chronic neuropathic pain. For all other chronic pain conditions (cancer, non-neuropathic noncancer pain), the use of cannabis-based medicines should be regarded as an individual therapeutic trial. Realistic goals of therapy have to be defined. All patients must be kept under close clinical surveillance. As with any other medical therapy, if the treatment fails to reach the predefined goals and/or the patient is additionally burdened by an unacceptable level of adverse effects and/or there are signs of abuse and misuse of the drug by the patient, therapy with cannabis-based medicines should be terminated. SIGNIFICANCE: This position paper provides expert recommendations for nonspecialist and specialist healthcare professionals in Europe, on the importance and the appropriate use of cannabis-based medicines as part of a multidisciplinary approach to pain management, in properly selected and supervised patients

Kuznetsova Y and Bento JPC. Workplace adaptations promoting the inclusion of persons with disabilities in mainstream employment: a case-study on employers' responses in Norway. *Social Inclusion*. 2018; 6(2):34-45.

<https://doi.org/10.17645/si.v6i2.1332>

MacEachen E. (editor). *The science and politics of work disability prevention*. New York: Routledge; 2019.

McKillop AB, Carroll LJ, Dick BD, and Battie MC. Measuring participation in patients with chronic back pain: the 5-Item Pain Disability Index. *Spine Journal*. 2018; 18(2):307-313.

<https://doi.org/10.1016/j.spinee.2017.07.172>

Abstract: BACKGROUND CONTEXT: Of the three broad outcome domains of body functions and structures, activities, and participation (eg, engaging in valued social roles) outlined in the World Health Organization's (WHO) International Classification of Functioning, Disability and Health (ICF), it has been argued that participation is the most important to individuals, particularly those with chronic health problems. Yet, participation is not commonly measured in back pain research. PURPOSE: The aim of this study was to investigate the construct validity of a modified 5-Item Pain Disability Index (PDI) score as a

measure of participation in people with chronic back pain. **STUDY DESIGN:** A validation study was conducted using cross-sectional data. **PATIENT SAMPLE:** Participants with chronic back pain were recruited from a multidisciplinary pain center in Alberta, Canada. **OUTCOME MEASURES:** The outcome measure of interest is the 5-Item PDI. **METHODS:** Each study participant was given a questionnaire package containing measures of participation, resilience, anxiety and depression, pain intensity, and pain-related disability, in addition to the PDI. The first five items of the PDI deal with social roles involving family responsibilities, recreation, social activities with friends, work, and sexual behavior, and comprised the 5-Item PDI seeking to measure participation. The last two items of the PDI deal with self-care and life support functions and were excluded. Construct validity of the 5-Item PDI as a measure of participation was examined using Pearson correlations or point-biserial correlations to test each hypothesized association. **RESULTS:** Participants were 70 people with chronic back pain and a mean age of 48.1 years. Forty-four (62.9%) were women. As hypothesized, the 5-Item PDI was associated with all measures of participation, including the Participation Assessment with Recombined Tools-Objective ($r=-0.61$), Late-Life Function and Disability Instrument: Disability Component (frequency: $r=-0.66$; limitation: $r=-0.65$), Work and Social Adjustment Scale ($r=0.85$), a global perceived participation scale ($r=0.54$), employment status ($r=-0.30$), and the Usual Activity domain of the 15D ($r=0.50$). The expected correlations observed indicating a moderate or strong association provided supporting evidence for the construct validity of the 5-Item PDI as a measure of participation. The Oswestry Disability Index and the 5-Item PDI were also strongly correlated ($r=0.70$). The 5-Item PDI was associated to a lesser degree with depressive symptoms and resilience, as measured by the Hospital Anxiety and Depression Scale (HADS) ($r=0.25$) and the Connor-Davidson Resilience Scale ($r=-0.28$), as would be expected. No statistically significant association was found between the 5-Item PDI and the HADS Anxiety score. **CONCLUSIONS:** It is important that outcome measures of participation are included in back pain research to gauge the effects of painful spinal conditions and interventions on maintaining valued social roles. A simple, concise measure would be very useful for this purpose in clinical and research settings. The results of this study support the construct validity of the 5-Item PDI as a brief measure of participation in people with chronic back pain. These findings are likely most applicable to those with chronic back pain attending pain clinics and other tertiary centers for care

Munn Z, Peters MDJ, Stern C, Tufanaru C, McArthur A, and Aromataris E. Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. BMC Medical Research Methodology. 2018; 18(1):143.

