



A SUSAN HARWOOD
GRANT

Trainer's Guide



FALL PREVENTION
IN CONSTRUCTION

ACCIDENT PREVENTION IS OUR #1 INTENTION!

TABLE OF CONTENTS

BE PREPARED (CHECK LIST)	3
LOGISTICS	4
SCRIPT.....	5
Day One.....	6
Day Two.....	17
ACTIVITIES	31
Day One Activity	32
Day Two Activity.....	37
LEVEL ONE TRAINING EVALUATION	46
LEVEL TWO TRAINING EVALUATION	48
Pre Test	49
Post Test.....	51
Answer Key	53

Disclaimer:

This material was produced under grant SH- 31240-SH7 from the Occupational Safety and Health Administration, U.S. Department of Labor. It does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

BE PREPARED!

INTENDED TARGET AUDIENCE:

The intended target audience for this training are workers and employers in high-hazard industries, temporary workers, minority, or other hard-to-reach workers, non-literate, low-literacy, or limited English proficiency workers, young workers (ages 16-24), or workers and employers in new small businesses.

TRAINER EXPERIENCE:

Trainers presenting this curriculum should have a minimum of three years' experience with this topic, should be knowledgeable in regards to OSHA's rules and regulations, and have a safety and health administration background.

TIPS:

What is the secret to confidence when giving a presentation? **BEING PREPARED!**

The following list is a guideline with items that you will need to help you give a successful presentation!

- Laptop with Accessories (charger, etc.)
- Electronic Copy of Presentation
- Projector
- Laser Pointer (with extra batteries)
- Microphone
- Mobile Wi-Fi Pack
- Speakers
- Document Holders
- OSHA Pamphlets (that coordinate with topic)
- Business Cards
- Pens
- Name Tags
- Pre-Printed Sign-in-Sheets
- Whistleblower Handout (OSHA Publication DWPP FS-3638 04/2018)
- Pre and Post Test
- Pre and Post Answer Key
- Scenarios Activity with Answer Key
- Training Evaluations
- Complete Personal Fall Arrest System to include:
 - Harness, Lanyard, Lifeline, and Anchor
- Ladder
- Assertive Communication Statements
- Fall Prevention Training Script

LOGISTICS

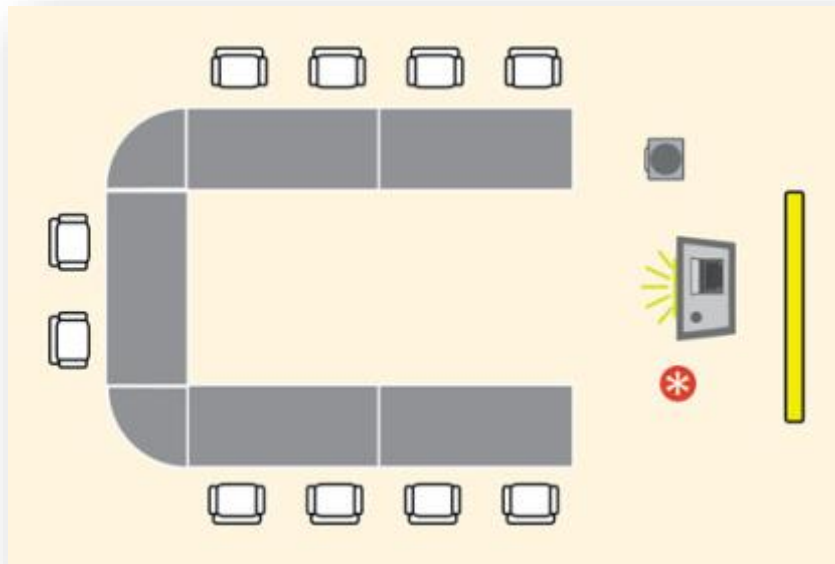
When providing training, you may not be in a location that you are familiar with. Allow yourself a minimum of 30 minutes to set up.

Somewhere towards the entrance of the room a table should be set up with your pre-printed sign in sheets, at least 2 pens, and your OSHA publications that students can take if they wish.

Arrange the room to promote active learning. According to Evergreen Safety Council's book, *Presentation & Training Techniques*, the room should be arranged for the learning situation. "A learner-centered arrangement allows for the learners to participate and to interact easily with the others in the group."

This style allows learners a relaxed environment where they are encouraged to participate while you still maintain control of the class.

When possible, the following classroom arrangement is highly recommended for an effective learning environment:



The Whistleblower Flyer, Pre-Test, and a pen should be at each place setting prior to the trainee's arrival.

Towards the open end of the U shaped class, set up your ladder, and personal fall arrest systems for display. The center should be kept clear for activities.

Set up your projector, speakers, laptop, and other electronic equipment needed, tests the WIFI to ensure you have a strong connection and you are ready to go!

SCRIPT

Fall Prevention In Construction

FALL PREVENTION IN CONSTRUCTION SCRIPT

The following is a script for a 2 day, 2 hours per day, Fall Prevention in Construction presentation. You may tailor as you see fit.

DAY 1

Slide 1:

Good morning/afternoon, my name is _____ and these are my colleagues _____ and _____, and we are with Community Services and Employment Training otherwise known as CSET. CSET is the local community action agency for Tulare County. We have many programs that serve our community by providing education, training, youth services, and community development! This year, we were fortunate to receive the Susan Harwood grant sponsored by the Department of Labor, so today we are going to train everyone on the basic OSHA safety standards in fall prevention.

Slide 2:

The Susan Harwood training grant provides funding to eligible non profit organizations to deliver safety and health trainings to eligible workers and employers. With this training, workers and employers will be able to recognize workplace safety hazards, incorporate accident prevention plans, and be informed of their rights and responsibilities as it pertains to OSHA.

Slide 3:

The primary law covering worker safety is the Occupational Safety and Health Act, or OSH Act, of 1970. The primary goal of this law is to reduce workplace hazards and implement safety and health programs for both employers and their employees.

The OSH Act created the Occupational Safety and Health Administration otherwise known as OSHA. OSHA sets and enforces workplace safety and health standards. As well as provide safety information, training, and assistance to employers and workers.

Slide 4:

One of the ways that OSHA protects workers is through the Whistleblower Protection Program. OSHA's whistleblower statutes protect you from retaliation. What does this mean? This means, an employer cannot retaliate against you for reporting injuries, safety concerns, or other protected activity.

You should always report any safety concerns to your immediate supervisor first. If you feel the safety concern was not resolved, you have the right to file an OSHA complaint. Under the Whistleblower protection program, you have the right to participate in an inspection or talk to an inspector, seek access to employer exposure and injury records, report an injury, and/or raise a safety or health complaint with the employer without fear of retaliation. If you feel you have been retaliated or discriminated against for exercising your rights, you must file a complaint with OSHA within 30 days of the alleged adverse action.

Slide 5:

Employers have a responsibility to provide a safe workplace environment, free from recognized hazards. The workplace should comply with OSHA standards, rules and regulations.

Operating procedures should be established and communicated with employees, and employers must provide safety training in a language employees can understand.

Slide 6:

What does OSHA require from you? As an employee it is your responsibility to read any workplace safety, and health posters at your jobsite. Comply with all OSHA safety standards and follow all lawful employer safety and health rules and regulations. Always use and wear your personal protective equipment when required, and report hazardous conditions and job-related injuries as soon as possible.

