Continuing Education Training
-Slips, Trips, and Falls

Presenter Guide
-2nd Quarter 2019
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Introduction

This Slip, Trip, and Fall continuing education course is intended as a facilitator led process. The facilitator may choose to augment the material with videos, handouts or other media to enhance the learning experience. The facilitator may want to incorporate visual aids to enhance the presentation.

Using this material combined with practical experience, good presentation skills, and knowledge of adult learning techniques, the facilitator has a greater opportunity to deliver the information effectively.

Microsoft® PowerPoint® combined with good instructional skills and instructor/student dialogue help with information retention and understanding. PowerPoint® presents the information to the attendee and the facilitator summarizes the content of the slides. It is critical to engage and involve the attendee in the process. Ask open-ended questions that will elicit conversation and discussion, but be cautious to maintain control of the discussion.

Conversation and scenarios are good, but can cause the discussion to run long. If it seems like the group is losing focus during the course, the facilitator can direct the group back on track by using comments like “This is a great discussion, but let’s get back to the subject at hand”.

Another tool is the “Parking Lot” which is simply a newsprint chart or dry erase board or note pad where the facilitator records unanswered questions during the meeting and that may require more research. It is vital to capture any ongoing discussions or questions on the “Parking Lot” and follow up when the information is known.

Deliver this continuing education module in the second quarter of 2019. Delivery time is approximately 1 to 1.5 hours in one setting, or divided-up into three, twenty to thirty minute settings. There is text animation on most of the slides. Text and images appear by varying levels on mouse clicks. **It is critical that the facilitator makes him or herself familiar with the material prior to delivery.**

At the end of this document are two handouts regarding Slip, Trip, and Fall prevention. The presenter can use these handouts as well as relevant examples in conjunction with the PowerPoint® presentation to augment the materials. The handouts may serve as stand-alone documents.
Introduce the module. Explain that the intent of this course is to provide continuing education on training topics relative to trends and leading indicators identified by the ET&D Partnership. Along with the partnership task teams, the Bureau of Labor Statistics identifies slips, trips and falls as the cause of 15 percent of all accidental deaths, second only to motor vehicle accidents. The National Safety Council reports that slips, trips and falls account for more than 26% of injury-related visits to the emergency room. They consistently rank among the highest frequency and severity (cost) claims. Yet most people fail to recognize the hazard or realize that the majority of fall-related injuries occur because of falls from same-level walking surfaces. Even workplaces that have a specific plan to address slip, trip and fall hazards are unable to eliminate these types of incidents. The reason is that slip, trip and fall prevention programs generally address the physical factors that lead to incidents.
Desired Outcomes

Upon completion of this continuing education module, you should be able to:
- Identify the key worker locations where slip, trip, and fall events are likely to occur
- Explain factors associated with slip, trip, and fall injuries
- Discuss common causes of slip, trip, and fall events
- Identify preventative measures
- Discuss behavioral risk factors that can contribute to slip, trip, and fall events

Possible Results
- Disabling injuries
- Deaths

Basic Truth
- Many are Preventable

Explain the objectives and the learning expectations of this continuing education module. Be sure to explain why this module is important and why the attendee should devote their attention to the lesson topic.

Explain Slips, trips and falls are frequent causes of accidents both on and off the job. According to OSHA, slips, trips, and falls constitute the majority of general industry accidents and result in back injuries, strains and sprains, contusions and fractures.
State that Slip, trip, and fall events have the potential to be a major cause of injury for employees and visitors to our premises. There is a common misconception that slip and fall injuries “just happen” and that there is little that can be done to prevent them. The potential for slips, trips, and falls can be widespread, but it is important to understand where the greatest potential for danger lies.