<https://doi.org/10.1186/s12874-018-0611-x> [open access]

Abstract: **BACKGROUND:** Scoping reviews are a relatively new approach to evidence synthesis and currently there exists little guidance regarding the decision to choose between a systematic review or scoping review approach

when synthesising evidence. The purpose of this article is to clearly describe the differences in indications between scoping reviews and systematic reviews and to provide guidance for when a scoping review is (and is not) appropriate. RESULTS: Researchers may conduct scoping reviews instead of systematic reviews where the purpose of the review is to identify knowledge gaps, scope a body of literature, clarify concepts or to investigate research conduct. While useful in their own right, scoping reviews may also be helpful precursors to systematic reviews and can be used to confirm the relevance of inclusion criteria and potential questions. CONCLUSIONS: Scoping reviews are a useful tool in the ever increasing arsenal of evidence synthesis approaches. Although conducted for different purposes compared to systematic reviews, scoping reviews still require rigorous and transparent methods in their conduct to ensure that the results are trustworthy. Our hope is that with clear guidance available regarding whether to conduct a scoping review or a systematic review, there will be less scoping reviews being performed for inappropriate indications better served by a systematic review, and vice-versa

de Oliveira Sato T, Hallman DM, Kristiansen J, and Holtermann A. The association between multisite musculoskeletal pain and cardiac autonomic modulation during work, leisure and sleep: a cross-sectional study. BMC Musculoskeletal Disorders. 2018; 19(1):405.

<https://doi.org/10.1186/s12891-018-2312-3> [open access]

Abstract: BACKGROUND: The prevention and rehabilitation of multisite musculoskeletal pain would benefit from studies aiming to understand its underlying mechanism. Autonomic imbalance is a suggested mechanism for multisite pain, but hardly been studied during normal daily living. Therefore, the aim of the study is to investigate the association between multisite musculoskeletal pain and cardiac autonomic modulation during work, leisure and sleep. METHODS: This study is based on data from the "Danish Physical activity cohort with objective measurements" among 568 blue-collar workers. Pain intensity scales were dichotomized according to the median of each scale, and the number of pain sites was calculated. No site was regarded as the pain-free, one site was considered as single-site musculoskeletal pain and pain in two or more sites was regarded as multisite musculoskeletal pain. Heart rate variability (HRV) was measured by an electrocardiogram system (ActiHeart) and physical activity using accelerometers (Actigraph). Crude and adjusted linear mixed models were applied to investigate the association between groups and cardiac autonomic regulation during work, leisure and sleep. RESULTS: There was no significant difference between groups and no significant interaction between groups and domains in the crude or adjusted models for any HRV index. Significant differences between domains were found in the crude and adjusted model for all indices, except SDNN; sleep time showed higher values than leisure and work time, except for LF and LF/HF, which were higher during work. CONCLUSION: This cross-sectional study showed that multisite musculoskeletal

pain is not associated with imbalanced cardiac autonomic regulation during work, leisure and sleep time

Pollock A, Campbell P, Struthers C, Synnot A, Nunn J, Hill S, et al. Stakeholder involvement in systematic reviews: a scoping review. Systematic Reviews. 2018; 7(1):208.