Slide 7:

Ok guys, why is it important to know what your employer, and what you are responsible for? When you follow OSHA and workplace safety rules and guidelines, you are not just protecting the employee of an organization, you are protecting someone's mother, father, son, daughter, aunt, uncle, and the list goes on. Someone's loved one gets to go home to their family, and that is the ultimate goal of these safety trainings.

In 2016, the U.S. Bureau of Labor Statistics reported there were a total of 5,190 fatal work injuries recorded in the United States. This was a 7-percent increase from 2015. This is the third consecutive increase in annual workplace fatalities and the first time more than 5,000 fatalities have been recorded by the Census of Fatal Occupational Injuries (CFOI) since 2008.

Slide 8: Lesson Objectives

In this presentation we will discuss when fall prevention tools are needed, how to recognize fall hazards, use of personal fall arrest systems, use of guardrails, and use of safety nets. All are essential factors to creating a safe workplace for you and those around you.

Slide 9:

Administer Pre-test

Slide 10:

What could you do to stay safe when working on ladders, scaffolds, or roofs?

You are required to evaluate your worksite for any hazards. If you noticed something that can be a potential danger to you or another worker you are required to notify your supervisor immediately. When working on a worksite that has fall risks, employees must take fall prevention steps to ensure they are safe at all times while working. Fall preventions steps can keep you safe and injury free!

Slide 11:

What does fall prevention do? Fall preventions can stop, prevent falls, and even catch a fall. There are different fall arrest systems that employers should provide to workers to ensure a safe workplace. Some fall arrest systems are Guardrails, Warning lines, safety nets, catch platforms, and safety monitors. Later in this training will go through each of these systems and explain how they work and when they are necessary to use

Slide 12:

The best way to avoid injury is to prevent it from happening in the first place. For example, when working above ground, ensure guard rails are properly used on the work site. Guardrails can hold workers back from falling off open-sided edges. If a worker is distracted by their job they can be at risk of tripping and falling. When engineering controls are not feasible, personal fall systems may be an option. If a worker happens to fall with a fall arrest system on, the employee must be rescued as soon as possible. You should follow company procedures to secure medical attention, or call 911 if needed.

Slide 13:

Working on a building with open-sided edges with no guard rails and where there is no other means of protection is an example of an area that an employee may work in that would require use of a personal fall arrest system.

Now, who can tell me what other work situations might call for an employee to use a personal fall arrest system?

Slide 14:

Here are some other examples that can call for the use of a personal fall arrest system. When working near or around any of these examples, you must use fall prevention precautions!

Slide 15:

Let's break this down even a little bit further. Tower construction sites are extremely dangerous. Falls from towers cause the most fatalities on construction sites. As you can see in this photo, workers perform tasks from extreme heights. In addition to guardrails and other engineering controls, every employee must use their personal fall arrest system equipment while working. It is also important to remember that when we are on the job site, that we remain free from any distractions like cellphones. This can cause distracted worker to trip and fall. Always assess your fall risk and pay attention to all safety precautions.

Slide 16:

What are scaffold ladders and platforms? Scaffold platforms are a temporary structure on the outside of a building, made usually of wooden planks and metal poles, used by

workers while building, repairing, or cleaning the building. Many construction workers use scaffolding on a daily basis. There are significant risks when working on scaffolding. Many scaffolds come with guardrails but if they do not then the employee must use a personal fall arrest systems when working.

Slide 17:

Skylights are a light transmitting element. OSHA concludes that a skylight should be regarded as a hatchway, or an opening in the roof of a building through which persons may fall. Therefore, OSHA requires that skylights be guarded by a standard skylight screen or a fixed standard railing on all exposed sides.

Many warehouses or buildings have skylights. They are a common roof hazard that workers have fallen through resulting in serious injury or death.

Slide 18:

Remembering Joe video.

https://www.youtube.com/watch?v=I_8cytm7wlk

Slide 19:

Walkways and ramps are passages or pathways for walking along, or connecting different sections of a building. Walkways and ramps are used for providing safe access to workers or pedestrians. Anytime ramps and walkways are above 6 feet, they must include guardrail systems which comply with OSHA regulations.

Slide 20:

When working with open sides and edges, workers must be protected by guardrail systems, safety net systems, or personal fall arrest systems.

Slide 21:

In this slide, a construction worker is demonstrating improper safety procedures. He is about 2 feet away from an unguarded edge. Can someone tell me what could happen if he steps close to the edge and what he and the employer should have done to make this safer for all employees?

ANSWER: The employer and employees should have installed proper guardrails to ensure no one falls from the edge and is neither severely hurt nor killed.

Slide 22:

Here is another photo demonstrating a safety violation. Who can tell me what this worker is doing wrong in this photo?

ANSWER: This employee is working on the leading edge. He is on the unprotected side of the guardrails, and therefore they pose no benefit to his safety. When working on a construction site, or any other worksite, conduct hazard assessment for fall

hazards. Be vigilant and aware of your surroundings, and always follow safety precautions.

Slide 23:

In this photo the employee or employer failed to install proper guardrails. Instead someone used ¼ inch nylon rope. This does not follow OSHA safety standards. Someone can easily break right through this rope and fall right over. OSHA standards require guardrail system that must be 42 inches above the walking/working level. When mid-rails are used, they must be installed at a height midway between the top edge of the guardrail system and the walking/working level.

Slide 24:

In this slide we are going to watch a short video about a construction worker who was working on a roof with no personal fall arrest protection. Let's see what happens to him.

<https://www.youtube.com/watch?v=G991LcaZQd8>

Slide 25:

Ok, we have been chatting about ways you can prevent falls above ground, however, you need to be just as aware of your surrounding and cautious when working near holes in the ground. All holes need to be covered if they are bigger than 2 inches by 2 inches. Holes that exceed that can be very dangerous so be aware of where you are walking. Even well trained workers who stay 6 feet away from hole have accidently falling through them

Slide 26

Here is an example of an improperly covered hole. Remember, a hole is considered anything that exceeds 2 inches by 2 inches. The hole on this job site must be covered by guardrails or a properly rated hole cover.

Slide 27:

Here is an example of a properly barricaded manhole. You can see the employer provided a proper guardrail system as well as safety cones in addition to the manhole cover.

Slide 28:

Let's watch a video of a construction worker who failed to use a personal fall arrest system.

<https://www.youtube.com/watch?v=UYMb1XZ83zQ&start=55>

Slide 29:

OSHA requires workers use fall protection when working on rebar or concrete formwork that is more than 6 feet or more above lower level. Workers and employees can

choose from the following types of fall protection: Personal Fall Arrest Systems, Safety Nets, or Positioning Device Systems.

Personal fall arrest systems are designed to stop a worker from free falling to a lower level. A personal fall arrest system consists of an anchor, connectors, and full body harness. Use this system as fall protection when you are constructing standard forms or doing demolishing work, exterior building work, or erecting precast concrete members.

Slide 30

Positioning device systems are the most appropriate type of personal fall protection for working on and placing rebar. A positioning device system enables one person to work on a vertical surface with both hands free, and it limits freefall distance to two feet or less.

The difference between a positioning device system and personal fall arrest system is that a positioning device system supports a worker on an elevated surface, and limits a fall to 2 feet. A personal fall arrest system on the other hand prevents a worker from free falling more than 6 feet.

Slide 31

Steel rebar is extremely dangerous to work around. Employees can be seriously injured or killed if they are not guarded. Whenever you work above rebar that protrudes from the floor, cover the rebar with protective caps that will prevent you from being impaled if you fall. Cap rebar protruding horizontally to prevent scrapes, cuts, or eye injuries. You can also bend rebar so exposed ends are no longer upright.

