

**ABOUT RESEARCH ALERT**

*Research Alert* is a service provided to you by the Institute for Work & Health (IWH) to help you keep abreast of recent literature in the areas of occupational health and safety, epidemiology, public health and others within the IWH mandate. Please note that these articles have not been reviewed by Institute scientists to assess the quality of the studies. Research Alerts should not be considered an endorsement of the findings. Readers are cautioned not to act on the results of single studies, but rather to seek bodies of evidence. It should also be noted that the Institute for Work & Health cannot provide full-text of articles listed in Research Alerts to individuals outside of the organization, as this violates copyright legislation.

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

**\*Lynaes C, Lynaes M, Simon LS, Tugwell P, D'Agostino MA, Strand V, Juhl CB, Nielsen SM, De Witt M, Beaton D, et al. Physicians' vs patients' global assessments of disease activity in rheumatology and musculoskeletal trials: a meta-research project with focus on reasons for discrepancies. *Seminars in Arthritis and Rheumatism*. 2022; 56:152074.**

<https://doi.org/10.1016/j.semarthrit.2022.152074>

Abstract: Background: In most rheumatic and musculoskeletal diseases (RMDs), global assessments of disease activity by physicians and patients are 'anchor outcomes' in therapeutic trials evaluating whether a treatment is effective. Objectives: To compare physicians' vs patients' global assessments of disease activity in RMD trials and explore reasons for discrepancies between them. Methods: Eligible trials were sampled from systematic reviews of treatments for RMDs by using the Cochrane database of systematic reviews (i.e., reviews from the Cochrane Musculoskeletal Group, [CMG]). Randomized controlled trials (RCTs) of interventions for RMDs were eligible if they reported quantitative analyses of both physicians' and patients' global assessments at the same time point for the comparison of the same experimental intervention against the same comparator (i.e., placebo, no treatment, or other treatment). We accepted data from trial comparisons for each type of outcome, regardless of the type of intervention and type of RMD within the CMG. Using mixed-effects meta-regression models, we assigned the dependent variable as the ratio of odds ratios (ROR) of global change with the experimental intervention, versus the control comparator. An ROR>1 would indicate that physicians rated the experimental intervention more favorable than their patients did. Results: We were able to estimate the

ROR (data from both physicians' and patients' global assessments) across 70 trials (116 randomized comparisons) in 7 diseases (ankylosing spondylitis, fibromyalgia, psoriatic arthritis, osteoarthritis, rheumatoid arthritis, systemic lupus erythematosus, and gout). The combined ROR across all effectiveness comparisons were rated significantly in favor of the intervention by physicians: ROR=1.15 CI 95% (1.07 to 1.23). This combined ROR was based on a substantial heterogeneity across comparisons ( $I^2=89.1\%$ ). Across all the stratified analyses, the type of the RMD was an informative reason for discrepancies, with a statistically significant ROR in rheumatoid arthritis ROR=1.33, CI 95% (1.13 to 1.56), unlike the ROR in all other conditions (ROR=1.04, CI 95% (0.95-1.14)). Conclusion: In comparative effectiveness research on rheumatology, physicians' global assessments of disease activity, surprisingly, are more in favor of the experimental interventions than are those of the patients.

**Abareshi F, Salimi F, Farnia F, Fallahi M, and Rastaghi S. The impact of mental workload, work-related and socio-demographic factors on job burnout among emergency medical staff. *Work*. 2022; 72(4):1269-1277.**

<https://doi.org/10.3233/WOR-210001>

**Abstract:** Background: Job burnout syndrome is caused by prolonged exposure to difficult working conditions. Emergency medical services (EMS) staff are exposed to varying levels of mental workload (MWL) depending on the operation, so it is more likely that they experience burnout syndrome. Objective: The main aim of the current research was to investigate the effect of MWL, work-related and socio-demographic factors on job burnout among Iranian EMS staff. Methods: The current cross-sectional and descriptive-analytical research was carried out among 198 EMS. In doing so, the Maslach Burnout Inventory (MBI), The NASA task load index (NASA TLX), and an author-developed work-related and socio-demographic factors were distributed among participants to collect data. The data were analyzed using descriptive and inferential statistics (t-test, ANOVA test, multiple linear regression, and Pearson correlation coefficient). Results: The results showed a significant statistical relationship between burnout and MWL. A significant statistical relationship between overall workload and two dimensions of MBI, namely, emotional exhaustion and depersonalization were observed ( $P < 0.05$ ). Moreover, a significant statistical difference regarding the mean of burnout in the different groups of educational levels and occupational categories were observed. Conclusions: The EMS staff generally reported moderate levels of MWL and burnout. Findings showed that socio-demographic and occupational factors had little effect on burnout. MWL, education levels, and occupational categories are the main predictors of job burnout.

