**Key Findings from Research:**

*Report Title and Authors:*

The Role of Age on the Cause, Type, Nature and Cost of Construction Injuries  
John Rosecrance, Ph.D. PT CPE, Lesley Butler, Ph.D., Natalie Schwatka, M.S. AEP.  
CPWR Report, December 2011.

*Overview:*

As older workers continue to delay retirement, understanding the health and safety needs of an aging workforce will be critical over the next twenty years. The goal of the project was to determine the impact of age on workers in the construction industry as age relates to selected workers’ compensation variables. Descriptive and multivariate analysis of over 100,000 workers’ compensation construction industry claims for the state of Colorado was conducted to understand the relationship between the claimant age and workers’ compensation costs by the causes and natures of injuries and illnesses. Our findings indicate that while older construction workers filed a small percentage of the total workers’ compensation claims, their injuries and illnesses were more costly compared to younger workers. The indemnity cost of a claim increased by 3.5% for each year increase in age whereas the medical cost increased by 1%. Workers over the age of 65 were injured most frequently from falls, slips and trips, and workers aged 35 to 64 were injured most frequently from strains. Though repetitive motion causes of injuries were not frequent among all age groups, they resulted in a 6.8% increase in the indemnity cost of a claim for each year increase in age. Strains were the most common nature of injury for workers over the age of 35 but workers over the age of 65 experienced strains and contusions at similar frequencies. This analysis suggests that aging construction workers and younger construction workers do in fact experience significant differences in injuries and costs.

*Key findings:*

- Older construction workers filed a small percentage of the total workers' compensation claims; however, when they did file a claim the associated costs were greater. This was especially true for the indemnity cost of a claim where the indemnity cost of a claim increased 3.5% for each year increase in age, where as the medical cost increased 1.1%.

- 29% of all claims filed by workers over the age of 65 were the result of a fall, slip or trip. A fall, slip or trip resulted in a 2.5% increase in the indemnity cost of a claim for each year increase in age. Falls to the same level or on ice or snow, specifically, were more common among older workers. Yet, the average cost of a fall to a different level was more costly, regardless of age.

- Strains, specifically from lifting, were the most common cause of injury among workers aged 35-64. A strain resulted in a 3.8% increase in the cost of a claim for each year increase in age.
• A repetitive motion cause of injury resulted in the greatest increase in cost with each year increase in age (6.8%) but was not cited frequently as cause of injury/illness among claimants.

• The most common nature of injury among workers over the age of 35 was strains but workers over the age of 65 experienced strains and contusions at similar frequencies. A strain and contusion injury resulted in a 3.5% and 3.4% increase in the indemnity cost of a claim for each year increase in age, respectively.

For more information, contact the lead author:

John Rosecrance at john.rosecrance@colostate.edu.