



TDCJ Risk Management's Training Circular



August Preventing Slips, Trips, and Falls: A Workplace Hazard



As a continuation of the previous Issue, Slips, Trips, and Falls are a predominant cause of injuries in the workplace.

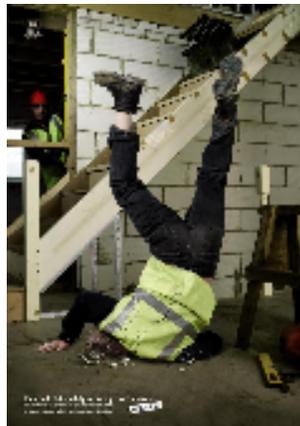


According to the Bureau of Labor Statistics "Non-Fatal Occupational Injuries and Illnesses Requiring Days Away from Work 2012" report, slips, trips, and falls constitute the majority of general industry mishaps. This particular category of mishaps causes 23 percent of all accidental deaths and is second only to overexertion and bodily reaction.

Likewise, in covered state agencies, slips, trips, and falls are among the most

frequent type of reported injuries and have so far averaged approximately 25 percent of reported claims in any given fiscal year. TDCJ averages about 20 percent of employee injuries associated with slips, trips, and falls each month.

Based on in depth investigations and detailed analysis of reported claims, many of them could have been prevented.



Understanding Slips, Trips, and Falls

The terms slips, trips, and falls are commonly grouped

into a single expression. In order to prevent these accidents and injuries, it is important to understand there are significant differences in the direct causes of these incidents. Specifically discussed here will be slips and trips and we will identify administrative controls to abate or minimize these types of mishaps.

In general, slips and trips occur due to loss of traction between the shoe and the walking surface or an inadvertent contact with a fixed or moveable object.

Housekeeping

Good housekeeping is paramount. If good housekeeping practices are not enforced, other administrative control measures implemented will never be fully effective.

It has often been said that safety and



housekeeping go hand in hand. This is extremely true, especially when addressing the serious issue of slips, trips, and falls. If your facility's housekeeping habits are poor, the result may well be employee injuries, ever increasing insurance costs, and regulatory citations. If an organization's facilities are noticeably clean and well organized, it is a good indication that its overall safety program is effective as well. In addition to safety, disorderly work environments can negatively impact the morale of employees who must function in a job site that is dirty, hazardous, and poorly managed.

Uneven Surfaces

Injuries from falls reported by covered state agencies cover the entire spectrum; however, interesting to note, a majority of these occur on walking and working surfaces that are not necessarily of any significant height. For example, a number of injuries have been reported involving stepping off the edge of a curb or sidewalk to stepping into animal holes by those agencies in the suburbs and outlying areas.



Stairs

As we have seen, falls are the second leading cause of accidental deaths in the United States. Of these fatal falls, statistics show that nearly half occur on steps and stairways.

Steps and stairways can be found in various dimensions and numerous locations. Stairways are constructed out of many common building materials (metal, wood, concrete, etc.) and used to permit transit from one level or floor to another in applications too numerous to detail here. In the home or the office, at the mall or the factory, indoors or out, the act of climbing or descending a stairway will occur many times each day.

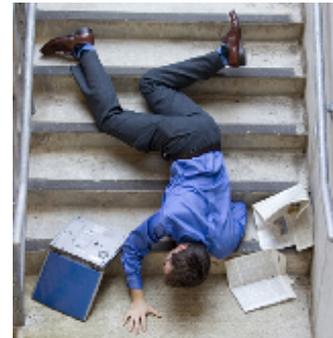


Naturally, to prevent a stairway fall, awareness and prevention remain the keys. Before setting foot on a stairway, the following preventative measures should be physically in place or consciously in your mind.

- Whether going up or down stairs, always use the hand-rail.
- Seeing where you are going

is important. Make sure the stairs are well lit with on/off switches at the top and bottom of the stairwell.

- Make sure the stairs are clear and free of all obstacles. Never use a stairway for temporary storage.



- Routinely check the stairs for worn or loose carpeting and immediately make any necessary repairs. If the steps have a smooth surface, install anti-slip tread to provide traction for secure footing.

- Make sure that the edge of each stair is noticeable. If the stairs are carpeted with a material that has a busy pattern, the edge of a stair may not be obvious.

- To avoid confusing the bottom basement step with the floor (a common occurrence), paint it white to make it more visible.

- Take extra care when ascending/descending steps while wearing footwear such as high heels, sandals, slippers, athletic shoes, or socks.

- Avoid carrying vision-

blocking loads. Don't carry so much up or down stairs that you can't see where you are stepping. Also, keep one hand free to hold onto the handrail. If necessary, make several trips with smaller loads.

• If throw rugs must be positioned at the top or bottom of a stairway, make sure they are securely fastened with skid-resistant backing and carpet tape.



• Be on guard for single steps when entering or exiting a room. Sudden level changes can be hazardous. Highlight these single steps whenever possible.

In addition to the preventative measures outlined above, steps and stairways located outside must be kept free of ice, snow, or water puddles. Keep in mind that the chances of falling on stairways can be increased by inattention, illness, fatigue, haste, and the use of alcohol or drugs.

Docks and Ramps

It is important to verify that loading docks and ramps have appropriate fall protection measures in place to include handrails and toe boards for ramps and safety rails or chains at loading docks. All safety rails and chains shall secure on loading docks when not in use.



Dock edges should be painted bright yellow to increase awareness and visibility of the edge.

All trailers should have wheel chocks used on every vehicle at your dock to prevent unwanted trailer shifts. Dock plates help transition loads between uneven levels and prevent trip hazards.