**Billias N, MacEachen E, and Sherifali S. "I grabbed my stuff and walked out": precarious workers' responses and next steps when faced with procedural unfairness during work injury and claims processes. *Journal of Occupational Rehabilitation*. 2022; [epub ahead of print].**

<https://doi.org/10.1007/s10926-022-10058-3> [open access]

**Abstract:** PURPOSE: Injured workers can experience adverse effects from work injury and claims processes. Workers may be treated unfairly by employers, compensation boards, and return-to-work coordinators; however, how workers respond to these challenges is unknown. This article describes how injured precarious workers responded behaviourally and emotionally to procedural unfairness in work injury and claims processes, and what workers did next. METHODS: Interviews were conducted with thirty-six precariously employed injured workers recruited in Ontario through social media, email, cold calling, word-of-mouth, and the "snowball" method. Thematic code summaries were analyzed to identify how precarious workers responded to procedural unfairness. RESULTS: Workers went through all or most of these five stages (not always linearly) when faced with procedural unfairness: (1) passive, (2) fought back, (3) quit pursuit of claim, (4) quit job, and (5) won or got further in fight. Feeling confused, angry, frustrated, unsupported, disappointed, determined, optimistic, and wary were common emotions. CONCLUSIONS: Identifying unfairness and its emotional, behavioral, and material effects on workers is important to understand implications for compensation systems. Understanding and recognizing unfairness can equip employers, legal representatives, compensation boards, and physicians, to address and prevent it, and provide worker resources. Policy changes can ensure accountability and consequences to unfairness initiators

**Chari R, Sauter SL, Petrun Sayers EL, Huang W, Fisher GG, and Chang CC. Development of the national institute for occupational safety and health worker well-being questionnaire. *Journal of Occupational & Environmental Medicine*. 2022; 64(8):707-717.**

<https://doi.org/10.1097/JOM.0000000000002585> [open access]

**Abstract:** OBJECTIVE: This article describes development of the National Institute for Occupational Safety and Health (NIOSH) Worker Well-Being Questionnaire (WellBQ). METHODS: The NIOSH WellBQ was developed through literature reviews and expert panel recommendations. We drew from a representative sample of the civilian, noninstitutionalized, US working population to pilot the questionnaire. Psychometric analyses were performed on data from 975 respondents to finalize items and optimize the NIOSH WellBQ's psychometric properties. RESULTS: The final questionnaire consists of 16 scales, 5 indices, and 31 single items across 5 domains: (1) work evaluation and experience; (2) workplace policies and culture; (3) workplace physical environment and safety climate; (4) health status; and (5) home, community, and society (experiences and activities outside of work). The instrument demonstrated adequate reliability and validity. CONCLUSIONS: The

NIOSH WellBQ is a reliable and valid instrument that comprehensively measures worker well-being

**Cox-Ganser JM, Henneberger PK, Weissman DN, Guthrie G, and Groth CP. COVID-19 test positivity by occupation using the Delphi US COVID-19 trends and impact survey, September-November 2020. American Journal of Industrial Medicine. 2022; 65(9):721-730. <https://doi.org/10.1002/ajim.23410> [open access]**

**Abstract:** Background: The potential for work to be a risk factor for coronavirus disease 2019 (COVID-19) was recognized early in the pandemic based on the likelihood of work-related differences in exposures to COVID-19 in different occupations. Due to intense demands of the pandemic, implementation of recommendations to collect information on occupation in relation to COVID-19 has been uneven across the United States. The objective of this study was to investigate COVID-19 test positivity by occupation. Methods: We analyzed data collected from September 8 to November 30, 2020, by the Delphi Group at Carnegie Mellon University US COVID-19 Trends and Impact Survey, offered daily to a random sample of US-based Facebook users aged 18 years or older, who were invited via a banner in their news feed. Our focus was ever testing positive for COVID-19 in respondents working outside the home for pay in the past 4 weeks. Results: The major occupational groups of "Production", "Building and grounds cleaning and maintenance," "Construction and extraction," "Healthcare support," and "Food preparation and serving" had the five highest test positivity percentages (16.7%-14.4%). Highest detailed occupational categories (28.6%-19.1%) were "Massage therapist," "Food processing worker," "Bailiff, correctional officer, or jailer," "Funeral service worker," "First-line supervisor of production and operating workers," and "Nursing assistant or psychiatric aide." Differences in test positivity by occupation remained after adjustment for age, gender, and pre-existing medical conditions. Conclusion: Information on differences in test positivity by occupation can aid targeting of messaging for vaccination and testing and mitigation strategies for the current and future respiratory infection epidemics and pandemics. These results, obtained before availability of COVID-19 vaccines, can form a basis for comparison to evaluate impacts of vaccination and subsequent emergence of viral variants.

