



ABOUT PREVENTING SLIPS, TRIPS & FALLS

LENGTH: 11 MINUTES

PROGRAM SYNOPSIS:

Our workplace is full of hazards, hazards that can hurt us or kill us. Controlling these hazards and preventing injuries is the point of our safety and health program. One such hazard is the risk of falling due to a slip or trip. Workplace falls are a leading cause of injury and even a small fall can have very serious consequences. Identifying and correcting fall hazards combined with paying close attention to our paths of travel can prevent these injuries and save lives. That is the point of our facility's effort to prevent slips, trips and falls and that is the point of this program.

Topics include why we fall in the first place, the effects of gravity, friction and momentum, wearing proper footwear, preventing slips and preventing trips.

PROGRAM OBJECTIVES:

After watching the program, the participant will be able to explain the following:

- What causes us to fall;
- How gravity, friction and momentum contribute to a loss of balance;
- Why people must wear proper footwear to prevent slips;
- What precautions to take to prevent slips;
- Which tripping hazards must be removed to prevent falls.

INSTRUCTIONAL CONTENT:

WHY WE FALL IN THE FIRST PLACE

- Simply put, you will fall when you lose your balance as your center of gravity shifts beyond its base of support.
- When standing, your base of support is your two feet, while your center of gravity is located near your lower back. These three points continuously change position when you walk or run.
- If your center of gravity extends past your feet, you will lose your balance. Unless you move your center of gravity back over your feet or move your feet back under your center of gravity, you will fall.
- When you walk, you momentarily lose your balance with each step.
- Your center of gravity shifts forward, beyond the base of support; however, while walking this momentary loss of balance is corrected by moving a foot forward with each step.
- Many falls occur when some type of hazard or obstruction prevents you from moving a foot forward while walking. This results in a loss of balance and a fall.

GRAVITY, FRICTION & MOMENTUM

- Workers who make it a point to remain balanced will be much less likely to fall. This requires an understanding of the three main factors that contribute to a loss of balance: gravity, friction and momentum.
- Gravity is the constant force that pulls you down toward the ground or floor.
- When a loss of balance occurs, gravity is the force that drives you into the ground.
- Friction is the force that resists the movement of one solid object relative to another.
- When you step, turn or stop while walking or running, it is the friction, sometimes called traction, between the sole of your footwear and the travel surface that prevents you from slipping or sliding.
- When this friction is significantly reduced or lost, your feet can slide, causing your base of support to move out from under your center of gravity, leading to a fall.
- Momentum is the force that tends to keep a moving object in motion.
- The more momentum you have when traveling, the more difficult it is to stop or change directions when encountering a slip or trip hazard.
- The more momentum you are carrying, the more friction is required to secure the soles of your shoes to the walking surface. When momentum overpowers friction, a slip and fall will occur.
- Finally, when your feet are suddenly stopped while carrying increased momentum, your center of gravity will continue moving forward beyond your base of support resulting in a trip and fall.

WEARING PROPER FOOTWEAR

- To help maintain good traction, workers must make a point of wearing footwear with a sole composition appropriate for the walking surfaces on which they travel.

- Certain types of soles provide better traction on specific surfaces and under specific conditions.
- If you have any questions about the appropriate footwear for your work area, ask your supervisor.
- You should periodically check the condition and tread wear of the sole of your boots or shoes.
- Be sure to pay particular attention to the heels. Most slips occur when there is not enough friction between the heel of your shoe and the traveling surface.
- Also, check the soles of your shoes for any accumulation of mud or other slippery substances. For maximum traction, footwear soles must be kept clean.