It is essential that lighting is bright enough to ensure the safe loading of a product and to help forklift operators see pedestrians. Lights mounted on forklifts aid entry into trailers and ease operations on ramps or in remote areas.

To prevent slips, trips, and falls from happening, the walkways, stairs, and walking sur-

faces of ramps and dock plates should be coated with non-skid paint. Also mark all walkways with yellow lines to control traffic. Be aware of sharp drops or uneven ground such as cargo loading areas.

Try to eliminate these drop points in docking areas by using mechanical substitutions such as tailgate loaders in trucks or ramps that store flat when not in use. Warning signs should be posted in these areas. Never jump from a dock; be careful not to step backward off docks; keep your mind and your eyes on what you are doing. Ramps and gang planks have hazards similar to loading docks. The slopes should be as gradual as possible, as wide as possible and as dry as possible.

Wet or Slippery Surfaces



Slips and trips on walking surfaces are a significant portion of injuries reported by covered state agencies. The specific types of surfaces involved in these injuries vary considerably, but some of the more frequently reported are:

- parking lots;
- sidewalks (or lack of);
- food preparation areas and shower stalls in resi-

dential dorms; and,

- floors in general.

Traction on outdoor surfaces can change drastically when subjected to environmental factors such as rain or sleet or on indoor surfaces when moisture is tracked in by pedestrian traffic.



Some administrative controls that can be implemented outdoors include keeping areas, such as the parking lots and sidewalks, clean and in good repair.

A wide variety of surfaces are available indoors. Although most provide some degree of slip resistance in their original state, there are some exceptions. Highly polished floors such as marble, terrazzo, or ceramic tile can be extremely slippery even when dry and definitely increases the potential for a slip when moisture is present.

Other types of floors may not have the built-in hazard such as the decorative ones men-

tioned, but they present a hazard especially in the presence of moisture, liquid spills, or food. Some agencies have additional unique exposures in this area, such as those with food services departments and bathing facilities for residential care workers.

Control measures that can be implemented indoors to prevent, or minimize as much as possible, injuries caused by wet surfaces include the following:

- During inclement weather conditions, moisture-absorbent mats should be placed in entrance areas. Caution: Improper mats can become tripping hazards themselves. Floor mats should have beveled edges, lie flat on the floor, and be made out of material or contain a backing that will not slide on the floor.
- Display wet floor signs. An additional caution: A wet floor sign is a valuable tool to attract attention, but should not in of itself be a sole control technique. It is also important that once the hazard is removed the sign is also removed. Otherwise, they become commonplace and lose their intended effectiveness.
- Where wet processes are used, maintain adequate drainage, mats, and false floors wherever possible.

Obstacles in Walkways

Injuries can also result from trips caused by reasons other than slippery surfaces, namely inadvertent contact with obstacles or other types of material (debris) and/or equipment. For example, obstacles could include obstructions across hallways, material stacked or dumped in passageways, clutter, and the list can go on. Of course proper housekeeping in work and walking areas is still the most effective control measure in avoiding these types of hazards.



Keep aisles and corridors clean, clear, and in good repair to the maximum extent possible. The following are some control measures that can be implemented:

- Insist on good housekeeping and keep all work areas, passageways, storerooms, and service areas clean and orderly.
- Where mechanical handling devices are used, such as storage areas or warehouses, allow sufficient clearance for maneuvering of the equipment. In highly congested or trafficked areas provide separate and marked

permanent aisles and passageways for both equipment and pedestrian traffic.

- Avoid stringing cords or lines across hallways or in any walkway. If it is necessary to do so, it should be on a temporary basis (i.e., power cords, telephone lines, etc.) and, then the item should be taped down.
- In the office environment, emphasize caution on where people leave carrying items such as briefcases, boxes, etc.
- Encourage safe work practices such as closing file cabinet drawers after use and pick up and stow loose items from the floor. Maintain constant vigilance for slip and trip hazards through periodic inspections.

Maintain Proper Lighting

Inadequate lighting can hide items that are in your way, so replace light fixtures or bulbs that don't work. Keep work areas well lit and clean. When you enter a darkened room, always turn on the light first, even if you stay only for a minute. Keep walkways clear of obstructions, especially in areas with poor lighting.

Have accessible light switches and a handy place where a flashlight can be found. Motion-sensitive lights can improve safety



and energy as well. Repair floor fixtures and cords immediately if they malfunction — don't wait until someone trips and falls in a darkened room. Move slowly where light is dim. Store items a safe distance from light bulbs. Towels or paper can catch fire from a bulb that's been left on.

Proper lighting will ensure that employees detect obstructions and avoid slippery areas. Use proper illumination in walkways, staircases, hallways, and basements to help people avoid slips, trips, and falls. Do not ignore flickering lights, blown fuses or sparks. Have a qualified electrician check the wiring. Don't overload outlets or use extension cords without inspecting them first. Also, check for frays and cracks and note the cord's limit.

Footwear

Unsuitable footwear is a leading contributor to accident exposure. Rubber-soled shoes of a non-skid material should be worn and regarded as PPE for the prevention of this classification of accidents.

Wearing appropriate footwear with regards to they type of walking surface encountered is crucial to preventing slips, trips, and falls. For example, it would not be appropriate to wear a type of shoe with a fine tip heel on a floor of open grating, or leather soled cowboy boot on a wet or greasy

Supervisors should identify the types of hazards in their respective areas to determine what footwear is appropriate with regards to employee safety.

References

- State Office of Risk Management
<http://www.sorm.state.tx.us/risk-management/safety-puzzle/slips-trips-and-falls>

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