Slide 32:

Take a look at this picture here. What safety standards need to be implemented?

Slide 33:

Your employer might require you to excavate something. What is excavation? Excavation is when you make a hole or channel by digging. Excavation and trenching are among the most hazardous operations. Cave-ins pose the greatest risk and are more likely than some other excavation-related incidents to result in worker fatalities.

Just one cubic yard of soil can weigh as much as a car. An unprotected trench can be an early grave. Employers must ensure that workers enter trenches only after adequate protections are in place to address cave-in hazards. The Occupational Safety and Health Administration's (OSHA) standards contain requirements for excavation and trenching operations. One requirement OSHA has when excavating more the 6 feet deep, you must have guards placed around the excavation.

Slide 34:

Each individual elevator shaft must be evaluated on a case-by-case basis to ensure that employees are properly protected and additional hazards are not introduced. We will be discussing appropriate barricades a little further in to the presentation.

Slide 35:

Falls are the leading cause of work-related injuries and deaths among roofers. Working six feet or more above lower levels put roofers at risk for serious injury or death if they should fall. A lack of fall protection, damaged fall protection equipment, or improper setup will increase their risk of injury when falling from heights.

Employers must provide fall protection if workers are exposed to a fall of 6 feet or more to a lower level. One form of fall protection is a personal fall arrest system. When used properly, these systems will arrest a fall and prevent the worker from contacting a lower level. What does arrest mean again? Good!

Slide 36:

Scenario Activity

BREAK

Slide 37:

We have been chatting all morning about the different types of Fall Protection methods. As a reminder, they are: Personal Fall Arrest System (PFAS), Guardrails, and Safety Nets.

Slide 38:

When you are using a personal fall arrest system, you should evaluate your job site for all hazards. The system will help you break your fall, slowing it down. Your PFAS will extend 6 feet if you fall, so you should account for approximately 9 ½ feet of a total free fall should your system deploy.

Slide 39: Fall Protection Illustration

Explain slide

Slide 40:

Personal fall arrest systems allow you to move freely on the job site while protecting you from falling which can cause serious injury or death.

Slide 41:

Employees must be trained by a competent individual at the time of hire, or any time there are changes to policies and procedures. Training should include a practical demonstration.

Slide 42:

Body belts are not acceptable as part of a personal fall arrest system. Why is this? (Give audience time to answer). Body belts can be used safely when there is no danger of the person falling vertically. For example, the leading edge can be 10 feet from the anchor point. Let's say the lifeline is 4 feet. If the person is utilizing a body belt, and is properly attached to the anchor, there is no danger of the person falling vertically because they would still need to walk an additional 6 feet to do so.

Slide 43:

If a person has a fall and their personal fall arrest system has deployed, that system has been compromised and should be removed from service immediately.

Slide 44:

Personal Fall Arrest Systems should be inspected regularly before each use. Look for damage or deterioration of the systems, defective components, any significant defect (tears, cuts, abrasions, mold, undue stretching), alterations or additions which might affect its efficiency, contact with fire, acids, or other corrosives, distorted hooks or faulty hook springs, loose or damaged mountings, non-functioning parts, wearing, or internal deterioration in the ropes. Also check the expiration date!

Slide 45:

Each personal fall arrest system consists of 7 major parts. They are:

1. Body Harness
2. Attachment Location
3. Vertical Lifeline/Lanyard
4. Webbing
5. Anchors
6. Horizontal Lifeline
7. Connectors

Slide 46:

There are many types of PFAS's. This is what one may look like.

Slide 47:

The biggest part of a PFAS is a body harness. It is designed to lower stress forces during falls, and it should distribute the impact of the fall evenly across your body.

Slide 48:

The attachment location must be located in the center of the wearers back, near the shoulder level.

Slide 49:

Your vertical lifeline/lanyards are what attach your body harness to the anchor. It MUST have a minimum breaking strength of 5000 lbs. Each worker must be attached to a separate vertical lifeline, except during the construction of an elevator shaft.

Slide 50:

Webbing is the ropes and straps used in lifelines and lanyards. They are made from synthetic fibers. It should be inspected prior to each use for any defects or wear and tear.

Give example of how webbing can be compromised.

Slide 51:

Anchorage should be used only for personal fall arrest systems. Anchorages must support 5,000 pounds per worker. Anchors are not effective if they are attached to weak materials. When prepping your personal fall arrest system ensure the material is strong enough to hold anchor in place. This should be determined by a qualified person.

Slide 52:

The "safety factor" is the ratio between the force that will be applied to a component in a system and the minimum breaking strength of the component. To calculate the safety factor, divide the gear's minimum breaking strength by the maximum force it will support. The safety factor should be at least 2, which will be determined by a qualified person.

Slide 53:

Horizontal lifelines can be installed above your head, or along the walking/working surface. It is installed between two locked points which are anchored in to the building. They must be installed by a qualified person.

Slide 54:

Whatever devices you connect your horizontal line to, must be able to lock. Here you can see the device is bolted in to the roof securely.

Slide 55:

A connector is something that links two or more things together. In these examples, these connectors will typically connect the lanyard to the anchor. They must be drop forged, pressed, or formed steel, or made of the equivalent material. Connectors must have a corrosion resistant finish, and all surfaces and edges must be smooth to prevent damage to interfacing parts of the system.

Slide 56:

A D-ring is an item of hardware, usually a tie-down metal ring shaped like the letter D used primarily as a lashing point. D-rings must be capable of sustaining a minimum load of 5,000 pounds. D-rings must be proof tested to a minimum load of 3,600 pounds without cracking, breaking, or incurring permanent deformation.

Full body fall protection harnesses are designed with a variety of D-ring configurations. It is the location of the employed D-Ring that determines the fall protection applications the harness can be used in. It is important to select a harness suitable for your particular job.

The Dorsal D Ring can be used in fall arrest with a maximum of 12 feet. The Sternal D Ring can be used for work restraint and fall arrest with a maximum of 2 feet. The side D Rings are suitable for work positioning. The shoulder D rings can be used for work positioning and restraint as well. All except for the side D rings can be used in rescue.

Slide 57:

Snap Hooks are used to connect lanyards to D rings on a body harness. The D rings must be compatible. They must be connected to a harness or anchorage point only. They should have 5000 pound tensile strength and be proof tested to 3600 lbs. When using snap hooks, use only one snap hook per D ring to prevent rollout. All snap hooks must have a locking mechanism.

Unless it is designed for the following connections, snap hooks must not be snapped on to:

- Directly to webbing, rope, or wire.
- To each other.
- To a D-ring to which another snap hook or other connector is attached.
- To a horizontal lifeline.
- To any object which is incompatibly shaped in relation to the snap hook such that the connected object could depress the snap hook keeper and release itself.

Slide 58:

The term "donning and doffing" is used to refer to the practice of putting on (donning) and taking off (doffing) protective gear, clothing and uniforms. Here is a quick video on how to don your personal fall arrest system when working on a roof.

<https://www.youtube.com/watch?v=dmYpEjGSnxo>

Slide 59:

Now that we have learned about the PFAS, and seen how it is supposed to be donned, let's get some practice on actually doing this. Can we please get two volunteers?

