

| Presentation Title   | Place in Schedule   |
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| Influence of work organization and environment on health behaviors of construction apprentices   | Poster Session<br><i>Day 2 – Wednesday – May 9<sup>th</sup>, 2018<br/>8:30am-9:30am</i> |
| Description of Presentation  | Presenter Name(s) And Credentials   |
| <p><b>Introduction:</b> Construction is among the most dangerous industries with well-recognized high physical demands and low job autonomy. In addition to traditional hazards for workplace injury and illness, other threats to health and well-being occur from work organization and work environment factors, including irregular employment, multiple job sites, long commutes, long work hours, and employer policies regarding health and safety. These non-traditional hazards are associated with injury and illness, as well as health behaviors including poor diet, smoking, and psychosocial stress. The cumulative impacts of both traditional and non-traditional hazards on the health and well-being of construction workers are largely unknown.</p> <p><b>Methods:</b> We conducted a survey among apprentice construction workers to identify relationships between work organization, environmental factors, health behaviors, and health outcomes.</p> <p><b>Results:</b> 963 surveys were completed. Respondents (mean age 28) reported high levels of job satisfaction, job security, and social support, but also report high rates of musculoskeletal symptoms and various work organizational factors potentially affecting health outcomes and behaviors. Average commuting distance to work was 45 miles, and 63% reported no limits on daily working hours. Workers reported high smoking rates (28% were current smokers), and only 55% reported any restrictions on smoking at their worksites. Only 10% reported regularly using sunscreen when in the sun for &gt;15 minutes; only 4% of worksites provided sunscreen. We examined associations between work organization and environmental factors and four self-reported outcomes: lower work ability, lower productivity, higher rates of missed days of work due to injury, and use of prescription pain medication. Preliminary analyses show that all four outcomes were associated with high job demands, low supervisor support, and low job security. Other factors were associated with one or more outcomes, including low job security, mandatory overtime, low coworker support, and low foreman supervision of safety. Compared to commercial construction workers, those in residential construction reported higher job demands and job strain, and had higher</p> | Bradley Evanoff, MD, MPH<br><i>Washington University School of Medicine</i>             |
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rates of missed days due to work injuries, bodily pain, and use of pain medication.

**Discussion:** These preliminary cross-sectional results highlight non-traditional worksite health risks, and suggest potential interventions that may improve health behaviors and outcomes among construction workers. As our study progresses, we plan to evaluate the longitudinal impact of work organization on health and health behaviors in construction trades, identify workplace programs, policies, and practices affecting worker health and well-being, and determine readiness for adoption of integrated interventions to improve worker health.