<https://doi.org/10.1186/s13643-018-0852-0> [open access]

Abstract: BACKGROUND: There is increasing recognition that it is good practice to involve stakeholders (meaning patients, the public, health professionals and others) in systematic reviews, but limited evidence about how best to do this. We aimed to document the evidence-base relating to stakeholder involvement in systematic reviews and to use this evidence to describe how stakeholders have been involved in systematic reviews. METHODS: We carried out a scoping review, following a published protocol. We searched multiple electronic databases (2010-2016), using a stepwise searching approach, supplemented with hand searching. Two authors independently screened and discussed the first 500 abstracts and, after clarifying selection criteria, screened a further 500. Agreement on screening decisions was 97%, so screening was done by one reviewer only. Pre-planned data extraction was completed, and the comprehensiveness of the description of methods of involvement judged. Additional data extraction was completed for papers judged to have most comprehensive descriptions. Three stakeholder representatives were co-authors for this systematic review. RESULTS: We included 291 papers in which stakeholders were involved in a systematic review. Thirty percent involved patients and/or carers. Thirty-two percent were from the USA, 26% from the UK and 10% from Canada. Ten percent (32 reviews) were judged to provide a comprehensive description of methods of involving stakeholders. Sixty-nine percent (22/32) personally invited people to be involved; 22% (7/32) advertised opportunities to the general population. Eighty-one percent (26/32) had between 1 and 20 face-to-face meetings, with 83% of these holding ≤ 4 meetings. Meetings lasted 1 h to (1/2) day. Nineteen percent (6/32) used a Delphi method, most often involving three electronic rounds. Details of ethical approval were reported by 10/32. Expenses were reported to be paid to people involved in 8/32 systematic reviews. DISCUSSION/CONCLUSION: We identified a relatively large number (291) of papers reporting stakeholder involvement in systematic reviews, but the quality of reporting was generally very poor. Information from a subset of papers judged to provide the best descriptions of stakeholder involvement in systematic reviews provide examples of different ways in which stakeholders have been involved in systematic reviews. These examples arguably currently provide the best available information to inform and guide decisions around the planning of stakeholder involvement within future systematic reviews. This evidence has been used to develop online learning resources. SYSTEMATIC REVIEW REGISTRATION: The protocol for this systematic review was published on 21 April 2017. Publication reference: Pollock A, Campbell P, Struthers C, Synnot A, Nunn J, Hill S, Goodare H, Watts C,

Morley R: Stakeholder involvement in systematic reviews: a protocol for a systematic review of methods, outcomes and effects. *Research Involvement and Engagement* 2017, 3:9. <https://doi.org/10.1186/s40900-017-0060-4>

Savych B and Thumula V. Comparing outcomes for injured workers in Minnesota, 2017 interviews [Report no: WC-18-44]. Cambridge, MA: Workers Compensation Research Institute; 2018.
<https://www.wcrinet.org/reports/comparing-outcomes-for-injured-workers-in-minnesota-2017-interviews>

Swanberg JE, Nichols HM, Clouser JM, Check P, Edwards L, Bush AM, et al. A systematic review of community health workers' role in occupational safety and health research. *Journal of Immigrant and Minority Health*. 2018; 20(6):1516-1531.

<https://doi.org/10.1007/s10903-018-0711-z>

Abstract: We systematically reviewed the literature to describe how community health workers (CHWs) are involved in occupational health and safety research and to identify areas for future research and research practice strategies. We searched five electronic databases from July 2015 through July 2016. Inclusion criteria were as follows: (1) study took place in the United States, (2) published as a full peer-review manuscript in English, (3) conducted occupational health and safety research, and (4) CHWs were involved in the research. The majority of 17 included studies took place in the agriculture industry (76%). CHWs were often involved in study implementation/design and research participant contact. Rationale for CHW involvement in research was due to local connections/acceptance, existing knowledge/skills, communication ability, and access to participants. Barriers to CHW involvement in research included competing demands on CHWs, recruitment and training difficulties, problems about research rigor and issues with proper data collection. Involving CHWs in occupational health and safety research has potential for improving inclusion of diverse, vulnerable and geographically isolated populations. Further research is needed to assess the challenges and opportunities of involving CHWs in this research and to develop evidence-based training strategies to teach CHWs to be lay-health researchers

Tamblyn R, Girard N, Qian CJ, and Hanley J. Assessment of potential bias in research grant peer review in Canada. *CMAJ*. 2018; 190(16):E489-E499.