Slide 60:

Premade or job-made guardrails can be used as temporary guardrails while more permanent structures are being installed or when the work is in a space not intended as a permanent work area. For example, temporary guardrails can be used while constructing a wall, completing floor decking, or replacing a roof.

Slide 61:

Guardrails must be 42 inches from the walking/ working level. It should also include a toe board that is 3 ½ inches high to prevent equipment or supplies from falling below.

Slide 62:

Here are two examples of proper and improper temporary guardrails. Can someone tell me which one follows OSHA standards?

Answer: Correct the photo on the right is a proper example of temporary guardrails. The example on the left does not have 3 ½ inch toe boards that protect workers working below.

Slide 63:

Here are another two examples of improper installation of guardrails.

Slide 64:

A safety net is being used under the roof of this building. Make sure that these are these are installed as close as possible under the surface of which you are working. Nets should never be more than 30 feet below the working surface. The mesh size must not be bigger than 6 inches by 6 inches. Installers should test each safety net to make sure it can hold a worker who falls.

Slide 65:

Remove objects that have fallen into the safety net. Inspect for wear damage and other problems at least, after initial installation and before being used, whenever relocated, after major repair, and after 6-month of being left in one place. There should be a recent certification record for each net installation. Safety nets must extend outward from the outermost projection of the work surface.

Slide 66:

OSHA requires nets to be installed a specific distance from the edge of the platform:

Explain chart

Slide 67:

If you are standing at the edge of the 3rd floor, and you begin to fall, your first motion is falling away from the platform horizontally before you fall vertically. The longer you fall, the further from the edge of the platform you will go.

Therefore the longer the distance between the working platform and your net, the wider the net has to be.

Slide 68-77:

We have gone over a lot of information today! Let's review some of the questions that will be on tomorrow's quiz!

Slide 78:

Any Questions?

Slide 79:

Information for tomorrow's training

DAY 2

Slide 1:

Intro

Slide 2

Disclaimer

Slide 3-12:

Test Review Questions

Slide 13:

Now that we have reviewed yesterday's content, let's talk a little about today's learning objectives.

Today we will cover: Fall prevention with scaffolding, fall prevention with ladders, General review, Rescue planning, and last but not least, a Post Test.

Slide 14:

A scaffold is an elevated, temporary work structure on the outside of a building, made usually of wooden planks and metal poles, used by workers while building, repairing, or cleaning the building.

When working in construction, there will be many different types of scaffolding you may work with. Today, we are going to discuss 3 different types, supported scaffolds, suspended scaffolds, and aerial lifts. It is important to remember that you must use fall prevention methods when using scaffolding.

Slide 15:

Supported scaffolds consist of one or more platforms supported by beams, brackets, poles, posts, frames, or similar rigid support.

There are several different types of supported scaffolds. The most common is the fabricated frame. It is cheap, and easy to use. They are frequently used in one or two tiers by residential contractors, painters, etc.

A ladder jack scaffold is another example of a supported scaffold. It is a simple device consisting of a platform resting on brackets attached to a ladder. Ladder jacks are used on light duty jobs because they are easy to move and are cost effective.

Mast climbing supported scaffolds carry much heavier loads than traditional scaffolding. They are typically used to perform work at great heights.

Mobile scaffolds are a type of supported scaffold that is set on wheels. They are designed to be easily moved and are commonly used for things like painting and plastering, or where workers must frequently change position.

Slide 16

Pole scaffolds are a type of supported scaffold in which every component is made of wood.

Pump jacks consist of a platform supported by moveable brackets on vertical poles. This is similar to a car jack.

Specialty scaffolds are designed for a very narrow and specific range. The example shown here is a bricklayer's scaffold.

Tube and coupler scaffolds are built from tubing connected by coupling devices. They are frequently used where heavy loads need to be carried, or where multiple platforms must reach several stories high.

Slide 17:

Supported scaffolding examples

Slide 18:

Scaffold Safety Hazards video

<https://www.youtube.com/watch?v=hJeUbaBdME0>

Slide 19:

Suspended scaffolds are platforms that are suspended from an overhead structure by ropes, or other non-rigid means.

A catenary scaffold is a scaffold consisting of a platform which is supported by horizontal ropes which are attached to a structure. They may also have vertical ropes that provide additional support.

A float scaffold is a suspension scaffold that has a braced platform which rests on two parallel bearers. It is hung from an overhead support by ropes.

An interior hung suspension scaffold consists of a platform suspended from the ceiling or roof structure by fixed-length supports.

A multi-level scaffold is a multi-point adjustable suspension scaffold with a series of platforms at various levels resting on common stirrups.

Slide 20:

A multi-point adjustable scaffold consists of a platform suspended by more than two ropes from overhead supports and equipped with means to raise and lower the platform to desired work levels.

A needle beam scaffold is a simple type of scaffold which consists of a platform suspended from needle beams, usually attached on one end to a permanent structural member.

A single-point adjustable scaffold consists of a platform suspended by one rope from an overhead support with means to permit the movement of the platform to different work levels. This is the type most commonly used by window washers.

A two-point scaffold is hung by ropes or cables connected to stirrups at each end of the platform. Both the single and two point scaffolds are most commonly used by window washers.

Slide 21:

Here is an example of a suspended scaffold. These individuals are laying a brick facade; however, we see them most commonly used by window washers. What is wrong with this photograph? What dangers do you see?

Slide 22:

Show example, and point out PFAS

Slide 23:

Aerial lifts (man lifts) are one of the most common devices used to conduct work from elevated locations and are commonly used to replace traditional scaffolding. Aerial lifts have replaced ladders and scaffolding on many job sites due to their mobility and flexibility.

Slide 24:

Most work related injuries or deaths are caused by falls. This is why it is important to take the time to follow manufacturer's instructions when setting scaffolding up.

It is also very important that workers are using proper personal fall arrest systems such as guardrails, harnesses, and lanyards. OSHA requires that any employees working on a scaffold more than 10 feet above a lower level be protected from falls by a personal

fall arrest system. Each employee on a single-point and two-point adjustable suspended scaffold shall be protected by both a personal fall arrest system and a guardrail.

Slide 25:

When working on scaffolding it is important to consider the weather conditions. It is very important employee's do not work on snow or ice covered platforms or even during storms and high winds. This can lead to a serious injury or death. Why, who can tell me why this would be dangerous?

Slide 26:

Weather risk video

<https://www.youtube.com/watch?v=okS-hXB3jGg>

Slide 27:

When working on scaffolding, ensure the ground is properly leveled. Employees must take the time to inspect all parts of the scaffold. Bars and rails should be in great condition as well as planks. All scaffolds should have proper guardrails installed. These guardrails ensure that the employee is protected in case of a fall. Scaffolding should always be inspected by a competent person.

Slide 28

It is very important that when installing scaffolding that it is installed more than 10 feet away from power lines.

Slide 29

Accidents on scaffolds can happen in many forms. One common mistake employee's make when working on scaffolds is climbing on or off of scaffolds inappropriately. Climbing on a scaffold can lead to an employee slipping and falling or causing the scaffolding to collapse. Another common hazardous risk when working on scaffolds is when scaffolds platforms and planks fail due to improper installation.

Slide 30:

In this example, we see the improper installation of a scaffold. Do you see how the scaffold is slightly tilted? The employer failed to install the scaffolding on even ground. This can be very dangerous for any employees working on this construction site. Shifting weight on the scaffold could easily tip it over and even if the employee is secured to the guardrails with a personal fall arrest system, it would be of no use because the entire scaffold would fall.