Some causal factors associated with slip, trip and fall injuries include:

- Slippery surfaces, such as a gloss-finished tile, polished stone, etc.
- Holes or broken surfaces.
- Uneven walking surfaces.
- Poorly marked and/or poorly lit walkway transitions.
- Wet surfaces caused by spills or poor drainage.
- Slippery conditions due to mud, ice, or water during inclement weather.
Partnership Facts

Falls are our fourth leading cause of OSHA Recordable injuries
81 of 644 reported in 2017

- 2017 (13%)
- 2016 (14%)
- 2015 (14%)
- 2014 (15%)
- 2013 (15%)

Ongoing Issue

Explain that the information on this slide emanates directly from Task Team One’s 2017 Analysis. Annually each partner submits OSHA 300 log data to Task Team One for analysis. The data is submitted, redacted, and compiled. For calendar year 2017, the partner member companies submitted 636 cases recorded on OSHA logs. Task Team One performed a high-level analysis and then reviewed specific cases for clarification. Falls were in the top 5 for 2017.
Slide 1-6

Explain that this chart shows the types of injuries our workers are experiencing as a result to slip, trip, and/or fall events. Be sure to mention that the majority of the time, the result of one of these events is some type of fracture. Slip, trip, and fall events can be life changing and life altering events.

Slide 1-7

Explain the industry facts and how they pertain to our job. Explain that over 77% (63 out of 81) of all fall injuries occurred due to falls from equipment and falls from same level.
Explain that according to the partnership data, the ankle is the body part most injured in a slip, trip, and/or fall event. Engage the group and ask how or if we can perform our jobs without injuring these body parts?

Slide 1-9

Explain in addition to the social costs, workplace injuries and illnesses have a major impact on an employer's bottom line. It is estimated that employers pay almost $1 billion per week for direct workers' compensation costs alone. The costs of workplace injuries and illnesses include direct and indirect costs. Direct costs include workers' compensation payments, medical expenses, and costs for legal services. Examples of indirect costs include training replacement employees, accident investigation, and implementation of corrective measures, lost productivity, repairs of damaged equipment and property, and costs associated with lower employee morale and absenteeism.
End Session One

Key Points Session One

Slide 1-10

The presenter should have touched on the following items when reviewing session one:

1. Slips, Trips, and Falls are a leading cause of workplace injuries.
   a. True
   b. False

2. Approximately 25,000 slip, trip, and fall injuries occur daily in the United States.
   a. True
   b. False

3. Of all fall categories, falls from ground level and falls from vehicles/equipment are the most common.
   a. True
   b. False

4. Regarding ETD partnership company workers, the most frequently injured body part, due to a slip, trip, and/or fall is the ankle.
   a. True
   b. False
Begin Section Two

Slide 2-1

Slips, Trips, and Falls
From Ground Level

Session Two

Explain that the following section will discuss slip, trip, and fall events that occur from ground level or same elevation.

Slide 2-2

Common Causes

Possible Deficiencies

- Housekeeping
- Unguarded holes
- Barriers
- Awareness
- Loss of Focus

Explain the typical job sites hazards and certain common causes of slip, trip, and fall events. Engage the group by asking if they have seen or experienced any of these instances at their worksites.
Common Causes

Environmental Issues
- Ruts
- Mud
- Rain
- Ice
- Snow
- Uneven/rough terrain

Explain how weather and terrain (like snow covered ruts) need to be identified and the hazards associated with them must be controlled to the best of our abilities prior to and while working.

Hazard? Possible Solution(s)?

Use this as an involvement activity. Ask the group if they see a potential hazard in this image. Ask them to identify the hazard and suggest a corrective solution. The desired answers here are that there is a possible trip hazard as well as a possible impalement hazard. The best solution is to move this ground rod to a non-travel location where people will not normally be walking. If the hazard absolutely cannot be removed then try to lower the exposure. Maybe drive the rod a bit deeper into the ground.
Use this as an involvement activity. Explain how a receiver hitch can cause a trip and/or fall and other injuries such as contusions and bruising. Explain the need to identify with barriers or eliminate by vehicle placement or removing them when not in use. Ask the group what could be some possible solutions to this hazard. This is a good slide to promote discussion.

