

The Redwoods Group Insurance Program for YMCAs

RISK MANAGEMENT ALERT

TOPIC: Slip/Falls – individually a pain, collectively a disaster

Approximately 25,000 American workers suffer a disabling slip/fall injury every day, 365 days a year. Slip/falls account for 35% of all OSHA injuries and more than 65% of all lost workdays with an average lost time of 38 days. YMCAs are not the most dangerous workplace in America, but slip/falls are still a primary cause of injury. Hazards include parking lots, sidewalks, stairs, halls, restrooms, locker rooms, pool decks, docks, etc. Oh yes, and also many people's shoes.

The science of slip/falls deals with coefficient of friction (COF), with surfaces classified as **slippery** (e.g., polished stone or ceramic tile and painted or slick-finished concrete), **moderately slippery** (e.g., vinyl, wood, ceramic tile, and stone), or **non-slip** (e.g., textured rubber, rough-troweled concrete, and expanded-steel grating).

Often forgotten is that COF is a ratio between two surfaces, specifically floor and footwear. If either surface is slippery, a fall will frequently result. The same classification applies to footwear: **slippery** (e.g., leather soles, some synthetic soles, athletic or work shoes with cleats or spikes, and stocking-feet), **moderately slippery** (most footwear including many athletic shoes, especially when the soles are worn), and **non-slip** (crepe soles, deck shoes, aqua-sox, etc.). Best results occur when both surfaces are non-slip.

Although the exposure is great and the potential loss is significant, there are many things that can be done to reduce both. A little extra attention to cleaning up the spill, picking up the object, or placing a warning sign will go a long way in preventing most falls. Consider these:

- **Utilize non-slip surfaces** when feasible; if a lesser surface must be used, apply a non-slip treatment; a dry COF below 0.5 is unsafe and always should be addressed; higher is always better
- **Keep surfaces dry**; moisture degrades most surfaces by a category, making a moderately slippery floor a slippery one. Address each of the following:
 - **Entries** – mop often during inclement weather; use pick-up mats to capture tracked-in water; set warning cones to alert of possible wetness
 - **Perpetual wet-floor areas** - install drains, use non-slip treatments, or utilize elevating mats (but realize that they may create other problems)

- **Leaks and spills** – mark the site with warning cones and/or wet-floor signs immediately and clean it up promptly; make necessary repairs and establish appropriate preventative maintenance protocols to prevent reoccurrence
- **Clean continuously** (at least daily): Remove all clutter, especially from hallways, walking spaces, and stairways; prohibit storage of items that might lead to tripping hazards
- **Provide adequate lighting**: All walking spaces (halls, stairs, areas between furniture or equipment, etc.) should be well illuminated – bright enough to identify potential obstacles, free of shadows, and so forth
- **Address elevation changes**:
 - Indoors, any change in floor elevation between ¼" and 1" should be beveled or chamfered instead of presenting a blunt 90° rise
 - Indoors or outdoors, any elevation change of 1" or more should be marked and/or illuminated
- **Maintain outdoor surfaces**:
 - Fix all cracks, pot holes, and other surface irregularities in sidewalks and parking lots that may create trip hazards
 - Keep walkways clear of ice and snow; shovel or scrape as frequently as necessary – keeping these access ways clear should be a primary consideration; use sand or salt if necessary
- **Maintain all steps and stairs**
 - Stairway pitch should be between 30° and 35°
 - Risers on any given set of stairs or steps should be of the same height
 - Treads should be level, not pitched forward; the surface should be solid and secure, without torn carpet, missing anti-slip coverings, and the like.
 - Handrails should be secure; if there are three or more steps a handrail should be provided on both sides (with minor exceptions)
- **Footwear**: All employees should wear appropriate closed-toe footwear at all times (except possibly in specific aquatic or similar settings); encourage non-slip choices especially where the floors are wet or have a slippery surface

Surprisingly, many such incidents occur because of multi-tasking – doing other things while walking. Like driving, walking requires paying attention to prevent accidents. Consistent vigilance regarding the above items will create a safer environment and minimize the risk.

Please call us at 800-463-8546 to discuss this or any other risk management safety tip, or visit our web site at www.redwoodsgroup.com to learn more about YMCA risk management issues.