



Training Solutions, Delivered!

CONSTRUCTION: Slips, Trips and Falls in Construction Environments

**Leader's Guide, Fact Sheet
& Quiz**

Item Number: 5074

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This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes before the quiz itself, which is on the final page.

CONDUCTING THE PRESENTATION

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

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FACT SHEET

LENGTH: 18 MINUTES

PROGRAM SYNOPSIS:

Slips, trips and falls are involved in most workplace accidents. They cause 17 percent of disabling occupational injuries and 15 percent of on-the-job fatalities, but slips, trips and falls can be prevented. To help prevent them, construction workers need to understand the mechanics of slips, trips and falls, the types of hazards that lead to them and the safe practices and equipment that they can use to stay safely on their feet. They should also know how to reduce their chance of injury if they do fall and what they can do to help a coworker who has fallen and is injured. This program reminds employees about the hazards of slips, trips and falls and explains in detail what they can do to avoid them. Topics include our center of gravity, three types of walking surfaces, how slips, trips and falls occur, good housekeeping and maintenance, wearing proper footwear and how to respond to a fall properly.

PROGRAM OBJECTIVES:

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

- How the human body maintains its stability while walking, standing and working;
- How to recognize slip, trip and fall hazards on the job;
- What procedures they should follow to avoid slips, trips and falls.
- What types of shoes, heels and soles can help to increase a person's stability.
- Which housekeeping and maintenance procedures they should follow to reduce or eliminate slip and trip hazards in their facility;
- What they should do and not do with their body in order to fall "properly";
- What basic first aid that they can provide to a coworker who has fallen.

PROGRAM OUTLINE

BACKGROUND

- **In the old days, slapstick comedies used to get a lot of laughs when their performers slipped on a banana peel or tripped over their own feet and fell down.**

—But in the real world, slips, trips and falls are no laughing matter.

- **In fact, they're involved in most of the accidents that occur in workplaces every day.**

—They cause 17 percent of disabling occupational injuries and 15 percent of on-the-job fatalities.

- **You don't have to fall a long way to hurt yourself.**

—Just slipping on a wet floor or tripping over an open file drawer can result in a fall that lands you in the hospital with a broken bone, strained back, concussion or worse.

- **But most slips, trips and falls can be prevented.**

—To avoid slips, trips and falls and the injuries that they can cause, it helps to understand just how we're able to stand and walk upright in the first place.

CENTER OF GRAVITY

- **First, we need to know something about our "center of gravity".**

—Our center of gravity is the point where the weight of the body is equally distributed, half above and half below.

—It plays an important part in every movement that you make.

- **Imagine that you're standing up straight.**

—Now draw a triangle, with your feet forming the two points at the "base", and the third point of the triangle at your lower back.

—This upper point is located roughly where your center of gravity is.

- **As you move, these three points constantly change position.**

—If the upper point extends out past the lower points, you can "lose" your balance. Unless you regain it, you will fall.

- **Because the shape and size of your body has a direct impact on how naturally stable you are, it's easier for some people to keep their balance than for others.**

—A short person will have a lower center of gravity and be more stable than a tall person.

—It simply takes less of a push for the taller person's center of gravity to extend out past their feet, so that they fall over.

- **How you stand also affects your stability.**

—You are in your most stable standing position when you are perfectly upright, with your arms at your sides.

—This keeps your center of gravity low (at about the lower part of your spine) and over your feet.

- **But if you are slouching or hunching your shoulders, your center of gravity can extend out past your feet, making you less stable.**

- **Reaching forward or sideways for something can have the same effect.**

- **When you reach over your head, you raise your center of gravity, which also reduces your stability.**

—The weight of anything that you're holding in this position just makes you that much more unstable.

- **How you carry something can affect your stability, as well.**

—Putting a load on your shoulder not only raises your center of gravity, it throws it dangerously off to the side.

- **On the other hand, you can increase your stability by carrying objects close to your body and as low as you can while keeping your back straight.**

HOW SLIPS, TRIPS & FALLS OCCUR

- **We tend to take walking for granted, but it's actually a pretty risky activity, because it requires us to fall and catch ourselves with every step!**

—While we are doing that, there are a lot of chances for us to slip or trip along the way.

- **To better understand why we can trip or slip, it helps to know something about "momentum".**

—Momentum is the "force of movement" that we build up as we move.

—The momentum that we build up tends to keep our body and its center of gravity moving.

- **But if we encounter something that interferes with our progress, such as an object that is in the way or a slick walking surface, it can cause trouble.**

- **Trips generally occur when our foot or lower leg catches on something.**

—This causes our lower body to stop while our momentum keeps our center of gravity moving, so that we lose our balance.

