



# Safety Connection

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## SAFETY RESEARCH

- 💡 **High-viz clothing may reduce the effectiveness of vehicle crash prevention sensors.** A recent [study](#) from the Insurance Institute for Highway Safety suggests that reflective clothing that makes pedestrians stand out to human drivers may make them invisible to pedestrian automatic emergency braking (AEB) systems. The AEB systems reduce the rate of pedestrian crashes of all severities by 27%. However, on dark roads, the effect of pedestrian AEB on crash risk is negligible, which is a significant issue as most fatal pedestrian crashes happen at night.
- 💡 **Impact of Employment Laws on Construction Worker Suicide.** A new University of Iowa/CPWR-The Center for Construction Research and Training [report](#) analyzed data on state "paid-leave" policies and suicide rates to understand how employment laws and community-level factors influence suicide rates among construction workers. The results show that from 2013 to 2020 there were 127,872 suicide deaths identified for working people aged 16 to 64, of which, 19,511 (15.26%) worked in construction. The study concluded that when state policies for family and paid leave laws were present, rates of suicide for construction workers were lower, statistically significant for female workers.
- 💡 **Nonpharmacological pain management approaches in construction.** A new National Institute for Occupational Safety and Health (NIOSH) [pilot study](#) published in the American Journal of Industrial Medicine (AJIA) examined nonpharmacological (without medication prescribed by healthcare provider) and pharmacological (e.g., prescription opioids) pain management approaches used by construction workers. Unfortunately, workers in the construction industry have been disproportionately affected by the ongoing public health crisis of the opioid epidemic. The study findings suggest there are specific factors related to training, job benefits, and worker familiarity with certain nonpharmacological approaches to potentially reduce reliance on prescription opioids for pain management.
- 💡 **Reducing Knee Risks During Roof Shingle Installation.** A [study](#) published in the American Journal of Industrial Medicine (AJIA) aimed to assess how knee savers (KSs) and knee pads (KPs) alleviate risks of knee musculoskeletal disorders (MSDs) among roofers during various phases of shingle installation. Both KS and KPs can lower knee strain by minimizing extreme knee postures and thereby reducing the risk of MSDs during the installation of shingles, especially at critical periods and on steeper slopes. This study also highlights the importance of applying focused ergonomic techniques in the roofing sector.
- 💡 **AAA study: smartphone apps can reduce risky driving habits.** New [research](#) by the American Automobile Association (AAA) Foundation for Traffic Safety studied the effectiveness of "usage-based insurance" (UBI) programs, which are used by insurance companies to offer incentives for safe driving and whether providing feedback and incentives—typical of UBI programs—enhances driver safety. The smartphone app tracked risky driving behaviors with the results showing there were clear improvements in driver behavior: up to a 13% reduction in speeding, 21% reduction in hard braking, and 25% reduction in rapid acceleration.

## CONSTRUCTION SAFETY TRENDS

- 💡 **Highway & Bridge Construction Fatalities Trending Downward.** According to the American Road & Transportation Builders Association [analysis](#) of the U.S. Bureau of Labor Statistics data, the highway and bridge construction sector is making measured progress in reducing worker deaths and injuries compared to the broader construction industry. Between 2011 and 2023, the number of fatal injuries for the highway, street, and bridge sector declined by 15% while the number grew for overall construction by 41%.
- 💡 **Hearing loss among noise-exposed U.S. construction workers.** Hearing loss continues to be a significant issue within the construction industry. A *Journal of Safety Research* [article](#) highlighted the prevalence of hearing loss among construction workers between 2010–2019, with highest prevalences for hearing loss among workers in Highway, Street, and Bridge Construction (28%), Site Preparation Contractors (26%), New Single-Family Housing Construction (25%), and Other Building Finishing Contractors (25%). It also emphasized key methods for reducing noise exposure include buying quieter equipment, keeping moving parts oiled and well-maintained, enclosing noise sources, and employing administrative controls to reduce the number of workers in noisy areas.