



Organizational and Safety Solutions

Slip and Fall Prevention

Background

Slips and falls are a leading cause of unintentional injury in the United States. Work related slip, trip, and fall incidents can frequently result in serious disabling injuries that impact the employee's ability to do his or her job, often resulting in

- Lost work days
- Reduced productivity
- Expensive workers compensation claims, and
- Diminished ability to perform their normal work.

Slips are defined as a lack of friction or traction between the footwear and the walking surface. Trips occur when the foot collides with an object causing a loss of balance. Falls from elevation are 40% of all compensable fall cases & 10% of occupational fatalities. Falls on the same level are responsible for 60% of the compensable fall cases.

According to the Consumer Product Safety Commission (CPSC), floors and flooring materials contribute directly to more than 2 million fall injuries per year. 85% of workers compensation claims are attributed to employees slipping on slick floors. 38% of slip/fall incidents resulted in more than 31 days away from work (BLS). Compensation & medical costs associated with employee slip & fall claims is more the \$70 billion dollars annually (National Safety Council)

Occupational fatalities due to falls are approximately 600 per year which is a significant decrease from when there were 1200 a year in the 70's. According to workers compensation statistics, falls account for 16% of all claims and 26% of all costs.

Action Steps to Reduce Slip and Fall Accidents

Research conducted by the National Institute for Occupational Health & Safety and its collaborators has shown that implementing a comprehensive STF prevention program within your organizations can lead to a significant decline in STF-related workers compensation claims

Review All Incidents – Develop a method for promptly investigating slips and falls and documenting details of the incidents. Include as much information as possible including witnesses, weather, and surface conditions. Take pictures of the incident scene. Review security camera footage that may have recorded the incident. Keep written records of investigation results. Document any corrective action taken including any follow up with individuals involved in the incident. Follow up with periodic reviews of incident statistics to look for trends. Determine what types of accidents are happening, where they are happening, and who is involved. Determine if slips are occurring on clear floor surfaces or from contact with floor contaminants. Look for trends in day and time of accidents, precise location of accidents, and weather conditions at the time of the accidents.

Condition of Walking Surfaces – Inspect walking surfaces for condition and maintenance. Repair any unstable surfaces such as loose tiles or torn carpet. Secure any mats, rugs, or carpets that do not lay flat. Provide adequate clearances for doors, walkways, and aisles. Keep floors clean and dry, and remove any obstructions or tripping hazards. Conduct routine monitoring of any walking surfaces that are periodically wet or icy such as sidewalks, building entrances, or food coolers. Provide warning signage if surfaces become hazardous due to environmental factors.

Stairs – Provide handrails for both sides of stairs. Keep risers between 7” and 11” high. Highlight tread nosing with a contrasting color to accent the steps. Yellow is a commonly used color for highlighting changes in walkway elevation. If an elevator is available, provide signs to direct pedestrians from stairs to the elevator.

Visibility – Good visibility is essential for the prevention of accidental slips, trips, and falls. Review your facility and grounds during different times of the day and seasons of the year to determine if lighting is adequate.

Consider the times when visitors, pedestrians, or employees are on your premises. Provide additional lighting for walking surfaces, as needed.

Spill Clean Up – Monitor any walking surfaces that are susceptible to periodic spills. Provide clean up tools and materials in a nearby location so they are readily accessible. Train employees to promptly clean up any spills. Use warning signs to mark any areas that have not been cleaned and any surfaces that are wet from mopping and cleaning. Follow instructions for any cleaners or floor treatments used in the facility. Proper use of cleaning agents and proper application of floor treatments is vital for good floor maintenance.

Shoe Selection – You cannot control the selection of non-employee footwear; however, there can be requirements for employee footwear. You can assist employees in the selection of appropriate footwear. Some employers participate in programs that provide periodic reimbursement to employees for proper footwear. Specific tread types can increase shoe traction on wet surfaces.

Test Floor Surfaces – “Slipperiness” of floor surfaces can be measured by using a device called a tribometer. The tribometer measures the coefficient of the floor surface under dry and wet conditions. This information will help you determine if the floor surface or surface treatment contributes to slips, or if the floor provides adequate traction. Determining the coefficient of friction provides a quantifiable assessment for traction of walking surfaces. PMA can use a tribometer at your facility to measure the coefficient of friction.

Audits – Conduct periodic audits of facility and grounds conditions. Monitor any areas where slip and fall accidents occurred in the past. Develop a system to document any problems or defects and assign corrective actions to appropriate personnel. Maintain a record of all actions taken to correct problems. Follow up to be certain that controls remain in place. Conduct routine assessments of walking surface conditions. Replacement of surfaces in disrepair could be less costly than a slip and fall accident.

Conclusion

Slip and fall accidents can result in serious injuries and are a leading cause of accidental deaths. Slips and falls can be prevented through a program that includes review of the premises to note any potential problems, corrective action to address possible hazards, good routine housekeeping and maintenance programs, and regular audits to observe walking surface conditions. Prompt accident and incident investigation is vital to determine the causes of any accident and to document conditions that led to the accident. Periodic review of slip and fall accident statistics can lead to actions that will prevent future incidents.

References

- Pedestrian Slip Resistance: How to Measure It, How to Improve It, Second Edition, William English, Inc., 2003.
- National Safety Council Injury Facts, 2014 Edition
- Slip and Fall Prevention Made Easy: A Comprehensive Guide to Preventing Accidents, Russel J. Kendzior, GI/ABS Consulting, 1999
- National Floor Safety Institute, 2015
- Bureau of Labor Statistics, Occupational Injuries Summary, 2014

If you have any questions or would like additional information, please contact your local PMA Risk Control Consultant.

IMPORTANT NOTICE - *The information and suggestions presented by PMA Companies in this risk control technical bulletin are for your consideration in your loss prevention efforts. They are not intended to be complete or definitive in identifying all hazards associated with your business, preventing workplace accidents, or complying with any safety related or other laws or regulations. You are encouraged to alter the information and suggestions to fit the specific hazards of your business and to have your legal counsel review all of your plans and company policies.*