**Gillespie ME, Nguyen V, Demaya D, and Frieden L. Barriers to participation in workplace wellness programs for people with disabilities. Journal of Occupational & Environmental Medicine. 2022; 64(8):649-652.**

**<https://doi.org/10.1097/JOM.0000000000002553>**

**Abstract:** OBJECTIVE: As workplace wellness programs become increasingly popular, many concerns have been raised that these programs are inaccessible or infringe upon the legal rights of people with disabilities. In response to those concerns, we investigated the experiences of workers with disabilities with barriers to access for workplace wellness programs. METHODS: We disseminated an electronic survey and conducted a descriptive statistical analysis assessing the demographics, behavior, and attitudes of people with

disabilities toward workplace wellness programs. RESULTS: We found that the largest barriers to workplace participation are lack of access to careers dominated by large employers who offer more employee benefits and issues regarding barriers to access within those employers. CONCLUSIONS: These findings indicate that there are significant barriers that prevent people with disabilities from fully participating in the workplace

**Hudon A, MacEachen E, and Lippel K. Framing the care of injured workers: an empirical four-jurisdictional comparison of workers' compensation boards' healthcare policies. *Journal of Occupational Rehabilitation*. 2022; 32(2):170-189.**

<https://doi.org/10.1007/s10926-021-10021-8>

Abstract: Purpose: The objective of this study was to explore how workers' compensation policies related to healthcare provision for workers with musculoskeletal injuries can affect the delivery and trajectories of care for injured workers. The principal research question was: What are the different ways in which workers' compensation (WC) policies inform and transform the practices of healthcare providers (HCPs) caring for injured workers? Methods: We conducted a cross-jurisdictional policy analysis. We conducted qualitative interviews with 42 key informants from a variety of perspectives in the provinces of Ontario and Quebec in Canada, the state of Victoria in Australia and the state of Washington in the United States. The main methodological approach was Framework Analysis. Results: We identified two main themes: (1) Shaping HCPs' clinical practices and behaviors with injured workers. In this theme, we illustrate how clinical practice guidelines and non-economic and economic incentives were used by WCs to drive HCP's behaviours with workers; (2) Controlling workers' trajectories of care. This theme presents how WC policies achieve control of the workers' trajectory of care via different policy mechanisms, namely the standardization of care pathways and the power and autonomy vested in HCPs. Conclusions: This policy analysis shed light on the different ways in which WC policies shape HCP's day-to-day practices and workers' trajectories. A better understanding and a nuanced portrait of these policies' impacts can help support reflections on future policy changes and inform policy development in other jurisdictions.

**Macpherson RA, Lane TJ, Collie A, and McLeod CB. Exploring differences in work disability duration by size of firm in Canada and Australia. *Journal of Occupational Rehabilitation*. 2022; 32(2):190-202.**

<https://doi.org/10.1007/s10926-021-10014-7>

Abstract: Purpose To identify whether there were differences in work disability duration between injured workers employed by small, medium, large, and self-insured firms and whether these differences varied between workers' compensation jurisdictions in Canada and Australia. Methods Workers' compensation data were used to identify comparable lost-time, work-related injury and musculoskeletal disorder claims in five Canadian and five Australian jurisdictions between 2011 and 2015. Work disability duration was measured using cumulative disability days paid up to one-year post-injury. Jurisdiction-specific quantile

