THE SLIPPERY SLOPE
of Work-Related Fall Injuries
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Overlooked odds

When discussing workplace injuries, it is easy to envision these as a function of mechanical failures and human factors resulting in incidents such as explosions, electrocutions and impacts from striking or moving objects. The detrimental effects of such occurrences cannot be ignored; however, the prevalence of slips and falls in this arena deserves special focus.

The reality of being injured by slipping and falling on the job is harsh yet very probable, particularly if careful prevention measures have not been set in place. Compounding this issue are some general misconceptions—people often think it won’t happen to them, and when it does, there is a false notion that slip and fall injuries “just happen” and that there is little that can be done to prevent them. This is far from true.

In fact, slips, trips and falls constitute the majority of general industry accidents—they cause 15% of all accidental deaths, and are second only to motor vehicles as a cause of fatalities. Further, slips and falls are the primary cause of lost days from work (an average of 38 days) and result in over 9 million emergency room visits each year. What’s more, falls are the number one cause of accidental injury in the United States, accounting for 35% of all accidents in the workplace.

The financial impacts are equally noteworthy. On average, the total cost of these incidents is upwards of $43,000, yielding costs of $70 billion a year in claims and medical expenses. At the other end of the spectrum, the average cost to defend a slip and fall lawsuit is approximately $50,000.

Judging from these numbers, it is evident that slip and fall events are not only probable, but are likely to have lasting and resounding impacts for the employer, and most significantly, the employee. These individuals may have to contend with a host of detrimental repercussions including lost wages and out-of-pocket expenses, temporary or permanent disability and a reduced quality of life.
Potential for danger

For the sake of simplicity, it can be said that slips occur due to a loss of traction between the shoe and the walking surface, while falls [at the same level] occur as a result of accidental contact with a fixed or movable object [at same walking or working surface].

Given these scenarios, it comes as no surprise that there are a variety of situations in which slips or falls may occur. However, the greatest potential for these occurrences arises in the presence of the following hazardous conditions: slippery surfaces, such as gloss-finished tile; polished stone; wet surfaces caused by spills or poor drainage; uneven walking surfaces; and poorly marked and/or poorly lit walkway transitions. Ultimately, any environment that has a hard walking surface and is subject to various contaminants signals the potential for danger and solidifies the need of some form of slip resistance, either through footwear, the conditioning of flooring or utilization of mats.

These conditions are most prevalent in the warehousing, healthcare, food service, food processing, hospitality and retail industries —frequently creating the perfect storm for slip and fall incidents for unsuspecting workers.

On average, 20-30% of affected individuals are injured in ways that decrease mobility and independence.

Gauging the impact

In 2012, the U.S. Bureau of Labor Statistics reported that of the 4,383 fatal work injuries that occurred, 668 of these were associated with slips and falls. The majority of slip and fall injuries result in relatively minor “soft tissue” injuries; these include, sprained tendons, ligaments and muscles, minor contusions and abrasions, small gashes, and minor burns. A large number of slip and falls, however, result in much more serious injuries, referred to as “hard injuries;” these include head trauma, disk herniations, fractures, amputations, deep gashes, and third or fourth degree burns, which generally occur if the person lands on a hard floor surface or trips into another object such as a hard metal machine.

On average, 20-30% of slip and fall victims are injured in ways that decrease mobility and independence.

There’s no sugar-coating the issue.

Take for example, the case of the factory worker who slipped and fell feet first into a meat grinder. Trapped for two hours before he was subsequently freed from the machinery, the worker later succumbed to his injuries. There’s also the case of a fast food worker who slipped and fell into a vat of 275 °F cooking oil, receiving third degree burns to his entire forearm and across his torso.
Similarly, a fast food employee slipped and fell on a wet floor while cleaning out a deep fryer, causing her hand to be thrust into a fryer of hot oil and sustaining burns. There’s the story of a truck driver who slipped and fell on ice and grease while making a delivery to a large retailer; as a result, she had to undergo three spinal surgeries, was unable to return to work and lost her truck. And finally, there’s the case of an auto detailer who slipped on ice, fell on his head and suffered a brain injury. These are just some of the countless slip and fall stories plaguing occupational safety and health records.

In most of these cases, the financial blow incurred by employers—determined to be at fault—were monumental. However, it is the lingering impacts felt by these individuals and their family members that are most significant. Chief among these is the inability to work and maintain their livelihoods at a critical time when there are mounting medical bills and exorbitant out-of-pocket expenses to deal with.

Putting protections in place

Occupational Safety and Health Administration (OSHA) regulations dictate that employers are primarily responsible for their employees’ safety, especially when it comes to reducing the risk of slips and falls. It is up to the employer to provide a safe work environment and seek ways to reduce the risk of injury and harm that could occur on the clock. Specifically, in their General Industry standards for walking or working surfaces (29 CFR 1910 Subpart D), good housekeeping practices are defined as maintaining a clean, orderly and sanitary working environment, keeping workrooms clean and dry and providing platforms, mats, or other dry standing places for wet processes, among other protections.

Key changes to terminology used to discuss safety have been proposed to discuss floor safety. Traditionally, employers were instructed to maintain floors that were “slip resistant;” presently, this term has been phased out to be replaced by the term “high traction,” in a nod to technical advances and more precise measurement techniques.

These changes have largely been prompted following the emergence of eye-opening injury and fatality data.
Best foot forward

Although slips and falls can carry serious consequences for their victims, they are often avoidable. Employers wield a significant amount of power and are charged with a great responsibility to protect their workers’ safety. Prevention efforts are multifaceted—beginning with the installation of slip-resistant mats, enactment of safety footwear regulations, proper labeling of hazards, implementation of safety structures, cleanliness protocols and a strict dedication to employee safety in the face of slips and falls. Employers can make great strides in reducing the risk of these accidents.

Related to safety footwear regulations is the utilization of slip-resistant footwear, which works to improve the wearer’s coefficient of friction by improving the interaction between the shoe and the floor. A coefficient of friction describes how much force is needed to move an object on a certain surface; a lower coefficient of friction, means less traction, while a high number means more traction, and often, better safety. As a surface’s coefficient of friction approaches zero, the likelihood of slipping is increased; conversely, at a coefficient of friction of one, employees are well-protected from slips and falls.

Shoes For Crews is dedicated to safety. Industry consensus establishes the safe coefficient of friction threshold at 0.40—Shoes For Crews’ slip-resistant footwear is far above this threshold with an average of 0.58. This advantage also comes with added features to ensure employee safety, such as a gauge to periodically check the amount of wear experienced by the footwear over time.

Sources:
- https://www.osha.gov/SLTC/walkingworksurfaces/
- Under the microscope: The science behind Shoes For Crews’ slip-resistant technology

Visit the Shoes for Crews website to learn more about corporate shoe policies or for safety tips and news articles regarding slip-resistant footwear and relevant industries.