



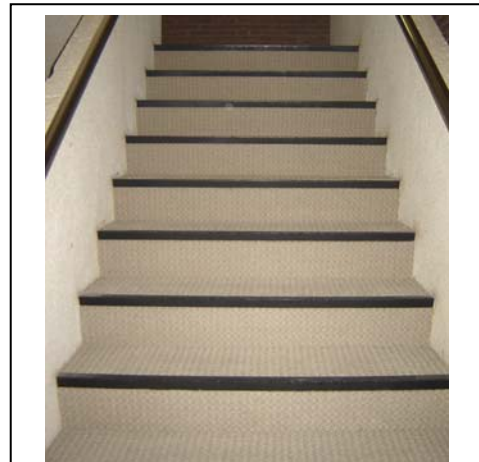
According to the National Safety Council, in 2003, more than 13,000 Americans 65 years and older died as a result of falls and more than 1.8 million had a fall injury that resulted in an emergency room visit. GuideOne's loss experience shows that slips and falls are the number one liability claim from a frequency and severity standpoint. Numerous factors can contribute to these types of injuries, including inadequate lighting, missing or damaged handrails, poor maintenance/condition, slippery conditions, loose floor coverings, irregular design of stairs and housekeeping.

*A 56-year-old woman grabbed on to a railing while descending exterior stairs. When the railing broke loose, the woman fell; and the railing landed on top of her. She lay on the ground for about 45 minutes before someone found her. Her injuries included a fractured hip and a broken bone in her left ankle. Upon later inspection, it was determined that the railing had been missing most of its attachment screws.*

Accidents such as the one described above are preventable. The following guidelines will help reduce your chances of slips and falls from stairs.

### Stair Treads

- ❑ The stairway should be at least 44 inches wide.
- ❑ The height of each step (riser) should be between 7 and 7.5 inches and the width (tread) should be between 9 and 10 inches.
- ❑ Nosing on the stair should not protrude more than 1.5 inches and should be beveled to reduce trip potential.
- ❑ If the steps have a smooth surface, install anti-slip material to the tread. This will provide traction.
- ❑ If the stairs are carpeted, ensure that the edge is noticeable.



This photo is an example of carpeted steps that have been installed with a rubber nosing. The rubber nosing will protect the carpeting, keeping it from fraying or tearing and help make the stair nose visible.

## Stair Landings

- ❑ The landing of the stairway should be at least as wide as the width of the stairway.
- ❑ Stairways and landings should be kept clear of storage or any other materials. Never use a stairway for temporary storage.



This photo is an example of materials being stored on a stair landing. Storing items on stair landings restricts the walkway, increasing the chances of slips and falls to occur.

## Handrails

- ❑ If stairs or stairways exit into any area where vehicles will be operated, adequate warnings and barriers should be installed to prevent individuals from stepping into the path of traffic.
- ❑ Any flight of stairs having four or more risers should be equipped with a handrail and include the following:
  - ❑ Handrails should be accessible within 44 inches of all portions of the stair width. This will allow for a person standing on any portion of the stairs to be able to reach out and grasp the handrail. Additional handrails may be necessary, depending on the width of the stairway.
  - ❑ Handrails should be between 34 inches and 38 inches high.
  - ❑ Handrails must have a diameter of 1.25 inches to 1.5 inches, must be positioned at least 1.5 inches from the wall and should extend beyond the stairway so the user can maintain a hold while taking the last step to the floor.
  - ❑ Handrails should be in good condition without any physical damage and adequately secured in place.



This photo is an example of exterior steps that are in good condition; however, the stairs have more than four risers, so they should be equipped with an appropriate handrail.



This photo is an example of an inadequate handrail in terms of design. The handrail has poor grasp ability, sharp corners and protruding bolts holding the handrail to the support posts.

## Lighting

- ❑ Lighting should be provided for stairways. Look for shadows that may be created, and adjust lighting accordingly.
- ❑ If applicable for stairwells, provide a light switch at the top and the bottom of the stairs.
- ❑ Inspect all lighting on a daily basis, and replace light fixtures or bulbs that do not work.

## Routine Inspections and Maintenance

- ❑ Routinely check the stairs for damage to the carpeting, tile, etc.; and immediately make any necessary repairs.
- ❑ Look for cracks, decay, or uneven points in the concrete in outdoor stairs. Older stairs have more potential to have these types of hazards.



Routine inspections should be conducted to locate and repair any hazards, such as the deteriorating steps in the photo above. Conducting routine inspections and maintenance will help prevent slips and falls from occurring.

All of the above are checkpoints for indoor and outdoor stairs. Following the above guidelines can make a major difference in reducing or eliminating the slip and fall hazards that exist with stairs.

Remember that slips and falls on stairs are the number one cause of accidental non-fatal injuries.