- **Stepping onto a lower level, such as when we're going down stairs, can also cause us to trip, especially if the surface is uneven or damaged.**

- **Slips are a little different. When we walk we need to have the best "grip", that is most friction, between the soles of our shoes and the walking surface.**

—Slipping occurs when something interferes with that grip and causes our feet to move out from under our center of gravity while our momentum keeps us moving.

—This causes us to lose our balance, which like tripping, can also result in a fall.

- **It's important to remember that our momentum increases when we walk faster, and when we carry more weight.**

—These are two things that we're very likely to do when we're on the job.

—The faster we go and the more that we carry, the more attention we need to pay to potential slip and trip hazards.

THREE TYPES OF WALKING SURFACES

- **You need to watch out for fall hazards during a busy workday as well.**

—If you don't, it can lead to pain, injuries and even worse.

- **For example, if you need to reach something up high, stacking up some pallets and standing on them may seem like a time-saver until those pallets shift out from under you.**

- **If you choose to climb a ladder instead, be sure to keep your center of gravity positioned between the two upright rails.**

—Losing your balance on a ladder could get you to the ground a lot faster and more painfully than you want to.

- **Different walking surfaces provide varying degrees of the friction that is needed by your feet to get a secure grip.**

—Carpeting provides a better grip than a smooth tile floor.

—A dry tile floor provides better grip than a floor that is wet.

- **You can avoid slipping by being aware of the type of surface that you are walking on, and how much traction it can provide.**

—The walking surfaces you may encounter can be divided into three types: non-slip, moderately slippery and slippery.

- **Non-slip surfaces provide good traction regardless of whether they are wet or dry.**

—They include rubber mats, carpet, surfaces covered with non-slip coatings and rough-textured concrete.

- **Moderately slippery surfaces are reasonably slip-resistant when dry, but can be very slippery when they are wet.**

—These include vinyl flooring, unpolished ceramic tile, unfinished wood and smooth concrete.

- **Slippery surfaces don't provide much traction at all, whether they are wet or dry.**

—They include polished marble and tile, smooth metal, varnished wood, freshly painted concrete and of course, ice.

- **The most slippery places inside of buildings tend to be near entrances, restrooms and around machinery.**
—Often the floors in these locations are made of moderately slippery materials, such as vinyl, tile or painted concrete, which can become "skating rinks" when they get wet.
—If possible, these areas should be covered with non-slip materials, like rubber mats or carpeting.
- **You should always keep an eye out for oil, grease and street grime on walking surfaces.**
—They can all increase the slipperiness of any surface.
—Accumulations of dirt, sand or other granular or powdery materials can also make surfaces more slippery.
- **Outside of your building, you need to be careful when you are walking on sidewalks and pavements that may be wet or icy.**
- **Whether you're walking inside or outside, watch your step on ramps or other sloping surfaces.**
—Your likelihood of slipping increases significantly when a surface isn't level.

GOOD HOUSEKEEPING & MAINTENANCE

- **The more disorderly and run-down a workplace becomes, the greater the number of slip, trip and fall hazards you're likely to encounter.**
—Good housekeeping and maintenance practices can help to prevent these incidents, as well as the injuries they cause.
- **For example, you have to be able to see hazards to avoid them, so replacing a burned out light bulb can help you or a coworker avoid a slip, trip or fall.**
- **You need to keep all walking surfaces dry as well.**
—If you discover some spilled water, use rags, paper towels or a mop to clean it up.
- **For substances like grease or oil that have accumulated on the floor:**
—Spread an absorbent such as vermiculite or kitty litter over the area.
—Sweep everything up and dispose of it properly.
- **Sometimes you may need to place a non-skid rubber mat or a piece of carpeting over a slippery spot.**
—If you do, make sure that it lies flat and stays in place, so people won't trip over it.
- **There are lots of other slip, trip and fall hazards you can encounter on the job too.**
—Walkways and other high-traffic areas should be kept clear of boxes, tools and other objects that could cause trips.
- **Remember to pick up small items off the floor, as well.**
—Stepping on a pencil or a paperclip could send somebody "skating" when they least expect it.
- **Inspect stairways and clear them of debris and other obstacles.**
—Check that the hand rails are firmly attached and use them whenever you go up or down the stairs, just in case.
- **Loose flooring, torn carpet, protruding nails and small "potholes" can cause slips and trips as well.**
- **If you discover problems like these you should:**
—Block them off from foot traffic so people won't trip over them.
—Report the hazards so they can be repaired as soon as possible.
- **Make sure to close file cabinets and desk drawers after using them.**
—That way they won't trip anyone who passes by later.
- **Sometimes even the cleanup process itself can create slip or trip hazards.**
—When you use a wet mop, put out signs to warn people about the slippery floor.
- **Stretching power cords across "high traffic" areas and walkways creates a serious trip hazard.**
—Instead, tape them down. Don't leave them there for more than a few hours. The tape will eventually loosen and create its own trip hazard!