Slide 2-6

Explain the need to identify hazards and maintain situational awareness when walking. State that irregular walking surfaces pose a risk. Identify these issues in the pre-task analysis.
Use this as an involvement activity. Ask the group to look at this picture and state some of the obvious hazards. The facilitator is looking for items such as electrical hazards, trip hazards, and slick surfaces from spilled oil, puncture hazards, back feed, and step potential issues. Then explain how conditions are unpredictable and ever changing on storms. Explain that we need to do our best to address all slip, trip, and/or fall hazards in the work areas. After a short discussion, ask the attendees to list some methods for controlling the obvious hazards.
Slide 2-8

**Common Causes**

Housekeeping
- Hoses
- Cables
- Conductor
- Extension cords
- Rigging
- Hardware

**Poor housekeeping is a precursor to an injury**

Explain that housekeeping or lack thereof can be a contributing factor to an injury. Poor housekeeping is a precursor to an injury. Rarely is there a time when housekeeping is deficient and productivity, quality, and/or safety is good. Poor housekeeping equals poor performance. Time is wasted, materials and tools are damaged or lost, and workers are frustrated and may be injured. There is no plus side to poor housekeeping.

Slide 2-9

**5-10-15 Method**

Every 5 minutes
- Take 10 seconds
- Look 15’ around you

Have a plan
- Consider your next steps
- Escape route

**Recognize**

**Evaluate**

**Control**

Explain the 5, 10, 15, process. Explain that the 5-10-15 process is a simple mental exercise where every 5 minutes, pause and take 10 seconds to look 15 feet around the work area. Look for possible slip, trip, and fall hazards and plan on how to eliminate them or if elimination is not feasible, how to mitigate the risk exposure to them. Always plan for an emergency and always have an escape route!
Tell the attendees that they need to be purposeful in their thinking and plan their next steps. Explain the need to not only have a plan, but they need to have an escape route if something goes wrong.

Slide 2-10

Explain that workers must be protected from falling into an excavation or drilled hole. The illustration shows an open excavation protection system. This system is a guardrail system that will keep workers from falling into a drilled hole. However, it is important to mention that there are times a worker may need to enter this workspace. There must be a system in place to keep the worker from falling into the hole and in the worst case, retrieve the worker should the edge of the excavation fail and the worker slips into the hole.

End Session Two
Key Points Session Two

The presenter should have touched on the following items when reviewing session two:

1. Falls from ground elevation can be caused by poor housekeeping.
   a. True
   b. False

2. Open excavations should be guarded to prevent fall hazards.
   a. True
   b. False

3. Uneven and or damaged surfaces may cause falls and result in an injury.
   a. True
   b. False

4. The meaning of the 5-10-15 method is:
   a. Every 5 steps, take a 10 to 15 minute smoke break
   b. Every 5 days, take 10 minutes to do 15 push-ups
   c. Every 5 minutes, take 10 seconds to look 15 feet around you
   d. Every 5 minutes, take 10 seconds to snap 15 selfies and post them on Facebook.
Begin Session Three

Slide 3-1

Explain that this section will discuss slip, trip, and fall hazard exposures to workers working above the ground and entering or exiting vehicles and/or equipment.

Slide 3-2

Explain that falls account for almost 13% (12.58%) of the total number of ET&D Partnership recordable injuries. Almost 40% of those falls involve vehicles and/or equipment. Fall injuries result in some type of bone fracture 32% of the time making it one of the most severe injury classifications. Climbing in or out of a truck, bucket truck basket, or other type of equipment can be one of the most dangerous tasks we perform. Falls during mounting or dismounting such equipment are the most frequently reported source of injury involving line workers.
Explain that there seem to be some recurring themes involving slip, trip, and fall events. The three most common are failing to maintain three points of contact which is two hands and one foot or two feet and one hand on the vehicle or equipment during entry and exit. Explain that another common cause is exiting the vehicle or equipment while facing forward. Always look in both directions for oncoming traffic and other hazards when entering and exiting vehicles or equipment. Lastly look out for uneven, wet, slick, muddy, terrain. In our work, those items will almost always be an issue. Always place footing firmly and deliberately before trusting your weight to the transition.
Safe Practices

