You can reduce the risk of slipping on wet flooring by:

- taking your time and paying attention to where you are going
- adjusting your stride to a pace that is suitable for the walking surface and the tasks you are doing
- · walking with the feet pointed slightly outward
- making wide turns at corners

You can reduce the risk of tripping by:

- keeping walking areas clear from clutter or obstructions
- keeping flooring in good condition
- always using installed light sources that provide sufficient light for your tasks
- using a flashlight if you enter a dark room where there is no light
- ensuring that things you are carrying or pushing do not prevent you from seeing any obstructions, spills, etc.

Housekeeping

Practicing good cleaning habits may be the most important measure in preventing slip and trip incidents. Having a clean and organized working environment will not only help reduce the risk of injuries from these types of incidents, it will help employees work more efficiently and increase employee morale - nobody wants to work in a cluttered, dirty, and potentially hazardous environment.

Although housekeeping may be delegated to custodial staff in most work environments, it is everyone's job to keep their workplace orderly. Developing a housekeeping program can be done in three easy steps:

- **Plan ahead.** Know what needs to be done, when it should be done, and what the workspace should look like when you're finished picking up.
- **Assign responsibilities.** Of course, individuals should be responsible to clean up after him or herself, but assigning responsibilities for shared spaces may be helpful to ensure that housekeeping duties are completed.
- Implement the program. Make housekeeping duties a part of the daily routine.

Following this simple rule will reduce the risk of slip and trip injuries:

If you drop it, pick it up.
If you spill it, wipe it up.
Look where you are going,
and go where you are looking.

Wet/slippery Surfaces

Wet or slippery surfaces are a major cause of slips. Many surfaces such as marble and ceramic tile can be extremely slippery even when dry. Spills and environmental factors such as rain, snow, and mud add to the problem. Food preparation areas and residential hall bathroom and kitchens are also at high risk for slippery surfaces.

Simple ways to reduce the occurrence of wet or slippery floors:

- Use anti-skid adhesive tape in high traffic areas.
- Use absorbent mats in entrance ways during inclement weather.
 - **Caution:** unanchored mats may cause slip hazards themselves make sure that mats lie flat and that the backing material will not slide on the floor.
- Display wet floor signs when appropriate, note that signs are a great awareness tool, but should not be the only means of control. Clean up spills and wet floors as soon as practical.
- Have a procedure to deal with spills.
- Use proper mats in areas that are "spill prone" (bathing facilities, food preparation).
- When wet processes are used, maintain proper drainage or use platforms or mats.

Footwear

Footwear plays a large role in the prevention of slip, trips, and falls. The slickness of the sole and type of heal may cause accidents. Employees who work in environments that could cause foot injuries are required to wear protective footwear per <u>OSHA standard 29 CFR 1910.136</u>. Jobs that are likely to require safety shoes include, but are not limited to:

- carpenters
- welders
- plumbers
- maintenance mechanics
- grounds workers operating heavy machinery or tools
- power plant maintenance workers

There are numerous types of safety shoes, including waterproof, slip-resistant, and steel-toed. Care of the shoes is also important. Footwear should be inspected before each use for damage; as shoes wear, their effectiveness may be reduced.

For more information on protective footwear:

- <u>Personal Protective Equipment</u> (OSHA) https://www.osha.gov/SLTC/personalprotectiveequipment/
- <u>Safety Footwear</u> (CCOHS)
 http://www.ccohs.ca/oshanswers/prevention/ppe/footwear.html

Off the job, footwear also poses a hazard. Wearing shoes that have worn soles or too high of a heal can cause slip, trip, and fall incidents. Anticipating walking surfaces and environmental conditions and wearing shoes that reflect those conditions will help prevent accidents.

Lighting

Inadequate lighting can hide slip, trip, and fall hazards is associated with an increase in accidents.

Maintaining appropriate lighting in workplaces, public buildings, and at home is an important factor in reducing accidents. Here are some ways that can prevent and control poor lighting conditions in various environments:

• Have light switches accessible, preferably near entrances to rooms.

- Keep a flashlight in a central location to use in case of a power outage emergency.
- If a worker faces a window, shades can be used to reduce glare.
- Move slowly where light is dim.
- Diffuse light to reduce glare.
- Use a light-colored, matte-finish on walls, ceilings, and floors to reduce glare.
- Preform regular maintenance on lighting systems to reduce flickering or burnt-out lights.

Changes in Elevation

Changes in elevation are a major source of trip accidents. Experts estimate that even a change in a walking surface of 1/4" - 1/2" or greater will be sufficient to cause a trip. Curbs, cracks in the sidewalk, ramps, and single steps are all examples of hazards. Changes in elevation may be almost unavoidable, but here are some simple ways to reduce accidents caused by these hazards:

- Place signs to warn walkers of bumps or changes in elevation.
- Use adhesive caution tape to mark changes in elevation or paint curbs or steps yellow to warn walkers.
- If the change in elevation is temporary (due to remodeling, etc.) use barricades to create an alternative route to avoid the hazard.
- Learn how to "walk defensively" follow safe walking procedures.

Personal Factors

There are numerous personal factors that may increase an individual's risk of a slip, trip, or fall. These may include:

- age
- body shape or mass
- gait dynamics (the particular way an individual walks)
- physical condition
- perception (an individual's ability to see their awareness of the surroundings)
- psychological and psychosocial factors (stress and distractions)

Much like being a defensive driver, to avoid accidents, one must also be a defensive walker. Here are some simple ways to alter your behavior and avoid hazards:

- Watch where you are going and walking. Pay attention and look for slip, trip, and fall hazards.
- Walk, don't run. Make sure to give yourself enough time to get where you're going.
- Don't engage in activities that may be distracting, for example, reading or writing while walking.
- Use handrails while climbing or descending stairs.
- Check that your walkway is clear and that you view is not blocked before you lift anything.
- Don't carry a load that you can't see over or around while carrying.