Scaffolding should be erected on an even and stable surface. If this is not possible, the scaffolding base should be adjusted so that it creates the even and stable surface required. When working on a construction site and you happen to come across an unsafe scaffold you are required to inform your supervisor immediately.

Slide 31:

People are not the only thing that can fall on a construction site. A very important accessory to wear on a construction site must be your hardhat! Wearing your personal protective gear like hard hats can protect you from severe head injuries! Debris can fall from scaffolds and will lead to severe damage to your head.

If you are working in an area that is at risk for falling debris, you must barricade the area below the scaffold. No one should be allowed in the barricaded zone. This will protect people from falling objects. Toe boards are also a very important part of safety when using scaffolding. Toe boards can prevent debris, tools, or any other equipment from falling from the scaffold and landing on someone. Toe boards should be at least 3 1/2 inches in height. If you are using material that is stacked higher than the toe board you will need to use panels or screens to cover scaffold to ensure no items fall.

Slide 32:

Platforms and planks are also an important part of scaffolding. They are used for workers to walk safely on. Each plank should be made of scaffold wood to ensure durability. Scaffold planking must be able to support its own weight and at least four times the intended load without failure. That includes workers weight and all the equipment they might need for the job. So when inspecting your scaffold make sure planks are not broken, cracked, and split. Working on planks that are in bad conditions can lead to a falls.

Slide 33:

Employers must provide access when the scaffold platforms are more than 2 feet above or below a point of access. So what does this mean? Having proper access means that the employer needs to provide a way to approach or enter the scaffold in accordance with OSHA safety standards.

OSHA prohibits the use of cross braces as a means of access. There are different types of accesses that are permitted. They can be portable or detached ladders, stairways, and built-in ladders. The use of stair towers, ramps, and walkways are also permitted. (NOTE: Point out cross braces on the picture)

Slide 34:

Climbing on the cross braces is specifically disallowed, and can be very dangerous. The photo on the left shows the wrong way of accessing the scaffolds. The photo on right shows the correct way of accessing the scaffold.

Slide 35:

Let's test your knowledge! Can anyone point out what you see wrong in this photo?

Answer: No PFAS, Improper Scaffold, No guardrails, no toe boards

Slide 36:

This is a very modern form of scaffolding. You can see these workers used all fall prevention measures to ensure their safety. (Explain the measures).

<https://www.youtube.com/watch?v=FyD5mpovxaw>

Slides 37:

Ok now we are going to show you a short demonstration on proper use of personal fall arrest system with scaffolding.

https://www.youtube.com/watch?v=w3Pb_FC9AfU

BREAK

Slide 38:

We are going to move on from scaffolding and talk about safety while using ladders. I am sure many of you already have an idea of how to be cautious when using a ladder but you can never be too safe! According to the fall prevention training for Southern Nevada Construction Workers instructors manual, falls off of portable ladders account for approximately 360 deaths, and 151,000 injuries each year. Most of the time, this is because of careless or improper use of the ladder. Let's discuss what to do to prevent falls from a ladder.

Slides 39:

Always examine your ladder before each use. Look to make sure it is clean and dry, free from wet paint, mud, oil, and in generally good conditions. Look for cracks, and make sure that no rungs are loose or missing. Check for warping, splitting, corrosion, sharp edges, and rungs that are bent. If you spot any of these things, do not use this ladder, it is unsafe. Most metal ladders should have slip resistant rubber or plastic feet. If any of these are missing, do not use this ladder, it is unsafe.

Even consider your clothing! Make sure you are not wearing loose clothing, and ensure your shoes have the proper, non-slip grip.

If your ladder is damaged you should to have a professional fix it or replace it with a better and safer ladder.

Slides 40:

Here are some examples of what to consider when working on ladders. Always use the proper ladder for the job. You should not use a ladder that is too short or too high. This can be dangerous when overreaching. Do not walk up the ladder without making sure at least one hand is gripping the side rails. Never step on the top rail. This can lead to the ladder tipping over, and you can be severely hurt. Always make sure your tools are secured in your tool belt. You should make sure the steps are clean and free

from any slippery substances. This will help to prevent slipping. Always ensure the ladder is placed on even ground.

Slide 41:

When using portable ladders it is always best to see if you are physically up for the job. Never overestimate your abilities. If you are not comfortable doing a job it is best to let your supervisor know. Portable ladders are not meant for tasks that involve you moving around while on the ladder. Consider items you will be carrying, your ability to maintain steady on the ladder, and your physical capacity to move and maneuver the ladder in a safe manner.

Slide 42:

To ensure workers safety OSHA requires that self-supporting and non-self-supporting portable ladders must be able to support at least four times the maximum intended load.

This does not apply to extra-heavy-duty metal or plastic ladders, which must be able to sustain 3.3 times the maximum intended load. When choosing a ladder for a job you must consider your weight, plus the weight of your equipment and tools. Your ladder must be able to hold you and your work supplies.

The ladder shown here is a 5 ½ foot heavy duty aluminum ladder, which is rated for 300lbs capacity.

Slide 43:

Here are two samples of labels you may see on ladders. They provide you with crucial information as to the ladder's size, weight capacity and rating. OSHA guidelines require that ladder manufacturers "provide reasonable safety for life and limb." What this means is that the manufacturer is certifying that they followed specific design and testing practices before placing the ladder into the stream of commerce. It is also means that those practices are based on the consumer using the ladder in accordance with the directions on the label. That means you should use the ladder for what is intended for and no more.

Slide 44:

Non-self-supporting ladders must lean against a wall or other support, positioned at an angle that the horizontal distance from the top support to the foot of the ladder is about 1/4 the working length of the ladder.

Slide 45:

Here is an example of how to properly angle an extension ladder. Keep in mind, if the person in the video wanted to get on the roof, the ladder would have to extend 3 feet past the landing surface in order to be OSHA compliant.

<http://akeinc.com/wp-content/uploads/2013/10/ladder2.jpg>

Slide 46:

Each ladder must contain rungs. Rungs are a horizontal support on a ladder for a person's foot. Rungs must be shaped so that an employee's foot cannot slide off, and must be skid-resistant. Each rung must be spaced between 10"-14" inches apart. For extension trestle ladders, the spacing must be 8"-18" inches for the base, and 6"-12" inches on the extension section.

Slide 47:

As with any of your work equipment, keep your ladders clean and free from debris. Inspect them to ensure they are free from any slipping hazards such as grease, oil, paint.

Make sure your wooden ladders are not coated with any opaque coverings.

Slide 48:

Other requirements are fold out or step ladders must have a metal spreader or locking device to hold the front and back sections in an open position when in use. OSHA also requires that when two or more ladders are used to reach a work area, they must be offset with a landing or platform between the ladders. Also the area around the top and bottom of ladder must be kept clear.

Slide 49:

Now that we know what each ladder should contain, let's talk about portable ladders specifically.

There are 3 grades of portable ladders, Type, 1, 2, and 3.

Slide 50

When choosing a ladder for a job you must consider the type of ladders. A Type I ladder is the most widely used for professional services like that of contractors, public utilities, and construction workers. Regardless of the material construction of the ladder, Type 1 ladders are built in lengths from 3 to 20 feet. This rating is broken down into three subcategories. Type 1 step ladders are built for loads up to 250 pounds, Type 1A step ladders are built for loads up to 300 pounds, and Type 1AA are built for loads up to 375.

