



# Safety Connection

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## SAFETY RESEARCH

- Excessive Heat's Influence on Workplace Injuries.** A recent [study](#) from the Workers Compensation Research Institute (WCRI) found important effects of excessive heat on the incidence of occupational injuries. The study shows the probability of work-related accidents increases by 5 to 6 % when the maximum daily temperature rises above 90°F, relative to a day with temperatures in the 65-70°F range. Also, the effect of excessive heat is greater on traumatic injuries, including fractures, dislocations, contusions, and lacerations.
- Effects of extension ladder fly configuration on climbing safety.** A new University of Pittsburgh [study](#) investigated the effects of reversing the extendable fly section of an extension ladder on foot placement, frictional requirements, adverse stepping events (repositioning the foot or kicking the rung), and user preferences. Results suggest that a reversed extension ladder configuration offers potential benefits in reducing fall-related injuries.
- Host organizations' safety climate impacts on-site contractors' safety.** A new [study](#) in the *Journal of Safety Research* investigated the influence of a host organizations' safety climates in high-risk industries, such as construction, on on-site contractor employees' safety and job attitudes. The study demonstrates that the safety climates of host organizations can extend to their on-site contractor organizations (i.e., subcontractors) and therefore, fosters a positive safety climate not only benefits the host organizations themselves but also creates a crucial environmental cue that shapes the safety climate and outcomes of on-site contractors.
- Risk Factors for Low Back Pain Among U.S. Workers.** A [study](#) by the National Institute for Occupational Safety and Health (NIOSH) looked at understanding the causes of work-related low back pain, which is crucial to developing prevention methods. It found that nearly 27% of study participants reported low back pain, with older workers much more likely to report low back pain at 31% among those aged 55-64 years than younger workers. The study also found workplace factors strongly tied to low back pain were high job demand, low job control, work-family imbalance, bullying, job insecurity, alternate shifts, and physical exertion.

## CONSTRUCTION SAFETY TRENDS

- Fatal Injury Trends in the Construction Industry, 2011-2022.** A new CPWR - The Center for Construction Research and Training data [bulletin](#) examines fatal occupational injuries and at-work deaths in construction. Key findings include: 11,700 construction workers died on-the-job with the number of fatal injuries increasing 39.8%; falls continue to be the most common event/exposures while the third leading detailed cause of death at work was accidental poisoning by and exposure to narcotics and hallucinogens; and fatal injuries largely occurred among males (99.0%), while older workers (55 years or older) accounted for 31.1% and Hispanic workers accounted for 37.4%.
- Detailed study of fatal construction jobsite injuries.** These ongoing NIOSH-funded reports describe fatal construction incidents and provide safety recommendations to prevent future fatal injuries. Recent Fatality Assessment and Control Evaluation reports address a [gutter installer who fell](#) from a patio roof, an [inexperienced framer falling](#) 22 feet from an upper floor, and a [16-year-old construction worker loses legs](#) while trenching.
- 2024 Safety Performance Report.** The Associated Builders and Contractors (ABC) issued findings from its [2024 Safety Performance Report](#), that shows construction companies can be six times safer than the industry average by implementing best practices, including: 1) employer involvement at the highest level of management produces a 54% reduction in total recordable incident rates (TRIR); 2) implementing robust substance abuse prevention programs, including drug/alcohol testing, lead to a 47% reduction in TRIR; 3) companies conducting in-depth new hire safety orientation have incident rates 45% lower than businesses that limit orientation to basic safety; and 4) conducting daily toolbox talks reduce TRIR and days away, restricted or transferred (DART) rates by 81% compared holding monthly talks.