

# Slips, Trips and Falls for Construction

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Most slips, trips, and falls can be prevented by simply practicing good safety habits.

## Definitions

Term	Definition
Slip	A loss of balance caused by too little friction between a person's foot/feet and his/her walking surface
Trip	A loss of balance caused by the interruption of the movement of a person's foot by an obstacle
Same-level fall	A slip and fall, trip and fall, or step and fall. Occur more often than elevated, but are associated with fewer and less serious injuries.
Elevated fall	A fall from any distance, such as from a ladder, down stairs, off equipment, or from docks, trees, roofs or other height. Occur less often than same-level, but are associated with more serious injuries.

## Fall Hazards

### ***Causes of Slips and Trips***

The following are just some examples of items in the workplace that can cause **slips**:

- Water
- Mud
- Grease/Oil
- Leaves and pine needles
- Food
- Dust
- Plastic wrapping
- Highly polished floors
- Loose floorboards or tiles
- Metal surfaces
- Mounting/dismounting vehicles/equipment
- Transitioning from one surface to another

Examples of **trip** hazards include:

- Clutter
- Tools
- Cords, cables, hoses in walkways
- Obstacles in aisles and walkways
- Changes in elevation or levels
- Irregularities in walking surfaces
- Missing or uneven floor tiles or bricks
- Non-uniform or irregular steps

### ***Housekeeping and Equipment***

Housekeeping and improper equipment use can cause slips and trips:

- Poor housekeeping
  - Items on the ground or on steps
  - Spilled liquids or water
- Inadequate/bad lighting
  - Too dark
  - Glare
- Improper or careless use of equipment
  - Ladders, scaffolds, vehicles, etc.
  - Wearing the wrong shoes

## ***Bad Habits***

Bad habits can cause slips and trips:

- Carrying objects that obstruct view
- Not using handrails
- Moving too fast to avoid hazards
- Taking shortcuts
- Being distracted

## **Protect Yourself**

What can you do to avoid the causes of slips, trips and falls?

- Keep work areas neat
  - Eliminate clutter from aisles
  - Keep floors clean and dry
  - Maintain drainage, using gratings or raised platforms
  - Use caution signs on wet floors
  - Use boot brush stations
  - Eliminate protruding nails, splinters or loose boards
  - Take care when using cords
  - Block off or mark hazardous areas
- Keep work areas well-lit
  - Avoid lighting that's too dark or too bright
  - Keep work areas, stairs and aisles well-lit
  - Avoid wearing sunglasses indoors
- Use equipment correctly
  - Know the:
    - Weight of the equipment and materials you will be using
    - Location of skylights and floor hole covers
    - Load capacities of structures
  - When working at heights, watch out for electrical lines, moving equipment and unguarded mechanical parts
- Develop good habits

## ***Ladders***

To avoid slips and trips related to ladders:

- Use the right ladder for the job
- Do not use makeshift ladders such as barrels, boxes or sawhorses
- Follow these guidelines when climbing or descending:
  - Only one person should be on a ladder at a time
  - Always face toward the ladder when climbing up or down
  - Keep your belt buckle area between the side rails to avoid over-leaning
  - Use both hands when climbing or descending
  - Never carry anything in your hands
  - Use three points of contact (two hands, two feet equals four points)
- If a ladder is required as part of your job, you must have ladder safety training
- Ladders should be placed with a secure footing and should be lashed or held in position

- Ladders used to gain access to a roof or other area should extend at least 3 feet (0.9 meters) above the point of support
- Place the base of extension or straight ladders 1/4 of the working length of the ladder away from the base of the structure
- Ladders should never be used in the horizontal position as scaffolds or work platforms
- Never use metal ladders near electrical equipment

**Stepladders** should be equipped with a metal spreader or locking device of sufficient size and strength to securely hold the front and back sections in the open position

- All ladders should be maintained in good condition
- They should be inspected frequently and before each use
- If you find a defect:
  - Tag it out of use
  - Secure or lock it up so others can't use it
  - Report it to maintenance or your supervisor

### ***Scaffolding***

There are different types of scaffolds, each with their own regulations and requirements. Some of the general requirements that apply to all scaffolds are:

- The footing or anchorage for scaffolds must be sound, rigid and capable of carrying the maximum intended load without settling or displacement
  - Unstable objects, such as barrels, boxes, loose brick or concrete blocks, must not be used to support scaffolds or planks
- Scaffolds and their components must be capable of supporting at least 4 times the maximum intended load
- Scaffolds must be maintained in a safe condition and must not be altered or moved horizontally while they are in use or occupied
- Damaged or weakened scaffolds must be immediately repaired and cannot be used until repairs have been completed
- A safe means must be provided to gain access to the working platform level through a ladder, stairs or a ramp.
- Overhead protection must be provided for personnel on a scaffold exposed to overhead hazards
  - Guardrails, midrails and toeboards must be installed on all open sides and ends of platforms more than 10 feet (3 meters) above the ground or floor
  - Wire mesh must be installed between the toeboard and the guardrail along the entire opening, where persons are required to work or pass under the scaffolds
- Employees must not work on scaffolds during storms or high winds or when scaffolds are covered with ice or snow

## **Stairs**

Because you use stairs so regularly, you may take them for granted, but in fact, a large number of slips, trips and falls occur on stairs.

- Look where you are going
- Make sure you can see around what you're carrying
- Take one step at a time – never skip steps
- Hold handrails
- Keep steps clean and dry

## **If You Fall**

- Try to keep your wrists, elbows and knees bent
- Do not try to break the fall with your hands or elbows
- It is better to land on your arm than on your head
- It is better to land on your buttocks than on your back