Slide 51

Type II ladders also run in lengths of 3 to 12 feet long. They are used in more commercial applications like painters, interior decorators, maintenance workers, and electricians. They have a weight maximum of 225 lbs. Type II ladders are manufactured in wood, fiberglass, and aluminum and are commonly used for medium-duty use.

Slide 52

Type III ladders are most typically household ladders. They only handle a load capacity of 200 pounds and are primarily used for light-duty use. These ladders are typically manufactured in lengths between 3 to 6 feet. These types of ladder are great for projects around your home or business like hanging photos.

Slide 53

Step ladders are a folding portable ladder with flat steps and a small platform. They are self-supporting portable ladders that do not adjust in length. Always inspect your portable step ladder before use, and take it out of service if there is any deficiency found that affects its safe use. Make sure all four feet of the portable step ladder are set on a level and stable surface and that both ladder spreaders are fully extended and locked into place before use.

Slide 54

A platform ladder is a step ladder with the top step being a platform. There is a bar called the top rail guard that is set about 2' above the platform to help stabilize the user when using the ladder. When going up or down the ladder, always face the ladder and maintain a firm hold. Do not attempt to carry other objects in your hands while climbing.

Slide 55:

An extension ladder is a non-self-supporting portable ladder that is adjustable in length. Extension ladders usually have two sections that operate in brackets or guides that allow for the ladder to be used at adjustable lengths. Extension ladders are not self-supporting and require a stable structure that can withstand the intended load. For access to an elevated work surface, erect ladders so that a minimum of 3 feet extends above the landing platform.

Slide 56:

The Trestle Ladder, also known as a Double Front Ladder, is a self-supporting portable ladder that is non-adjustable in length, and hinged at the top. It consists of two sections and is designed to be climbed by two persons at the same time, one on each side. A Trestle Ladder must not be used unless its base is spread fully open and the Spreader locks are locked. Some Trestle Ladders are equipped with more than one pair of Spreader locks, and all must be locked prior to use.

Slide 57:

When climbing up and down a ladder you must face the ladder at all times. Never overreach when on ladder. This can cause it to tip over. You must keep your body between side rails of the ladder. Also, never climb higher than the third rung from the top of a straight or extension ladder, or the second thread from the top of a step ladder.

Slide 58:

Always maintain a 3-point (two hands and a foot, or two feet and a hand) contact on the ladder when climbing. Keep your body near the middle of the step and always face the ladder while climbing. When working with tool or work materials always raise or lower heavy loads with a hand line or hoist. Also attached light compact tools or materials to the ladder or yourself.

(Have audience member come up and demonstrate the three point rule on a self-supported ladder)

Slide 59:

When working with fiberglass or wooden ladder never place ladder near energized electrical lines. This can cause ladder to catch on fire or employee can be electrocuted. Also avoid placing ladder near exit door. If a job requires you to work near an exit door ensure door is locked. Also avoid using ladder near the path of pedestrian or vehicular traffic.

Slide 60-62: Don'ts

Ask the audience to show us the infractions of these photos.

Slide 63:

After video:

Lesson is, take the time to set up your ladder properly, pay attention to hazards around you, and be cautious when using ladders!

https://www.youtube.com/watch?v=Tbr_jjNUAfI

Slide 64:

A fall protection plan is a safety plan for workers who will be at elevated work areas. Having a detailed fall protection plan is essential to ensure the highest degree of worker safety. The plan aims to provide a safe working environment and to administer the use of fall protection measures, techniques, and equipment. The plan should be created by a competent person. There are 8 steps you should follow when following a protection plan.

1. *Assess all fall hazards in the work area.* An essential step to take when developing a fall protection plan is identifying all existing and potential fall hazards in the work area such as holes, skylights, platforms, etc.
2. *Fall protection equipment employees will be using.* Potential fall protection applications include: PFAS, guardrails, body belt, etc.
3. *Correct procedures for assembly, maintenance, inspection, and disassembly of fall protection.* This must be done according to the product manufacturer's recommended procedures. Inspection of all safety equipment must be done by the end user before each use.
4. *Correct procedures for handling, storage, and securing of tools and materials.* Organizations must have a plan to ensure that their fall protection equipment is handled and secured properly. If not stored properly, equipment can become contaminated or otherwise damaged and will not be safe to use.
5. *Training methods for the employees working on the jobsite.* All new and current employees should be given instructions on the proper use of fall protection devices before they begin to work. Prior to permitting employees into areas where fall hazards exist, all employees must also be trained regarding fall protection plan requirements.
6. *A rescue plan.* A plan for the rescue and recovery of fallen workers is essential to include in all fall protection plans. OSHA requires that employers shall provide for prompt rescue of employees in the event of a fall, or shall ensure that employees are able to rescue themselves. If employees are not rescued in a timely manner they can experience serious injuries related to suspension trauma.
7. *The fall protection plan must be jobsite specific.* Every job is different and will present different types of fall hazards. It is extremely important that each jobsite is analyzed for these hazards, and that they are eliminated prior to the beginning of any work.
8. *The fall protection plan must be available to employees.* Your written fall protection plan should be reviewed before work begins on any jobsite.

Slide 65:

Prevention is the key to safety, especially when it comes to fall hazards in the work area. Therefore, training is essential! Employers shall provide training for each employee exposed to fall hazards. A competent person is responsible for training employees on the nature of all fall hazards in the work area. These procedures should include correct instructions for erecting, maintaining, disassembling and inspecting FPS (fall protection system).

Slide 66:

An effective fallen worker rescue plan addresses the procedures, equipment, and personnel needed to ensure that a rescue proceeds quickly and efficiently when a fall occurs.

Slide 67:

Even when a PFAS works properly, the fallen worker is still in danger. The worker's body weight places pressure on the harness straps, which can compress the veins, and cause blood to pool, in the lower extremities and reduce blood return to the worker's heart. This condition is called suspension trauma, also known as harness hang syndrome. If the pressure is not reduced promptly, the worker can lose consciousness within minutes.

Slide 68:

Self-rescue and aided rescue are two techniques for rescuing a suspended worker. In the next 2 slides we will discuss more about both techniques.

Slide 69:

Aided rescue comes in to play when an employee finds himself in an emergency situation where their personal fall arrest system has deployed. They could be suspended from a lifeline and not able to perform self-rescue. It then becomes necessary for the employee to get help from trained rescuers using appropriate equipment, and additional fall protection. Off-site emergency response personnel may rescue suspended workers, although most 911 responders are not trained in how to do so.

Slide 70:

Self-Rescue allows an employee to minimize suspension trauma by utilizing equipment that helps to temporarily relieve pressure on the legs or in some cases to even lower themselves to the lower level.

Slide 71:

In this video we see how a self-rescue is performed.

<https://www.youtube.com/watch?v=g6aO-T2NNZY>

Slide 72:

Ok guys! So the last two days we talked about how to prevent falls at your jobsite and what fall prevention methods you can use when working at hazardous heights. If you find yourself on a job site that you feel is unsafe, it is your responsibility to make the hazard known to your supervisor. This can be really uncomfortable for some people. There are three types communication styles that we would like you to be aware of.

The first is aggressive. This person can come across as dominating, disrespectful; they don't apologize even if they are at fault.

Aggressive communicators will often try to dominate others. They use humiliation to control others. They will criticize, blame, or attack others, have a low frustration tolerance and act threateningly and rudely. The impact of a pattern of aggressive communication is that these individuals: become alienated from others, generate fear and hatred in others always blame others instead of owning their issues. The aggressive communicator will say "I'll get my way no matter what." "You're not worth anything." "It's all your fault." "You owe me." "I own you."