Always
- Use designated access points
- Use grab rails
- Face the equipment
- Climb don’t jump
- Keep eyes on path
- Maintain the triangle

If one is the loneliest number, three is the safest. We have all heard of the “three points of contact” rule to help prevent falls. However, what is it, and how do you use it? Three points of contact means you are using two hands and one foot, or one hand and two feet, to support your body while mounting or dismounting a vehicle, stable platform, or ladder. The three points of contact should be broken only after your reach your destination. Keep these tips in mind when using the “three points of contact” rule:

- Dry your hands and wipe excess mud or snow off your boots for surer grip.
- Face the vehicle, platform, or ladder when you enter or exit.
- Use the handrails when mounting a platform.
- Keep your hands free. If you need to bring tools or materials up with you, place them in a tool belt or use a hoist line for larger items. If you are climbing down from a vehicle, put the tool or other item on the floor and then grab it from the ground.
- Do not use a tire as a ladder. Enter the vehicle way the manufacturer intended.
- Do not reach for the steering wheel to pull you up.
- Do not jump off the machine onto the ground.
- Do not try to enter a piece of equipment that is moving.
- Check for obstacles, debris, or fluids on the ground before dismounting.
- Do not wear loose clothing or dangling jewelry that could catch on something.

Three points of contact sounds simple and you probably already do it most of the time. However, it is that one time you do not that can land you in trouble. Explain proper access and use of three points of contact and situational awareness. The last picture is a humorous but sad example of what three points of contact is not! The sad aspect is that a worker would intentionally place himself or herself in such a tenuous situation. Explain that this is an illustration of unnecessary “at-risk” behavior.
Explain the importance of maintaining good housekeeping and parking equipment for access / egress. Also, explain that it is important to keep hands free for climbing into and off equipment. Place any object in the cab from ground level if possible. Reverse the process when exiting.

Explain that sometimes we have to implement engineering controls to help minimize the hazards. The product shown in the next-to-last image is called “The Big Truck Tire Step”. The manufacturer states that it is the only tire step that allows you to safely step on the top of the tire. The Big Truck Tire Step provides safe maintenance on 18-wheelers, flat bed trailers, 1-1/2 ton, 2 ton, and most medium sized trucks. The Standard Two-Step tire step is approximately 18" from the ground to the first step when on a tire. Weighing around 13 pounds, the Two-Step tire step folds into a space just over a cubic foot. This product fits tire Sizes: 255, 265, 275, 285, 295 (Fits 10" to 11-1/2" tread width).
The step is load tested to a 400-pound capacity, has spring-loaded grips for stability, and is made of 3003 aluminum and steel. **This is not an endorsement of this product but simply an illustration of available options.** The final image shows guard rails installed on a conductor stringing machine. These guard rails offer convenient grab points for access and egress and help prevent falls.

State that more often than not, we fail to address the human factors that lead to accidents, injuries, and fatalities. In a 2014 survey of safety professionals by Safety Daily Advisor, “Understanding How Human Factors Affect Slips, Trips, and Falls,” respondents identified human factors as the primary cause of more than half of all slip, trip and fall incidents. They usually were the result of errors in judgment, such as how fast to walk or how tidy to keep a work area. People tend to perceive these behaviors as much less risky as they actually are, which makes a solution challenging.
Explain how their behavior leads to additional risk. Be sure to emphasize that the listed behaviors are not to point the finger and be considered as intentional risk taking even though some are. Others may just be the way we normally behave. We continue to train workers to address the physical factors that lead to slip, trip and fall incidents, but we also need to focus on behavior. As in any other training, regular reinforcement is necessary, and supervisors and managers also need to model the behaviors they expect in their employees. Risky behaviors we specifically need to train workers to be aware of and that both they and we need to avoid include:

Rushing – Employees try to rush through tasks for many reasons. They may be overachievers, or they may feel overwhelmed and rush to catch up. Some see work as a competition where they need to stay ahead of their coworkers, while others simply want to manage their time as efficiently as possible. Whatever the reason for rushing, it often leads to poor decisions, such as walking faster than is safe across an icy walkway or failing to stop and don the ice grippers before stepping outside. Emphasize the importance of safe behavior over speed.