regression models were used to estimate differences in cumulative disability days paid to claims from small (< 20 full-time equivalents (FTEs)) medium (20-199 FTEs), large (200 + FTEs) and self-insured firms at the 25th, 50th, and 70th percentiles in the disability distribution, adjusting for confounders. Results Compared to large firms, workers in small firms generally had longer work disability duration at each percentile, particularly in Saskatchewan and Alberta (Canada), Victoria and Australian Capital Territory (Australia), where an additional 31.1, 18.4, 58.5 and 37.0 days were paid at the 75th percentiles, respectively. The disability duration of workers from self-insured firms was longer than large firms in all Canadian jurisdictions but was shorter or no different in Australian jurisdictions. Smaller differences were observed between claims from large and medium-sized firms. Conclusions Workers in small firms had longer work disability duration than those in large firms in all but one of the study jurisdictions. Claims management processes need to be sensitive to the challenges that small firms face in accommodating and returning injured workers back to work.

**Munir M. Frequency of musculoskeletal complaints and their associated risk factors among computer workers. *Work*. 2022; 72(3):997-1005.**

<https://doi.org/10.3233/WOR-210266>

Abstract: BACKGROUND: Computer-related work has become a part of the daily routine of workers of many occupations which leads to pains of multiple parts of the musculoskeletal system. OBJECTIVES: To examine the frequency and severity of musculoskeletal complaints of different regions of the body, and to examine the relationship between work-related risk factors with musculoskeletal complaints. METHODS: Three hundred and twenty-six computer workers were selected by non-probability purposive sampling from three clusters of computer sectors. The study design was a descriptive cross-sectional study. Respondents were interviewed and their height and weight were measures. Confidentiality was assured. RESULTS: The most common musculoskeletal complaints were shoulder (45%), neck (43%), and upper-middle back (36%) pain. The complaints were related to the female gender, increase duration of computer and using a computer at home. CONCLUSIONS: Musculoskeletal complaints and psychosocial stresses were related to increasing the duration of computer work

**Nanwa N, Wong V, and Thompson AMS. Impact of timing of mental health interventions for mild traumatic brain injury patients: a 10-year matched cohort study of workers' compensation claims. *Journal of Occupational & Environmental Medicine*. 2022; 64(6):458-464.**

<https://doi.org/10.1097/JOM.0000000000002512>

Abstract: OBJECTIVE: To examine the impact of timing of mental health interventions in workers' compensation claims for mild traumatic brain injury (MTBI). METHODS: A 10-year matched retrospective cohort study of MTBI claims. Cases who started treatment within 3 months of the date of injury were hard matched to cases who started treatment more than 3 months after the date of injury. Outcomes were incremental cost difference and loss of

earnings benefit duration 1 year after first intervention. RESULTS: Seventeen percent (17%) of patients received mental health interventions. The early mental health intervention group had lower mean costs (incremental difference \$1580 [95% CI: \$5718 to \$2085]) and shorter durations of disability (off loss of earnings) (59.2% versus 46.6%, NS). Sensitivity and stratified analyses demonstrated the same trend. CONCLUSIONS: Early mental health interventions for MTBI patients may lead to reduced health care costs and shorter durations of disability

**Pomeroy JML, Sanchez JO, Cai C, Garfinkel S, Cote P, Frontera WR, et al. Incorporating the concept of relevance in clinical rehabilitation research and its reviews may improve uptake by stakeholders. American Journal of Physical Medicine & Rehabilitation. 2022; 101(8):775-781.**

<https://doi.org/10.1097/PHM.0000000000002046> [open access]

Abstract: The "relevance" of research to stakeholders is an important factor in influencing the uptake of new knowledge into practice; however, this concept is neither well defined nor routinely incorporated in clinical rehabilitation research. Developing a uniform definition, measurement standards, stakeholder engagement strategies, and guiding frameworks that bolster relevance may help incorporate the concept as a key element in research planning and design. This article presents a conceptual argument for why relevance matters, proposes a working definition, and suggests strategies for operationalizing the construct in the context of clinical rehabilitation research. We place special emphasis on the importance of promoting relevance to patients, caregivers, and clinicians and provide preliminary frameworks and innovative study designs that can assist clinical rehabilitation researchers in doing so. We argue that researchers who include a direct statement regarding why and to whom a study is relevant and who incorporate considerations of relevance throughout all phases of study design produce more useful research for patients, caregivers, and clinicians, increasing its chance of uptake into practice. Consistent consideration of relevance, particularly to nonacademic audiences, during the conceptualization, study design, presentation, and dissemination of clinical rehabilitation research may promote the uptake of findings by patients, caregivers, and providers