WEARING PROPER FOOTWEAR

- **While it's important to reduce or eliminate any slip, trip and fall hazards that exist in a workplace, it's also a good idea to wear shoes that will help protect you from them. They should:**
—Fit properly.
—Be comfortable.
—Have soles and heels suited for the surfaces that you will be walking and standing on.
- **Avoid sandals and "open-toed" shoes with straps that can catch on things and cause you to trip.**
- **The heels of your shoes are especially important.**
—Most slips occur when there is not enough friction between the heel and the walking surface beneath it.
—To get a secure grip, the heels on your shoes should be low and wide.
- **High heels may look nice, but they can create real slip and trip hazards.**
—They provide very little traction for your feet and can trip you by catching on carpet or irregularities in a walking surface.

—High heels also make you naturally unstable, because they raise your center of gravity.

- **Pay attention to the soles of your shoes as well.**

—Soles made of synthetic soft rubber, such as those on sneakers and most "walking" shoes, can grip dry surfaces well but may slip in wet conditions.

- **Many work boots have soles made out of hard rubber.**

—These soles don't provide particularly good friction on dry surface, but have good traction in areas that are wet or greasy.

- **Some men's and women's dress shoes with smooth leather soles can lose their grip even on carpet and other "non-slip" surfaces.**

—Fortunately, many attractive business shoes have "slip-resistant" rubber soles. These are not only a lot safer, but can also be more comfortable.

- **Raised patterns or texturing on the soles, called "tread", can greatly increase their slip-resistance as well.**

- **Some work shoes and most work boots have especially deep treads, to improve their grip and channel away water or other liquids that could reduce their friction with a walking surface.**

—But an embedded pebble or thumbtack can turn even a slip-resistant shoe into a skate.

—So inspect the treads on your shoes frequently, and remove any foreign objects that you find.

HOW TO FALL 'PROPERLY' & FIRST AID

- **Even when we do our best to avoid them, slips, trips and falls can still occur.**

—They happen quickly and without warning, so it's important to know ahead of time what you can do to avoid an injury or lessen its severity.

—You also need to know how to treat any injuries you might experience.

- **What you do with your body when you fall can make a**

big difference in how much of an injury may result. The important thing to remember is to stay loose:

—Relax, don't tense up.

—Bend at your elbows and knees and allow your muscles to absorb the impact gradually.

—Roll in the direction of the fall.

- **Do not try to break a fall with your hands.**

—If you land with all of your body weight on a hand, you could seriously sprain your wrist or even break some bones.

- **If a coworker is hurt in a fall, there are a few first aid guidelines to follow.**

- **For minor injuries, there are several things you can do:**

—Clean any visible wounds with water.

—Stop any bleeding by applying pressure with a sterile dressing or a clean cloth.

—Apply ice wrapped in a cloth or towel to reduce pain and swelling.

- **You should call 911 immediately if:**

—The victim is unconscious, unable to move or has difficulty breathing.

—The injury bleeds heavily, or there is bleeding from the nose, ears, or mouth.

—You think the head, neck, back, or hip may have been affected.

- **In some cases, the EMT dispatcher may be able to assist you with basic first aid instructions.**

- **Finally, you should comfort the injured person.**

—Stay with them until they have recovered or emergency assistance arrives.

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ANSWERS TO THE REVIEW QUIZ

1. a
2. b
3. b
4. a
5. a
6. b
7. b
8. b
9. a
10. b

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REVIEW QUIZ

The following questions are provided to determine how well you understand the information presented in this program.

Name _____ Date _____

1. The center of gravity of a standing person is located in the vicinity of their lower back.
 - a. True
 - b. False

2. Raising a load over your head with your arms will tend to increase your body's stability.
 - a. True
 - b. False

3. Walking up a flight of stairs can often create trip hazards, but coming down stairs normally does not.
 - a. True
 - b. False

4. Trips occur when your foot or lower leg catches on something while your center of gravity keeps moving forward.
 - a. True
 - b. False

5. Your chances of slipping increase significantly when you walk on a surface that isn't level.
 - a. True
 - b. False

6. Non-slip walking surfaces include vinyl flooring, unpolished ceramic tile and smooth concrete.
 - a. True
 - b. False

7. Small items on the floor, like pencils and paperclips, won't create a slip and fall hazard.
 - a. True
 - b. False

8. Shoes with smooth leather soles provide good traction on carpet and other non-slip surfaces.
 - a. True
 - b. False

9. A shoe with deep treads in the sole can still lose its grip if a pebble becomes embedded in the treads.
 - a. True
 - b. False

10. If you begin to fall, you should try to use your hands to break the fall.
 - a. True
 - b. False