

# Safety Matters

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## Preventing Injuries from Slips, Trips and Falls

In 1999, over one million people suffered a slip, trip or falling injury, and over 17,000 Americans died as a result. Of the estimated 3.8 million disabling injuries each year in the work force, **15 percent** are due to slips, trips, or falls, which account for 12 to 15 percent of all Workers' Compensation costs.

### Same-Level Falls:

High Frequency -- Low Severity

Same-level falls are generally slips or trips. Injury results when the individual hits a surface while walking or working, or strikes some other object during the fall.

#### Slips and Falls

Slips are primarily caused by a slippery surface and compounded by wearing improper footwear. In normal walking, two types of slips occur. Either the heel of the front foot slips on the floor causing the person to fall backward, or the rear foot slips backward causing the person to fall forward.

Dry concrete sidewalks have good traction, while icy surfaces or freshly waxed floors have low traction. Traction depends on two things:

- the quality of both the walking surface
- and the soles of your shoes.

Dry walking and working surfaces, and slip-resistant footwear is the key to preventing injuries for slips and falls.



In work areas where the walking and working surface is likely to be slippery, non-skid strips or floor coatings should be used.

#### Trip and Falls

Trip and Falls occur when the front foot strikes an object and is suddenly stopped. The upper body is then thrust forward, and a fall occurs.

As little as a 3/8 inch rise in a walkway can cause a person to "stub" his toe resulting in a trip and fall. The same thing can happen going up a flight of stairs: only a slight difference in the height of subsequent steps and a person can trip and fall.

#### Prevention:

- Keep work and walking areas free of debris
- Paint yellow lines to identify working and walking areas
- Ensure adequate lighting in all areas
- Do not carry anything which obstructs your vision
- Follow safety procedures



### Elevated Falls:

Lower Frequency -- High Severity

Generally, elevated falls are less frequent but more severe than same-level falls in the workplace.

#### Falls from Ladders

A ladder should be long/tall enough so that the user can work with his waist no higher than the top rung of the ladder.

**This means that the top three rungs of a straight ladder, or the top two steps of a step-ladder, should never be used for the feet.**

Ladders should be set at a 4:1 ratio angle. So, for each 3 feet of height (from the ground to where the top is resting), the base should be 1 foot away/out from the vertical line upon which the top is resting.

Ladders should be inspected before each use:

- check for cracks, loose rungs, splinters, and sharp edges
- Rungs and siderails of ladders must be free of oil, grease, and mud

**NEVER attempt to reach too far left or right.** When working on a ladder, your belt buckle should never extend beyond the siderails. Reaching can cause the ladder to slide in the opposite direction. Tying the ladder to the structure supporting it, is helpful and recommended.

**Hold the siderails, not the rungs, when climbing or descending.** Small tools may be carried in a tool belt, not in the hands. The best option is to raise tools and supplies to the working area with a rope.

**Make-shift ladders, chairs, boxes, and barrels should never be used as substitutes for a ladder!**

Workers at high elevations, such as ladders, platforms, catwalks, or on top of equipment, should be protected from falling by some kind of fall protective device. This can be a protective cage, a lifeline, lanyard, safety belt or harness.

#### Signs and Stripping

- Safety signs to remind people of hazards are certainly helpful
- Yellow stripping to identify walking/working areas are most effective if they are enforced. Items or people should not enter areas that are striped.
- Dropped and spilled materials should be removed immediately.



## Remember... Safety Matters.

Comments and suggestions are always welcomed and encouraged.



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