**Putsa B, Jalayondeja W, Mekhora K, Bhuanantanondh P, and Jalayondeja C. Factors associated with reduced risk of musculoskeletal disorders among office workers: a cross-sectional study 2017 to 2020. BMC Public Health. 2022; 22(1):1503.**

<https://doi.org/10.1186/s12889-022-13940-0> [open access]

Abstract: Background: Prolonged sitting at work should be avoided to reduce the risks of either noncommunicable diseases (NCDs) or musculoskeletal disorders (MSDs) among office workers. A short duration of breaks in sitting every hour can reduce cardiometabolic risk factors contributing to NCDs. However, the recommendation for a break from sitting at work to reduce the risks of MSDs has not been identified. Therefore, this study aimed to determine whether breaking by changing position at work, physical activity, physical fitness, stress and sleep were associated with MSDs among office workers. Methods: A cross-sectional study

was conducted from 2017 to 2020. Participants aged 20-59 years and using a computer at work  $\geq 4$  days/week were recruited. Data were collected using an online self-reporting questionnaire for computer users and 5 domains of physical fitness tests. Odds ratio (OR) with 95% confidence interval (CI) and multivariate logistic regression were used for statistical analysis. Results: Prevalence of MSDs was 37.9% (n = 207/545) and the most area of complaint were the neck, shoulders and back. A nonsignificant association between physical fitness and MSDs among office workers was obtained. After adjusting for age, sex, body mass index, and comorbidity, moderate-to-vigorous intensity physical activity (MVPA)  $\geq 150$  min/week and sitting at work  $\geq 4$  h/day were MSDs risk factors (OR = 1.57, 95%CI = 1.04-2.37). Frequently changing positions from sitting to standing or walking at work every hour could reduce the risks of MSDs by more than 30%. The risks of MSDs increased among office workers who commuted by staff shuttle bus and personal car and had high to severe stress and slept  $< 6$  h/day (1.6 to 2.4 times). Conclusion: Our findings indicated MVPA and prolonged sitting were MSD risk factors. We recommend office workers change position from sitting to standing or walking during work every hour and sleep  $\geq 6$  h/day to reduce risks of MSDs.

**Ridderseth H, Daltveit DS, Hollund BE, Kirkeleit J, Kromhout H, Kruger K, et al. Occupational benzene exposure in the Norwegian offshore petroleum industry, 2002-2018. *Annals of Work Exposures and Health*. 2022; 66(7):895-906.**

<https://doi.org/10.1093/annweh/wxac022> [open access]

Abstract: PURPOSE: Workers on offshore petroleum installations are at risk of being exposed to benzene which is carcinogenic to humans. The present study aimed to assess the time trend of full-shift benzene exposure from 2002 to 2018 in order to characterize benzene exposure among laboratory technicians, mechanics, process operators, and industrial cleaners, and to examine the possible determinants of benzene exposure. METHODS: A total of 924 measurements of benzene exposure from the Norwegian petroleum offshore industry were included. The median sampling duration was 680 min, ranging from 60 to 940 min. The overall geometric mean (GM) and 95% confidence interval, time trends, and determinants of exposure were estimated using multilevel mixed-effects tobit regression analyses. Time trends were estimated for sampling duration below and above 8 h, both overall and for job groups. The variability of exposure between installation and workers was investigated in a subset of data containing worker identification. RESULTS: The overall GM of benzene exposure was 0.004 ppm. When adjusting for job group, design of process area, season, wind speed, and sampling duration, industrial cleaners had the highest exposure (GM = 0.012). Laboratory technicians, mechanics, and process operators had a GM exposure of 0.004, 0.003, and 0.004 ppm, respectively. Overall, the measured benzene exposure increased by 7.6% per year from 2002 to 2018. Mechanics had an annual increase of 8.6% and laboratory technicians had an annual decrease of 12.6% when including all measurements. When including only measurements above 8 h, mechanics had an increase of 16.8%. No statistically



significant time trend was found for process operators. Open process area, high wind speed, and wintertime were associated with reduced exposure level. CONCLUSIONS: An overall increase in measured exposure was observed from 2002 to 2018. The increase may reflect changes in measurement strategy from mainly measuring on random days to days with expected exposure. However, the time trend varied between job groups and was different for sampling duration above or below 8 h. Industrial cleaners had the highest exposure of the four job groups while no differences in exposure were observed between laboratory technicians, mechanics, and process operators. The design of the process area, job group, wind speed, and season were all significant determinants of benzene exposure

