

## Preventing Slips, Trips and Falls

### Facts

According to the Bureau of Labor Statistics (BLS), slips, trips and falls accounted for 15.8% of all fatal occupational injuries in 2013. The BLS reported a preliminary total of 4405 fatal work injuries for calendar year 2013. Of this total, 699 were associated with slips, trips and falls. Falls to a lower level accounted for 574 (82%) and falls on the same level accounted for 106 (15.2%) fatalities.

In addition, of the 1,162,210 nonfatal occupational injuries and illnesses involving days away from work in 2013, 296,130 of these cases were associated with slips and falls. Falls on the same level resulted in 10 median days away from work and falls to a lower level resulted in 20 median days away from work.

The most disabling workplace injuries and illnesses in 2010 amounted to \$51.1 billion in direct workers' compensation costs, according to the 2012 Liberty Mutual Workplace Safety Index (WSI). Overexertion injuries remained the largest contributor to the overall burden, accounting for \$13.61 billion, or nearly 27%, of the total cost. Falls on the same level (\$8.61 billion) and bodily reaction (\$5.78 billion) were the next most costly injury causes, followed by falls to a lower level (\$5.12 billion). The cost of the combined fall categories exceeded that for the overexertion category.

The actual cost of work-related deaths and injuries is much greater than the cost of workers' compensation insurance alone. Per the National Safety Council Injury Facts® 2014 Edition, the average cost per death in 2012 was \$1,420,000 and the average cost per medically consulted injury was \$39,000.

### Regulations

The Occupational Safety and Health Administration's (OSHA's) General Industry standards for walking/working surfaces are found in 29 Code of Federal Regulations (CFR) 1910 Subpart D, 1910.21 – 1910.30. Voluntary consensus standards are available from the American National Standards Institute (ANSI), American Society of Safety Engineers (ASSE), ASTM and National Fire Protection Association (NFPA).

### Causes

There are many situations that may cause slips, trips and falls, such as:

- Uneven walking surfaces
- Spills
- Loose matting
- Weather-related conditions like rain, snow and/or ice
- Use of inappropriate footwear
- Walkway surfaces that are in disrepair
- Highly polished surfaces/floors that do not allow for adequate footwear traction
- Clutter

- Open desk/cabinet drawers

## Prevention

The controls needed to help prevent slips, trips and falls include:

- Practicing good housekeeping
- Keeping floor surfaces clean and dry
- Providing adequate drainage in wet floor locations
- Ensuring wet floor warning signs are posted in and around wet floor locations
- Maintaining clear aisles and passageways
- Ensuring walkway surfaces are in good repair
- Keeping cords and hoses out of the way
- Reporting and cleaning up spills immediately
- Providing non-slip coatings or anti-skid surfaces
- Minimizing matting trip hazards
- Providing adequate lighting in all areas
- Eliminating uneven floor surfaces
- Setting standards for type(s) of footwear to be worn
- [Training the workforce](#) to take shorter, more vertical steps in tricky spots and to step over obstacles at an angle
- Establishing an “eyes on the path” and no running rule

## Sources

Bureau of Labor Statistics – Census of Fatal Occupational Injuries, 2013

Bureau of Labor Statistics – Nonfatal Occupational Injuries and Illnesses Requiring Days Away From Work, 2013

National Safety Council, Injury Facts 2014<sup>®</sup> Edition

29 CFR 1910 Subpart D, 1910.21-1910.30

ASTM F1637 Practice for Safe Walking Surfaces

NFPA 101 Life Safety Code

ANSI A117.1 Accessible and Usable Buildings and Facilities

ANSI/ASSE A1264.1 Safety Requirements for Workplace Floor and Wall Openings, Stairs and Railing Systems

ANSI/ASSE A1264-2 Standard for the Provision of Slip Resistance on Walking/Working Surfaces

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