PREVENTING SLIPS

- Even if you are wearing the proper footwear for your working environment, there are various types of slip hazards that may be encountered which can cause a loss of traction and result in a fall.
- To prevent slips, employees should always be on the lookout for leaks and spills of water, chemicals, oil and other substances.
- Be aware that slipping hazards are not always a liquid. Metal shavings, sawdust, and similar byproducts of work processes can also cause a loss of traction, leading to a slip and fall.
- Avoid slip hazards by paying close attention to the traveling surface when moving about the work place.
- Pay extra attention to the entrances into buildings and restrooms. In these areas, floors are often wet and slippery. Proceed with caution in these areas to prevent a slip and fall.
- If you encounter any hazard that could cause a slip, clean it up right away if you are able. Otherwise, report it to the proper authority immediately.
- Don't assume someone else will handle the situation. Correcting unsafe conditions is critical to prevent injuries.
- There may be times when you cannot avoid walking across a wet or slippery surface. When this is the case, using a wide stance with your feet pointed outward slightly, while taking short steps, can help you maintain your balance.

PREVENTING TRIPS

- As we learned earlier, a trip occurs when your center of gravity moves beyond your base of support after one or both of your feet are obstructed. One way to prevent trips is to avoid contact with obstructions that may become tripping hazards.
- Just about any item has the potential to be a tripping hazard. This includes extension cords, air hoses, tools, boxes and pallets, just to name a few.
- Usually what makes an ordinary object become a tripping hazard is poor housekeeping. If the floor of your work area is cluttered with tools and supplies, the potential for a trip and fall greatly increases.
- Prevent this by keeping your work area organized so that these items won't be in your path of travel and do not allow materials to obstruct marked aisle ways used by other workers.
- Many tripping incidents occur in stairwells and doorways. Don't use these areas for storage, even if you only plan to leave the items there a short time.
- Preventing trips requires workers to always be on the lookout for hazards. Make a point of scanning your intended path before traveling.
- If you discover a tripping hazard, move it yourself if you are able; otherwise, mark it if possible and notify the proper authority.
- Lower file cabinet drawers are the cause of many trip and fall injuries, especially in office environments. They should be closed immediately after each use.
- Many fall injuries also occur when workers trip over extension cords. If you must use an extension cord in areas of pedestrian traffic, make sure to secure it to the floor and mark the hazard. Be sure to remove the cord as soon as you have finished using it.
- Trips can also be prevented by traveling at a slow, safe pace.
- Recall that increased momentum contributes to trips by allowing the upper body to continue forward after the feet become obstructed. This is why you should never run in the work place.
- Running hinders your ability to scan your travel path and also gives you less time to react to changing conditions.

SAFE WORK PRACTICES

- Always turn on the lights when preparing to walk through dark areas.
- Be sure to travel in designated aisle ways and other approved means of access that are intended for pedestrian traffic.
- Stay focused on your path of travel and avoid distractions such as daydreaming, reading, texting and any other activity that shifts your eyes from the path of travel.
- Also, never carry a load that obstructs your forward view. This makes it impossible to see any hazards in your path.

TO THE POINT ABOUT PREVENTING SLIPS, TRIPS & FALLS

Review Quiz

Name _____ Date _____

Please provide answers to the following to show how well you understand the information presented during this program.

1. When standing, your center of gravity is located _____.
 - a. between your shoulders
 - b. near your lower back
 - c. behind your knees
2. Gravity is the constant force that pulls you down toward the ground or floor.
 - a. true
 - b. false
3. The more momentum you have when traveling, the more difficult it is to stop or change directions when encountering a slip or trip hazard.
 - a. true
 - b. false
4. Most slips occur when there is not enough friction between the _____ of your shoe and the traveling surface.
 - a. heel
 - b. toe
 - c. midsole
5. Slipping hazards are not always a liquid.
 - a. true
 - b. false
6. You should only store items in stairwells and doorways if you are going to leave them there for a short time.
 - a. true
 - b. false
7. You should only run in the workplace when an emergency requires evacuation.
 - a. true
 - b. false
8. You should never carry a load that obstructs your forward view.
 - a. true
 - b. false

ANSWERS TO THE REVIEW QUESTIONS

1. b

2. a

3. a

4. a

5. a

6. b

7. b

8. a