

## Army Safety Gram

Leading on the Edge for Safety Excellence

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## Don't Take Falls Lightly

It's easy to take the subject of falls lightly - unless you or someone you know has had a serious fall. Then you realize how deadly this commonplace accident can be. Millions of people are injured or killed by falls every year. Most of these falls occur on the same level. That means they do not involve a fall from a height above ground level. Instead, most falls occur from slipping on a slick surface, or tripping over an object. To understand how a fall occurs, we have to review a little high school physics.

## Three forces are involved in falls - friction, momentum, and gravity.

- Slips occur when there is not enough friction between your foot and the surface you are walking on. That is why you slip on surfaces such as ice, wet floors, and banana peels there isn't enough friction to slow your foot down.
- The next principle is momentum, which is at work when you trip over something. Your feet are stopped by the object, but momentum carries the rest of your body forward.
- The final principle is gravity. When you lose your balance by slipping or tripping, the force of gravity pulls you down.

## Here are some tips for fall prevention:

- Keep clutter picked up. Common causes of falls are debris, tools, and materials on the floor.
- Arrange work spaces so there are clear passages for walking. Remove or cover cords and cables on walking routes. Store boxes of materials away from traffic areas.
- Close desk and cabinet drawers and doors as soon as you use them. Many accidents are caused by tripping over them.
- Keep walking surfaces free of water, oil, and mud. Watch especially for slippery surfaces on sidewalks, stairways, in entryways, around machinery, in lunch areas and washrooms.
- Wear footwear which will prevent slipping and tripping. Avoid slippery soles and wear well-fitting, correctly fastened footwear. Special non-slip footwear is available for special work situations. Consult your supervisor about the right kind of footwear for your situation.
- Work areas and traffic routes must be well-lit. Report or replace burned out light fixtures. Do not store materials
  where they will block the light from windows or lighting systems. Keep windows and light fixtures clean. While
  dim light would ordinarily be considered a contributor to falls, light which is too bright can also create conditions
  which cause you to fall.
- Stick to established traffic routes. Falls can be caused by taking short-cuts through areas which contain unexpected obstacles.
- If you must walk on a low-friction, slippery surface, take small, deliberate steps.
- Use the handrail on stairways. Never run up or down stairs. Do not store any objects on the stairs and do not permit others to do so.
- Report any walking surface hazards such as obstacles, loose carpet, tile or stair treads.
- Never use makeshift climbing devices. Get a step stool or ladder, and use it properly, if you must reach a higher surface. Don't stand on chairs!
- If you do start to fall, there are things you can do to lessen the impact and prevent injury. You should relax your muscles. Do what you can to protect your head and spine from injury. Try to land on a soft, fleshy part of your body.
- Roll in the direction of the fall so that you do not stop all at once.

Falls are a commonplace kind of accident. They can cause serious injuries or death - so take fall prevention seriously.