<https://doi.org/10.1503/cmaj.170901> [open access]

Abstract: BACKGROUND: Peer review is used to determine what research is funded and published, yet little is known about its effectiveness, and it is suspected that there may be biases. We investigated the variability of peer review and factors influencing ratings of grant applications. METHODS: We evaluated all grant applications submitted to the Canadian Institutes of Health Research between 2012 and 2014. The contribution of application, principal applicant and reviewer characteristics to overall application score was assessed

after adjusting for the applicant's scientific productivity. RESULTS: Among 11 624 applications, 66.2% of principal applicants were male and 64.1% were in a basic science domain. We found a significant nonlinear association between scientific productivity and final application score that differed by applicant gender and scientific domain, with higher scores associated with past funding success and h-index and lower scores associated with female applicants and those in the applied sciences. Significantly lower application scores were also associated with applicants who were older, evaluated by female reviewers only (v. male reviewers only, -0.05 points, 95% confidence interval [CI] -0.08 to -0.02) or reviewers in scientific domains different from the applicant's (-0.07 points, 95% CI -0.11 to -0.03). Significantly higher application scores were also associated with reviewer agreement in application score (0.23 points, 95% CI 0.20 to 0.26), the existence of reviewer conflicts (0.09 points, 95% CI 0.07 to 0.11), larger budget requests (0.01 points per \$100 000, 95% CI 0.007 to 0.02), and resubmissions (0.15 points, 95% CI 0.14 to 0.17). In addition, reviewers with high expertise were more likely than those with less expertise to provide higher scores to applicants with higher past success rates (0.18 points, 95% CI 0.08 to 0.28). INTERPRETATION: There is evidence of bias in peer review of operating grants that is of sufficient magnitude to change application scores from fundable to nonfundable. This should be addressed by training and policy changes in research funding

ter Weel B. The rise of temporary work in Europe. De Economist. 2018; 166(4):397-401.

<https://doi.org/10.1007/s10645-018-9329-8> [open access]

Wickens CM, Mann RE, Brands B, Ialomiteanu AR, Fischer B, Watson TM, et al. Driving under the influence of prescription opioids: self-reported prevalence and association with collision risk in a large Canadian jurisdiction. Accident Analysis & Prevention. 2018; 121:14-19.

<https://doi.org/10.1016/j.aap.2018.08.026>

Abstract: BACKGROUND: Motor vehicle collisions are an important contributor to prescription opioid use-related morbidity and mortality. The purpose of the current study was to estimate the prevalence of driving under the influence of prescription opioids (DUIPO) in Ontario, Canada, and to measure the association between this behaviour and the risk of a motor vehicle collision. METHODS: Data were based on telephone interviews with 7857 respondents who reported having driven in the past year. Data were derived from the 2011-2016 cycles of the CAMH Monitor, an ongoing cross-sectional representative survey of adults aged 18 years and older. A binary logistic regression analysis of collision involvement in the previous 12 months was conducted and included demographic characteristics (sex, age, marital status, education, income, region), driving exposure, poor mental health, non-medical use of prescription opioids, and driving after use of alcohol. RESULTS: The prevalence of past-year DUIPO was 3.1%. Controlling for demographic characteristics, driving exposure, and other

risk factors, self-reported DUIPO significantly increased the odds of a collision (AdjOR = 1.97; 95% CI 1.08, 3.60; p = 0.026). CONCLUSION: Based on these findings, DUIPO is a notable road safety issue. Research focused on better understanding the impact of prescription opioids on driver behaviour, reducing the prevalence of DUIPO, and improving drug-impaired driving policy and interventions should be prioritized in public health strategies