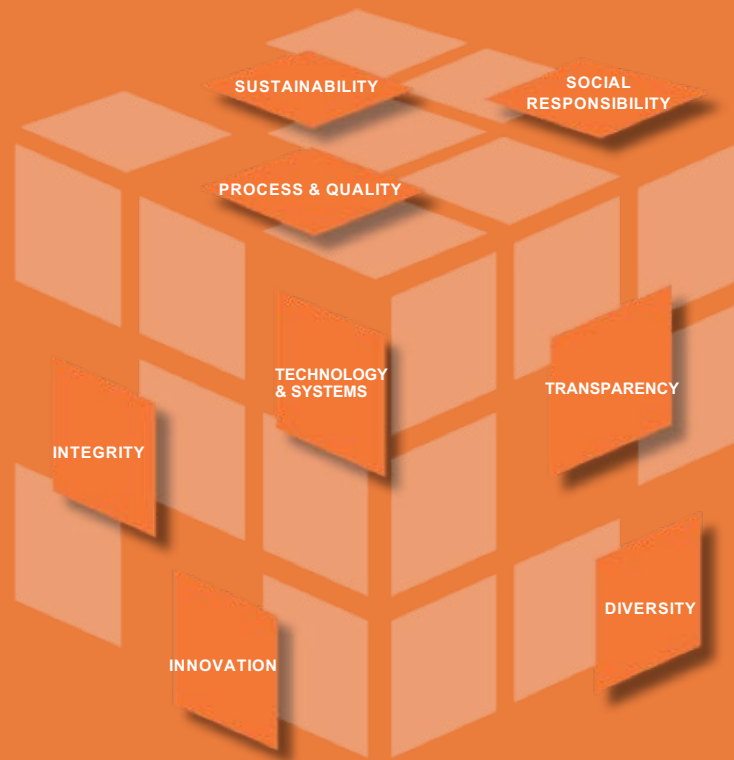


## Slips, Trips, & Falls with Safe Lifting/Carrying Techniques



### **Welcome to the Slips, Trips, and Fall Prevention module.**

This module will raise awareness and assist in the understanding of the most dangerous hazards, statistics, dangerous surfaces and obstructions, and identify preventative actions you can take to prevent accidents.

During the module you will answer Quick Quizzes to help you review and test your understanding; these are not scored.

There is also a short quiz, in addition to this module, which will be scored. It is necessary to pass with a score of 80% or better to receive credit for this module. This module will take 20 minutes to complete.

Here are examples of the most common types of injuries sustained from slips, trips, and falls:

- **Back/spine**
- **Head/brain**
- **Muscle strains**
- **Sprains**
- **Broken bones**
- **Death**



Slips, trips, and falls constitute the majority of general industry accidents. They cause 15% of all accidental deaths, and are second only to motor vehicles as a cause of fatalities.

Overexertion, bodily reaction, falls, slips, and trips accounted for approximately 60 percent of all injuries and illnesses with days away from work.

The OSHA standards cited in this module for walking/working surfaces apply to all permanent places of employment.



Poor housekeeping can cause trips.

**Many trip and fall hazards can be eliminated by being careful and removing hazards, such as:**

- Clutter at your worksite
- Open file and desk drawers
- Uneven flooring
- Wet or slippery surfaces
- Ladders in your path
- Inappropriate worksite footwear
- Snow, ice, wet leaves and other natural slipping hazards



## You can eliminate many falls if you:

- Practice good housekeeping
- Step over obstructions
- Walk slowly
- Watch for changes in flooring
- Make sure lighting is adequate
- Use handrails



Wet and worn surfaces cause two out of every three falls. Any floor can become a hazard if damaged or if something is spilled on it:

- Broken tiles, wrinkled or loose carpeting can cause trips.
- Spills of oil, water, coffee, grease, or cleaners can cause slips and falls.

Remember that different surfaces have different traction. A waxed floor or a shiny tiled floor can both be slippery, even when dry. Be aware of the surfaces that are in your environment.



### Slips and falls on wet floors can be prevented by:

- Cleaning up spills immediately.
- Making sure mats are present, clean, and dry.
- Wearing appropriate shoes for the working conditions.
- Drying wet surfaces as soon as possible.
- Placing a warning sign and/or applying an ice melting substance or sanding the surface in icy conditions.





## Slips, trips, and falls can also be prevented by using common sense:

- Adjust your stride, based on the situation.
- Make wide turns around corners.
- Do not block your vision if you are carrying objects.



**This man can't see hazards that might be in his way.**

## Take it easy on the stairs:

- Hold handrails.
- Don't run up or down.
- Inspect stairs for slippery surfaces or damage.
- Don't put objects on stairs.
- Keep one hand free, if possible.



## Here are some ways to keep safe outdoors:

- Watch where you are walking.
- Use shoes with good traction.
- Slow down. Walk, don't run.
- Wipe your feet to remove debris and wetness.
- Sand slippery spots and walk slowly in sanded areas.
- Wear sunglasses to cut down on glare.



**Which statements are NOT true?**

- A. You should pick up items and clean up spills even if you didn't put them there.
- B. Good housekeeping helps eliminate slip, trip, and fall hazards.
- C. If you can't eliminate a slip or trip hazard, just avoid it and forget about it.
- D. Walk quickly over slippery spots to avoid slipping.

