



FOR IMMEDIATE RELEASE:
June 10, 2010

CONTACT:
Mary Watters mwatters@cpwr.com
301/495-8523/o, 301-919-4627/c

RESEARCHERS FIND A DISCONNECT BETWEEN SAFETY PERCEPTIONS AND ACTUALITY; OPPORTUNITIES EXIST FOR IMPROVEMENT

*Ladders are #1 cause of injuries from falls among residential carpenter apprentices,
but workers think ladders pose minimal fall risk*

Researchers examining individual and organizational factors associated with falls from heights among residential apprentice carpenters found that 30 percent of all falls from heights were from ladders, yet apprentices, when surveyed on ladder safety, thought ladders posed minimal risk of falls. An alarming 16 percent of apprentices had fallen in the past year, and more than 50 percent knew someone who had fallen. Most apprentices also reported they had not received training on ladder use, despite the fact that step and extension ladders are the two most-used objects in residential carpentry. These and other results, funded through a grant from CPWR –The Center for Construction Research and Training, were reported in the latest issue of the *Scandinavian Journal of Work, Environment and Health*.

Working with members of the Carpenters' District Council of Greater St. Louis and Vicinity, researchers from the Washington University School of Medicine in St. Louis and Duke University collected fall experience among 1,025 apprentices then identified their fall-prevention knowledge, risk perceptions, confidence, training, perceived safety climate, and crew safety behaviors. Apprentices reported that fall arrest systems were used on just 13 percent of worksites, although 87 percent of apprentices received training on their use. The carpenter apprentices reported they often observed crew members taking a risk, such as standing on the top wall of a house being framed, which could result in a fall several stories to the ground.

“Our findings are disturbing, given that falls are the No. 1 killer of residential carpenters,” said researcher and lead author of the paper, Vicki Kaskutas. “Having less than 1 year of construction was the biggest predictor of falls from heights, with these workers 3.5 times more likely than experienced workers to suffer a fall. Residential apprentices were over 2 times more likely to fall than apprentices working commercial construction.”

The good news is that apprentices who worked with crews that practice safer behaviors or have a greater number of senior carpenters for mentorship had a lower probability of suffering a fall. According to Kaskutas, “After all, the apprenticeship model used in many trades relies on senior workers to train inexperienced crew members.”

However, Kaskutas and her colleagues, led by principal investigator Bradley Evanoff, did more than identify problems. The research team also suggested many ways to improve jobsite safety and lower falls among workers, especially inexperienced ones.

“Everyone involved in the work plays an important role,” Kaskutas said. “Apprenticeship training programs can improve the timing and content of fall-prevention training. Carpenters can assume a more active role in ensuring their fall prevention knowledge and practicing safe worksite behaviors. Contractors can ensure that their work crews are optimally staffed and there is adequate time, training, supervision, and resources to maintain the safety of the workers during all phases of the construction process. Researchers can partner with contractors to improve the safety culture and infuse safe construction methods and technologies into the residential construction process. Policy-makers can increase the levels of enforcement of standards designed to protect workers from falls.”

The disconnect between the seemingly harmless ladder and the research findings that proved most falls came from ladder use is even more reason for contractors and workers to pay attention to the study suggestions, Kaskutas says.

“Just following the OSHA residential guidelines can decrease worker falls from heights,” she said. “We know personal fall arrest systems will prevent a fall, yet they aren’t widely used in residential framing. Add in training and awareness – and make it a site-wide priority for the people running the job as well as the workers – and we could see a decline in injuries and deaths among residential carpenters.”