The second style of communication is passive communication. Passive communication is a style in which individuals develop a pattern of avoiding expressing their opinions or feelings. As a result, passive individuals do not respond to hurtful or anger-inducing situations. Instead, they allow annoyances to mount. Once they have reached their threshold for unacceptable behavior, they are prone to explosive outbursts.

Passive communicators will often allow others to deliberately or inadvertently infringe on their rights, they fail to express their feelings, needs, or opinions and tend to speak softly or apologetically. They often feel anxious or depressed because life seems out of their control and can be resentful. A passive communicator will say "I don't know what my rights are." "I get stepped on by everyone." and "People never consider my feelings." The third style of communication is assertive communication.

Slide 73:

Assertive communication is a style in which individuals clearly state their opinions and feelings, and firmly advocate for their rights and needs without violating the rights of others. These individuals value themselves, their time, and their emotional, spiritual, and physical needs. They are strong advocates for themselves while being very respectful of the rights of others.

Assertive communicators will communicate respect for others, listen well without interrupting, speak in a calm and clear tone of voice, and have a relaxed body posture. These individuals feel connected to others, feel in control of their lives, and are able to address issues and problems as they arise. The assertive communicator will say "We are equally entitled to express ourselves respectfully to one another." "I speak clearly, honestly, and to the point." and "I can't control others but I can control myself."

Slide 74:

We have discussed the different communication styles. If you come across a situation at work where you don't feel safe, you should speak to your supervisor in an assertive manner. This is the best way to communicate. Do not get angry, stay calm. Stick to the facts and do not allow emotion to overcome you. For example, you can say "That task is a fall risk" State your position calmly or offer a compromise..."I will be glad to

complete that task once I put on my harness". Being assertive is a great skill to have both on and off the job.

Slide 75:

ACTIVITY: Assertive communication practice

Slide 76:

So we are going to do a quick review. Can someone tell me when fall prevention is needed? Fall prevention is needed when working more than 6 feet above lower level. Fall protection measures include guardrails, covers, safety nets, and personal fall arrest systems. You should fall prevention on the following walkways, ramps, open sided edges, holes, roofs, and etc.

Slide 77-80:

Test Review

Slide 81:

Post Test

Slide 82:

Evaluation

Slide 83:

Excuse class and collect all Post Tests and Evaluations. As you are collecting, make sure everyone wrote their name and date on Post Test.

ACTIVITIES

DAY ONE ACTIVITY

Break students up in to four groups. Hand out one scenario to each group. Have them read the scenario out loud and come up with alternative solutions to the scenario. Then have the students present their responses to the class.

Answer Key:

SCENARIO 1 ANSWER:

Larry should have never taken the guardrails down. He should have worn a personal fall arrest system, or should have requested a temporary elevator permit.

SCENARIO 2 ANSWER:

Employee should have never taken off his personal fall arrest system as he was still in an area where he was exposed to fall hazards. He also should have put his phone down to avoid distraction. Employer should have also provided proper guardrails systems to ensure employees are safe while on jobsite.

SCENARIO 3 ANSWER:

The employee should have put on his personal fall arrest system when going back upstairs. The other employee should have never removed the guardrails, and walked his tools downstairs. Since he did remove the guardrails, he should have taken the extra time to put them back in place and ensure they were properly installed around the floor opening.

SCENARIO 4 ANSWER:

As a best practice the employer should have ensured that the skylights were properly guarded with skylight covers or guardrails. The employee should have worn a personal fall arrest system to arrest his fall or should have evaluated the skylight to determine if it was safe to be around. The personal fall arrest system should be used as a secondary prevention measure and as a last resort

Fall Prevention Scenario 1:

Larry was a carpet installer with over twenty years of experience. One morning he and his crew planned to deliver 6 rolls of carpet to an apartment building under construction.

The elevator was not approved for use yet, so Larry decided to transport the carpet rolls to the open window of the second floor using a forklift with a skip box. It is common practice to stand rolls upright in the box, however on this day; employees laid the carpet rolls flat which made them extend about 2 feet outside the box. The forklift operator elevated the skip box to the second floor.

Because the carpet rolls were extended, the forklift operator had to position the box a few feet away from the window. Larry then took the guardrails out so he could have a better reach. He and his partner began unloading the carpet rolls. Larry was having a hard time gripping the last roll and decided to put one foot outside the window and on to the skip box.

Larry's body was completely outside the window. As he was gripping the roll with both hands he lost control of the carpet roll and fell to the ground. He sustained severe injuries and later died.

What fall prevention methods could Larry have used to arrest his fall and save his life?



Fall Prevention Scenario 2:

A construction employee was working on laying concrete on the fourth floor of a parking garage.

It was time for his lunch break, so he removed his personal fall arrest system and sat next to a pillar near an open-sided edge. After he finished his lunch, he walked back to his work station. As he was walking back, he was distracted sending texts to his friends.

He proceeded with his duties and forgot to put his personal fall arrest system back on. He lost his balance and fell to the first floor. He died on impact due to his injuries.

What fall prevention methods could he have used to arrest his fall and save his life?



Fall Prevention Scenario 3:

A few construction workers were ending their day working on the second floor of a residential home. It was getting dark outside, and everyone was anxious to wrap up the work day.

One of the employees had a lot of equipment to put away, so he figured it would be advantageous to remove the guardrails from around the floor opening. This would allow him to drop his supplies down quickly instead of taking several trips down the stairs. He was in such a hurry to get home, that when he finished, he left the floor opening unguarded.

Another employee forgot a piece of equipment on the second floor and walked back upstairs to retrieve it. Upon returning, the employee could not see the floor opening and fell straight down to the first level. The employee suffered serious injuries.

What fall prevention methods could he have used to arrest his fall and prevent this situation?



Fall Prevention Scenario 4:

A maintenance worker was cleaning the debris off of the roof of a warehouse building. This building had many skylights, and the roof was covered with rocks and gravel. None of the skylights were protected. The worker was walking backwards, tripped over a hose, and fell through the skylight. He fell more than 25 feet from the roof and died due to his injuries.

What fall prevention methods could he have used to arrest his fall and save his life?



DAY TWO ACTIVITY

On the next several sheets you will note two statements. They will be either passive or aggressive. Cut each sheet in to halves so that there is one statement per sheet. Laminate statements if possible.