Distraction – Our work culture places a high value on multi-tasking, but we need to realize the danger we place others and ourselves in with our constant distractions. Those electronic devices we cannot seem to take our eye off of may be the death of us all if we do not start watching, where we are going. Replaying this morning’s argument with your spouse repeatedly in your head is equally distracting. Teach employees to recognize and avoid distractions.

Complacency – This is probably the biggest behavioral challenge. Webster’s Dictionary defines complacency as “self-satisfaction especially when accompanied by unawareness of actual dangers or deficiencies”. It is easy to become complacent when you do the same tasks day after day without incident or injury. If no one has tripped over the electrical cord strung across the office floor, you eventually tell yourself that there is no real danger there. Sadly, it often takes a serious accident involving one’s self or a coworker to jolt us out of this complacency. A strong safety culture is the best defense against complacency.

Explain that rapid changes in direction also create a similar problem.
Explain that we can mitigate much of the risk associated with walking / working surfaces by not being in a hurry, planning our routes, and not taking short cuts. State that carrying or moving cumbersome objects or simply too many objects at one time, not paying attention to surroundings, distraction, taking unapproved shortcuts, and/or being in a hurry and rushing are all examples of taking unnecessary risks.

Explain that there are many slip, trip, and fall hazards out there that are easy to identify. The longer we work around a hazard (or in this case the more we place ourselves in the Line-of-Fire) and suffer no negative consequences the less we respect a hazard’s ability to harm us. The best way to avoid line of fire incidents is to eliminate the hazards that cause these incidents whenever possible. By totally eliminating the hazards, there is no chance that you or anyone else in the work area can be injured by that hazard.
State that if it is not possible to remove the hazards, we must mitigate them. Explain the hierarchy of controls. State that elimination is the most effective. For example, use proper personal protective equipment to avoid exposure. Explain that PPE is the last line of defense. Do not rely just on your PPE to avoid injury. Think about the slip, trip, and fall hazards and how to mitigate them. State that some great topics to be identified and discussed during the pre-task meeting are:

- Poor lighting
- Glare
- Shadows
- Bulky PPE (includes improper foot-wear)
- Excess noise or temperature
- Fog or misty conditions
- Inadequate or missing signage

One should ask: “How can I protect myself from the hazard?” When elimination is not possible, engineering controls are the next best choice in protecting yourself from line of fire incidents. Some engineering controls that could protect you from line of fire incidents include physical barriers, guarding around moving parts, and toe boards on elevated work platforms to prevent objects from falling to the area below. There are many other possible engineering controls that could be used depending on the specific hazard. Total elimination of hazards is not always possible and engineering controls may not be feasible or they can fail.

End Session Three
Key Points Session Three

Slide 3-12

The presenter should have touched on the following items when reviewing session three:

1. The most common slip, trip, fall event occurs to workers at ground level.
   a. True
   b. False

2. Poor or inadequate housekeeping is a leading cause of slip, trip, and fall events.
   a. True
   b. False

3. Rushing and/or distraction are also leading causes of slip, trip, and fall events.
   a. True
   b. False

4. Maintaining three-points of contact means:
   a. Text at least 3 of the contacts on your cellphone before performing any task
   b. Hold-on to every object with a minimum of 3 fingers
   c. 2 hands and 1 foot or 2 feet and 1 hand in contact when entering/exiting a vehicle
Ask for questions. Once complete thank the attendees and close the session.