**Shirangi A, Lin T, Iva Nova I, Yun G, Williamson GJ, Franklin P, et al. Exposure to fine particulate matter (PM2.5) during landscape fire events and the risk of cardiorespiratory emergency department attendances: a time-series study in Perth, Western Australia. *Journal of Epidemiology & Community Health*. 2022; 76:809-818.**

<https://doi.org/10.1136/jech-2021-218229>

Abstract: Background: Landscape fires (LFs) are the main source of elevated particulate matter (PM2.5) in Australian cities and towns. This study examined the associations between daily exposure to fine PM2.5 during LF events and daily emergency department attendances (EDA) for all causes, respiratory and cardiovascular outcomes. Methods: Daily PM2.5 was estimated using a model that included PM2.5 measurements on the previous day, remotely sensed aerosols and fires, hand-drawn tracing of smoke plumes from satellite images, fire danger ratings and the atmosphere venting index. Daily PM2.5 was then categorised as high (=99th percentile), medium (96th-98th percentile) and low (=95th percentile). Daily EDA for all-cause and cardiorespiratory conditions were obtained from the Western Australian Emergency Department Data Collection. We used population-based cohort time-series multivariate regressions with 95% CIs to assess modelled daily PM2.5 and EDA associations from 2015 to 2017. We estimated the lag-specific associations and cumulative risk ratios (RR) at lags of 0-3 days, adjusted for sociodemographic factors, weather and time. Results: All-cause EDA and overall cardiovascular presentations increased on all lagged days and up to 5% (RR 1.05, 95% CI 1.03 to 1.06) and 7% (RR 1.07, 95% CI 1.01 to 1.12), respectively, at the high level. High-level exposure was also associated with increased acute lower respiratory tract infections at 1 (RR 1.19, 95% CI 1.10 to 1.29) and 3 (RR 1.17, 95% CI 1.10 to 1.23) days lags and transient ischaemic attacks at 1 day (RR 1.25, 95% CI 1.02 to 1.53) and 2 (RR 1.20, 95% CI 1.01 to 1.42) days lag. Conclusions: Exposure to PM2.5 concentrations during LFs was associated with an increased risk of all-cause EDA, overall EDA cardiovascular diseases, acute respiratory tract infections and transient ischaemic attacks.

**Small TF, Smith CR, Hutton S, Davis KG, and Gillespie GL. Workplace violence prevention training, safety resources, and commitment to HHCWs' safety. Workplace Health & Safety. 2022; 70(7):325-331.**

<https://doi.org/10.1177/21650799221076871>

**Abstract:** BACKGROUND: The threat of workplace violence (WPV) is a primary safety concern for home health care workers (HHCWs). WPV prevention training is a critical tool for HHCWs' safety. Yet, most existing WPV prevention training is limited or not specific to HHCWs' environment, the patient's home, and neighborhood. The purpose of this study was to describe WPV prevention training, resources used, and commitment to HHCWs' safety. METHODS: Using a cross-sectional design, HHCWs from two sites located in Southwestern Ohio completed the Violence Against Home Healthcare and Hospice Workers survey, a 37-item survey used to describe frequency and characteristics of WPV prevention training and resources. Descriptive statistics were used to analyze the data. FINDINGS: Half (n = 25) of the HHCWs received WPV prevention training. Training content focused on characteristics of aggressive/violent patients and family members (n = 19, 82.6%), but limited content about characteristics of hazardous neighborhoods (n = 15, 65.2%). Cellular phones (n = 43, 97.7%) were primarily used as a resource to promote safety, few cellular phones (n = 1, 2.3%) were provided by the agency. CONCLUSIONS/APPLICATION TO PRACTICE: HHCWs described WPV prevention training content and resources used to promote safety. WPV prevention training is deficient in procedures for seeking psychological care, screening patients for violent behavior, skills for self-protection, characteristics of hazardous neighborhoods, and physical maneuvers and verbal methods to diffuse or avoid aggressive behavior. Access to WPV prevention training and resources for HHCWs needs to be strengthened. Occupational Health Nurses can assist their employers with developing WPV prevention training for HHCWs

**Missed an issue?** Catch up on previous Research Alerts available on the IWH website [www.iwh.on.ca/journal-articles/research-alerts](http://www.iwh.on.ca/journal-articles/research-alerts)