- Walk carefully and slowly when you transition from one walking surface to another.
- Slow down and take small steps if the walking surface is cluttered, narrow, uneven, slippery or at an angle.
- Wear stable shoes with non-slip soles.

If you must walk on a slippery surface:

- Point your feet slightly outward, keeping your center of balance under you.
- Take slow, small steps.
- Use your feet as probes to detect possible slip, trip, and fall hazards.
- Get your feet underneath your body quickly to maintain your balance after an initial step.
- Pay close attention to the walking surface.
- Use rails or other stable objects that you can hold onto.
- Protect the more vulnerable parts of your body, like you head, neck, and spine, if you do fall.

Environmental Factors

Some examples of environmental factors are:

- Temperature and humidity
- Precipitation
- Type of volume of traffic in walking areas
- Walking surface
- Lighting conditions in walking areas

Because many of these conditions are out of an individual's control, wearing the right shoes for weather and walking conditions and **walking cautiously** will help prevent accidents.

Task Factors

Task factors are characteristics of the work performed that can affect the risk of slip, trip, and fall hazards. For example:

- Pushing or pulling objects
- Shape and weight of an object carried
- Change in direction while walking

Although these factors, like environmental ones, sometimes cannot be altered, you can be cautious while transporting objects:

- Limit the amount of objects that you carry.
- Ensure the things that you are carrying, pushing, or pulling do not block your view.
- Carry small loads close to your body, maintaining your center of balance.
- Make sure you have a clear path to walk on before beginning tasks.

Stairs

Falls are the second leading cause of fatal accidents (only after automobile accidents), and of those falls, nearly 50% occur on stairs.

Keeping stairs in good repair is essential to prevent accidents. Make sure that stairways have secure handrails and guardrails, even surfaces, even tread heights and are free of deteriorating coverings such as fraying carpets.

To prevent an accident, awareness and prevention are key. Here are some simple ways to prevent a fall incident on stairways:

- Whether going up or down stairs, always use the handrail.
- Make sure stairways are well lit, with on/off switches at the top and bottom.
- Make sure stairways are clear of any obstacles.
- Make sure that the edge of the bottom stair is noticeable if the stairs and floor have the same carpeting or same paint color, it may not be obvious where the stairs end.
 Painting the edge white or using adhesive caution tape will help differentiate the stairs from the floor.
- If you are wearing footwear such as high heels, slippers, or sandals, take extra caution while going up and down stairs.
- If throw rugs are positioned at the top or bottom of the stairway, make sure they are secured with a skid-resistant backing.
- Routinely check stairs for loose or warn carpeting and make repairs when necessary.
- Keep outdoor stairways free of ice, snow, or water accumulation
- When carrying objects up and down steps, be sure to see where you are stepping and can hold onto the handrail.

The chances of fall accidents in stairways increases with inattention, illness, fatigue, and haste, so take care when ascending and descending stairways.

Uneven Surfaces

Injuries from falls may be caused by a variety of sources. Many of these sources, like curbs, flaws in parking lots, and uneven lawns, are not of significant height, but have caused significant injuries. The best way to prevent injuries such as these is to be aware of where you are going and pay attention to your walking surface.

Ladders

There are a few hazards associated with ladder use:

- Ladder structure may deteriorate
- Ladders may tip sideways, backwards, and slip at the bottom
- Ladders not fully opened or locked may cause the ladder to "walk," twist or close up when a load is applied to the ladder
- Using metal ladders around electricity
- Using fixed ladders without fall protection or cages

Here are some basic rules you should follow when using a ladder:

Set up ladders or step stools on firm, solid ground.

- Always face the ladder when ascending or descending.
- Choose the right ladder length for the job.
- Be sure shows are not muddy, greasy, or slippery before climbing.
- Never lean to far on the sides, keep your hips within the side rails.
- Maintain a "three-point contact" by keeping three limbs on the ladder at all time. For example, one hand/two feet or two hands/one foot.
- Do not climb higher than the third rung from the top on straight or extension ladders, or the second thread from the top on stepladders.
- Never job off a ladder always dismount from the bottom rung.
- Inspect ladders before using.
- If the ladder is set up in passageways or areas with traffic, secure the ladder and block off the area.
- Do not set a ladder or step stoop on other objects, such as tables, boxes, or scaffolding.
- Never move a ladder when someone is using it.
- Do not tie ladders together, unless they are manufactured to be used that way.
- Never leave an unsecured ladder set-up unattended.
- Hold onto a ladder with both hands when going up to down. Raise or lower needed materials with a rope before ascending or descending a ladder.
- Keep ladders at least 10 feet away from power lines. Even wet or dirty wood ladders can conduct electricity.
- Use a 4-to-1 ratio when setting up a single or extension ladder. For example, place a 12 foot ladder so that the bottom is 3 feet away from the object the ladder is leaning against.
- Any damaged ladders should be removed from the worksite for repair or to be discarded, until they can be, label or ta any ladders that have flaws accordingly.
 "Dangerous. Do not use."

If the ladder is fixed:

- Make sure to wait until other people have cleared the ladder before ascending or descending the ladder.
- Be sure to use the proper safety devices, such as a restraint belt or traveling fixture.