**Which statements are NOT true?**

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- C. If you can't eliminate a slip or trip hazard, just avoid it and forget about it.**
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### **Did you know that there are rules to falling?**

Most of these steps are instinctual, like protecting your head and using your hands to catch yourself (which in itself can cause an injury).

However, if you bend and roll with the fall and exhale to relax yourself, the fall may not result in a serious injury.



- If you do slip, trip or fall make sure you alert your supervisor immediately. Let someone know.
- Complete all Accident/Injury forms.
- If you are hurt, seek medical attention. Know the full extent of your injuries and follow the doctor's orders.



- ▶ Keep walkways clear.
- ▶ Clean up spills promptly.
- ▶ Make sure stairs and ladders are safe.
- ▶ Walk slowly.
- ▶ Don't block your vision.



Lifting doesn't have to be a strenuous activity. Let's take a look at safe lifting practices. If a load is too heavy to reasonably carry by hand, use lifting equipment:

- Powered equipment such as forklifts, powered carts, and electric pallet jacks
- Hand trucks, carts, pallet, jacks
- Cranes and hoists
- Conveyors



### **Before the actual lifting begins, take a moment to develop a lifting plan.**

- Size up the load by looking at the weight, shape, and size of the load.
- Clear any objects that may be in the path of travel and allow extra space to maneuver through tight doorways or corners.
- Think about where the load is going to be unloaded; is the area clear and big enough for the load or is the area in the right environment for the load.



## Use proper lifting techniques.

- Size up the load by looking at and testing weight, shape, and size of the load.
- When lifting, stand close to the load with a wide stance and bend at the knees, not the waist.
- Pull the load close and grip it tightly.
- Then, tighten your stomach muscles and lift your head.
- Finally, rise up using your legs. This will reduce the strain on your back and shoulders.



The amount of force that can be placed on your back under certain conditions will alarm you. If you lean over to pick something up and you don't bend your knees, the amount of pressure on your lower back is significant.

Think of your back as a lever. With the fulcrum in the center of the lever, it only takes ten pounds of pressure to lift a ten pound object. However, if you shift the fulcrum to one side, it takes much more force to lift that same object. Your waist will act like the fulcrum in a lever system, and it is not centered.

Your waist will operate on a 10:1 ratio. Lifting a ten pound object actually puts 100 pounds of pressure on your lower back. When you add in the 105 pounds of the average human upper torso, you see that lifting a ten pound object actually puts 1,150 pounds of pressure on the lower back.

As you can see, it is easy to see how continual lifting and bending can quickly cause back problems.



## When lifting bags that may be heavy or awkward:

- Squat next to the bag
- Grab it at opposite corners
- Lift it up to your thigh or waist
- Stand up carefully
- Put the load on your shoulder



### When lifting a heavy or awkward load:

- Designate a person to lead the lift to avoid confusion
- Lift at the same time
- Keep the load level
- Slowly unload together



### When carrying a load by yourself:

- Make sure you can see in front of you and the path ahead
- Take small, stable steps
- Do not twist your back



**Unloading materials is also important. To prevent harm to your back or other muscles:**

- Squat with the load
- Do not bend your back over the load
- Be careful of pinching or smashing fingers





If you have to handle loads that are located overhead:



**Stand facing the load.**



**Slide the load close to your body.**



**Maintain good posture.**

### If the load you are handling is long:

- Pick up one end
- Place the balance point on your shoulder
- Watch the ends to ensure that they don't bump into anything



- Good sleep is essential to your health, and an important part of your overall well-being. Practice mindfulness when considering good back health.
- Proper exercise can be impactful when trying to strengthen your back.
- Be diligent in thinking about your back! Think long term and don't try to lift too much at one time.
- Consider your back at the beginning of each task during the planning phase of the lift and take appropriate action in all you do.



### What is happening in these pictures?

- ▶ This man is moving an extremely heavy box by himself.
- ▶ He tilts the box toward his body.
- ▶ He realizes that the box is too heavy to lift so he thinks he can move it by rotating the box on the bottom edge.
- ▶ The box starts to fall and he makes a grab for it.
- ▶ This man has just strained his back which can result in missed time from work.



### Let's review the previous scenario.

- ▶ Was the box too heavy? **Yes.**  
The box had a label on it that displayed the weight of the box.
- ▶ Was the box too big to move alone? **Yes.**
- ▶ Were proper lifting techniques followed? **No.**



- ▶ **Was the back belt a factor?** Yes and No. Back belts may have increased this person's lifting confidence. The National Institute for Occupational Safety and Health (NIOSH) states:  
*“There is some research showing that workers believe they can lift more when wearing a back belt and if they believe they are protected, they may subject themselves to even greater risk by lifting more weight than they would have without a belt “*
- ▶ Remember, before any actual lifting begins, make a plan and never lift a heavy box by yourself. Team lift the item or use a hand truck or other type of equipment.



**Which 3 choices are safe practices for lifting?**

- A. Team lift large loads.
- B. Use your back and not your legs while lifting.
- C. Use lifting equipment, when necessary.
- D. Bend your knees and use your legs when lifting.

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- ▶ Maintain proper back posture.
- ▶ Exercise regularly.
- ▶ Use available lifting equipment and have a lifting plan.
- ▶ Use your legs; bend them when lifting.
- ▶ Always think about your back.

Congratulations!

You have completed the Slips, Trips, and Falls module.

Click [here](#) and take the final quiz.