

Presentation Title	Place in Schedule
Health and safety interventions for professional drivers: A scoping review	Concurrent Session 1.2 <i>Day 2 – Wednesday</i> <i>May 9<sup>th</sup>, 2018</i> <i>1:00 – 2:15pm</i>
Description of Presentation	Presenter Name(s) And Credentials
<p>Background:</p> <p>Professional drivers suffer from numerous acute and chronic health issues, such as obesity and musculoskeletal disorders. These health issues, as well as their safety at work, are often related to exposure to occupational hazards such as, irregular work shifts, long hours of driving, sedentary restricted postures, whole body vibration, noise and chemical exposures. Additionally, drivers’ health behaviors (their diet, sleep patterns, lifestyle and tobacco use) exacerbate their risk of developing ill health and/or injury. The recent focus on interventions addressing workers’ health and safety has revealed the need to identify best evidence-based policies, programs and practices to inform the design of future interventions. Despite, a body of literature identifying risk factors associated with professional drivers’ ill health and safety risk, there is little evidence on the protection of professional drivers’ health. The objective of this scoping review was to review the literature to: 1) summarize the process used to develop existing interventions; 2) characterize the content of worker- and organizational- based interventions focused on professional drivers’ health and safety; 3) determine the effectiveness of these interventions; and 4) identify barriers and pitfalls to implementing these interventions. The data from this review will be used to inform a future intervention to improve drivers’ health and safety.</p> <p>Methods:</p> <p>We used the Joanna Briggs Institute methodology to conduct the Scoping Review. Searches of studies published between 1999-2017 were performed using PUBMED, Web of Science and LILACS. Inclusion criteria were that studies had to evaluate interventions focused on improving the health and safety of professional drivers and that interventions focused on five health outcomes previously associated with</p>	<p>Maria Andree Lopez Gomez, MPH, PhD  <i>Harvard T.H. Chan School of Public Health</i></p> <p>Susan E. Peters, PhD, BOccThy(Hons)  <i>Harvard Center for Work, Health and Wellbeing, Harvard T.H. Chan School of Public Health</i></p>

professional drivers' exposures: stress, obesity, fatigue, sleep disorders and musculoskeletal disorders.

For each publication, we identified outcomes, target risk factors, intervention components and their effectiveness and procedures preceding the intervention.

**Results:**

Searches yielded 1,131 publications of which 18 publications met the selection criteria. Of the 18 publications, six (33.3%) evaluated the effectiveness of integrated interventions and they were focused on improving drivers' body weight. Other studies focused on single component interventions such as use of: ergonomic devices or training for managers to reduce musculoskeletal injury; alert systems inside the vehicle or changes in the road environment to alert drivers of fatigue symptoms; sleep apnea screening and treatment and technological innovations and reduction of job demands to reduce work-related stress. Intervention effectiveness and measured outcomes varied by study even among studies targeting the same health problem. Interventions on fatigue and sleep disorders focused on solving the problem rather than preventing it.

**Conclusions:**

Our review identified few studies that utilized multifaceted integrated approaches to develop interventions that improve health and safety of professional drivers and these were generally focused on improving drivers' weight. Thus, few studies focused on ways that organizations can change policies, programs and practices to improve workers' health and safety. Most of the studies were worker-focused interventions aimed at improving health behaviors. The review's findings can be used to inform the design, development and implementation of integrated interventions to improve professional drivers' health and safety.