



Safety Connection

Vol. 1, No. 2 | March 2024

SAFETY RESEARCH

- Fatal and Nonfatal Falls in the U.S Construction Industry, 2011-2022.** A new CPWR [data bulletin](#) examined fatal and nonfatal falls in the construction industry by major and detailed subsector. Key findings included the number of fatal falls to a lower level increased 52.7%, Roofing Contractors had the highest number of fatal falls, slips, and trips in 2022 (n=100) and Residential Building Construction 2nd (n=63), 70% of fatal fall injuries occurred among those working for small establishments (10 or fewer employees), and most fatal falls occurred from 10 a.m. to 12:59 p.m.
- Recreational Marijuana Legalization and Workplace Injuries Among Younger Workers.** A new [study](#) published in the Journal of the American Medical Association (JAMA) Health Forum found younger workers have become injured on the job at higher rates than their older counterparts in states that have legalized recreational marijuana. Since 2012, 24 states have legalized the possession and sale of small quantities of marijuana for recreational purposes and these laws are associated with higher adult marijuana use, but the study notes their broader impacts in terms of health and safety remain unexplored. The researchers found that recreational marijuana law adoption correlated with a statistically significant increase in workplace injuries among workers between the ages of 20 and 34 between 2006 and 2020.
- Assessment of Construction Workers' Mental Health to Improve Wellbeing.** A recent Colorado State University [study](#) aimed to identify and assess mental health problems among construction workers, as well as initiatives for mitigating those problems. A key finding was construction workers have a high rate of poor mental health, including anxiety, depression and that targeted interventions are needed to address specific work-related stressors and alleviate the strains associated with poor mental health.
- Roof-to ladder transitions, walk-through extensions, and friction.** A recent NIOSH funded [study](#) by the University of Pittsburgh was to determine the relationship between extension ladder top (traditional vs. walk-through) and roof incline angle on the required coefficient of friction (RCOF) during descending roof-to-ladder transitioning events. Results show ladder rungs should be designed with good friction in multiple directions.

CONSTRUCTION SAFETY TRENDS

- Protecting Workers and the Planet.** A recent International Safety Equipment Association (ISEA) [survey](#) aimed at better understanding market needs and preferences as safety equipment/Personal Protective Equipment (PPE) suppliers are being challenged to offer products that protect workers and support sustainability goals. A key observation was 80% of end users consider PPE sustainability important, but safety performance matters most.
- Prevention Through Design (PtD) to Address Continuing Construction Workplace Deaths and Injuries.** A National Institute for Occupational Safety and Health (NIOSH) [blog article](#) highlighted the process of designing out hazards early in a construction project's life cycle, with PtD being one of the most reliable and effective way to protect workers.
- Innovation: The science behind Mips.** Mips safety system consists of a low friction layer that is mounted inside a helmet and designed to move slightly in the event of an impact to help redirect rotational motion away from the head. Look at the Mips helmet [test laboratory](#) that has state-of-the-art tools designed to mimic real-world head impact scenarios.
- CPWR Highlights 2023.** CPWR – The Center for Construction Research and Training, which is the NIOSH-funded National Center for Construction Safety and Health Research and Translation, produces an [annual report - Highlights](#) - of their most important research, discoveries, achievements and activities focused on construction safety.