



Preventing Slips, Trips and Falls

What makes falling so hazardous?

Everyone has slipped, tripped, or fallen, most times without great injury. Slips and trips can result in serious injuries. When you fall, generally you don't think about what is happening other than the obvious: falling off of something, falling down on the ground, or not quite falling, but losing your balance and slipping or tripping. Generally, a fall is the result of a progression of events. There are three laws of science involved in a slip, trip or fall: **friction, momentum and gravity.**

Friction is necessary to maintain a grip on the walking/working surface. Remove the friction and you will slip. When you encounter an object in your walking path and are thrown off balance or if you trip, your **momentum** (the speed at which you are moving) will cause you to go further, or hit the ground harder. **Gravity** is the force that pulls you to the ground. Once a slip or trip is in progress, the end result is usually a fall, which is only stopped by the surface you land on.

Tips to prevent fall hazards: Prevention is simple!

Increase friction: Housekeeping is number one. We must keep floor, stairs, walking and working surface clean and dry, free of paper, plastic, oily substances or other liquids. **Don't forget, a friction problem could be weather related as well! Be careful during times of wet weather, high humidity, ice or snow.** Weather is one of the leading causes of falls.

Reduce momentum: The best way to do this is to SLOW DOWN. Running is not a job requirement. Be especially careful when using stairs and when turning.

Don't give gravity a chance: Gravity is a constant, whenever we take risks and allow gravity to take over, it will. Any high work that requires employees to use lifting equipment, ladders, scaffolds, catwalks, loading docks, ramps and more, expose employees to the constant power of gravity. Because gravity is a constant, we must protect ourselves from falling constantly.

To prevent every slip, trip or fall is impossible, but we must do our best by always assessing walking surfaces. When we assess, determine if the walking/working surfaces is clean, free of debris, and strong enough to safely provide support. No one is permitted to work on unstable surfaces until it has been determined that the surfaces are safe. Also the use of fall protection will always win over gravity.

By: Chris Palmisano, Senior Safety Consultant, ECRM of NC