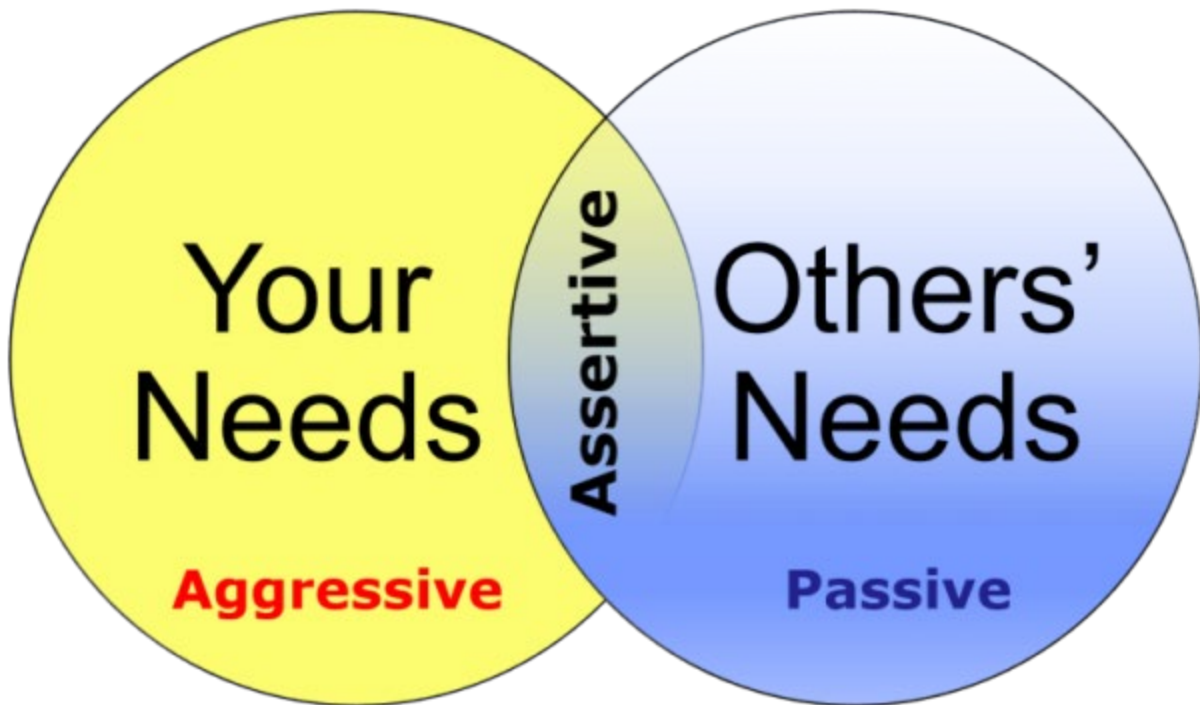
During the day two activity, pass out one statement per person and have the individual identify if the statement is passive or aggressive. Then, have the individual turn the statement in to an assertive one.

For example:

Student is handed a card that says: "I don't care if the ladder is broken; it is not my problem anyways!"

Student identifies the statement as aggressive.

Student then turns the statement in to an assertive one: "This ladder is broken and is unsafe to use, I will advise my supervisor so we can repair it."



“It is your fault I tripped and fell in to this hole!”

“You need to provide me with safety equipment!”

“I wasn't informed on the new safety training procedures sorry I failed you.”

“I do not know what my rights are so I just ignored the fall hazards.”

“I am too afraid to ask for a new personal fall arrest system so I will use this expired harness.”

“I am really afraid of heights but I just I will just suck it up!”

“I am not going to lift a finger until someone does their job and inspects this jobsite!”

“Put on your protective gear and get to work!”

“You owe me for not writing you up for not wearing your protective gear!”

“I was never trained properly so how am I supposed to know the guardrails did not follow OSHA standards”

“Who are you to tell me my job isn't being done properly! Worry about yourself!”

“People never consider what a great worker I am.”

“I am tired of people stepping all over me!”

“You will finish this project even if it takes you all night!”

“It's about time you finished this job! Could you have taken any longer?!”

LEVEL ONE TRAINING EVALUATION

Training Session Reaction Evaluation

Fall Prevention Evaluation Form

Please help us improve our training by providing your feedback below!

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The training met my expectations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I will be able to apply the knowledge learned.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. The content was organized and easy to follow.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The materials distributed were useful.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. The trainers were knowledgeable.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. The quality of instruction was good.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. The trainer met the training objectives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Class participation and interaction were encouraged.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Adequate time was provided for questions and discussion.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. How would you rate the training overall?

Excellent

Good

Average

Poor

Very poor

11. What aspects of the training could be improved?

10. Other comments?

LEVEL TWO TRAINING EVALUATION

Learning Evaluation

Name: _____

Date: _____

Fall Prevention Pre Test

1. **The most common causes of injury on a construction site are _____**
 - A. Fires
 - B. Injuries from falling objects
 - C. Falls
 - D. Faulty equipment

2. **The ultimate responsibility for on-the-job safety rests with _____**
 - A. You
 - B. Your supervisor
 - C. Human resources
 - D. OSHA

3. **A type 1A ladder is rated for _____ use.**
 - A. 200 pounds, light duty/household
 - B. 225 pounds, medium duty/commercial
 - C. 250 pounds, heavy duty/industrial
 - D. 300 pounds, extra heavy duty/professional

4. **If you are going to step onto a platform or roof, the top of the ladder should extend at least _____ feet above the point where the ladder touches the upper landing surface.**
 - A. 2
 - B. 3
 - C. 4
 - D. 5

5. **You should report an accident immediately after it occurs so that _____**
 - A. Someone else can use the machine
 - B. First-aid can be applied if necessary
 - C. Everyone else can see what's going on
 - D. Your supervisor can hide the evidence

6. **If an employee falls into their fall protection equipment what should happen to the equipment.**
 - A. Inspect it and return to service if it is in good condition
 - B. Take it out of service immediately
 - C. If the employee was not injured cut it up and throw it away
 - D. Save the equipment and only use it when you think someone might fall. It worked the first time so it should work the second time.

7. **An anchorage point for a Fall RESTRAINT system must be capable of supporting?**
 - A. 5,000 pounds
 - B. 1,500 pounds
 - C. 12,000 pounds
 - D. 3,000 pounds

Name: _____

Date: _____

Fall Prevention Pre Test

- 8. A floor hole wider than _____ must be protected.**
- A. 12 inches
 - B. 24 inches
 - C. 2 inches
 - D. 19 inches
- 9. When fall arrest equipment is used, employers must assure that _____.**
- A. All equipment is properly inspected before each use
 - B. Users have calculated total fall distance
 - C. A rescue plan is in place to rescue a fallen employee
 - D. All of the above
- 10. A fall arrest system is required when a worker is operating at a height of ?**
- A. 3 feet or more
 - B. 6 feet or more
 - C. 10 feet or more
 - D. None of the above
- 11. Who is primarily responsible for providing employees with a fall protection system?**
- A. The manufacturer of the fall protection system
 - B. The employer
 - C. The employee
 - D. The insurer
- 12. When should ladders be inspected?**
- A. Each day before use
 - B. At least once a week
 - C. At least once a month
 - D. At least once a year
- 13. At what height do open-sided floors in construction require guardrails?**
- A. 1 foot
 - B. 2 feet
 - C. 4 feet
 - D. 6 feet
- 14. What items and/or elements and/or approaches can be legally and safely used to help prevent falls during roof construction activities:**
- A. Guardrails
 - B. Covering holes and openings with sheathing
 - C. Ensuring workers are properly and adequately trained
 - D. All of the above
- 15. Inspections of scaffolds must be conducted?**
- A. By a competent person
 - B. Before each work shift
 - C. After scaffold is erected or modified
 - D. All of the above

Name: _____

Date: _____

Fall Prevention Post Test

- 1. Who is primarily responsible for providing employees with a fall protection system?**
 - A. The manufacturer of the fall protection system
 - B. The employer
 - C. The employee
 - D. The insurer

- 2. You should report an accident immediately after it occurs so that_____**
 - A. Someone else can use the machine
 - B. First-aid can be applied if necessary
 - C. Everyone else can see what's going on
 - D. Your supervisor can hide the evidence

- 3. The ultimate responsibility for on-the-job safety rests with_____**
 - A. You
 - B. Your supervisor
 - C. Human resources
 - D. OSHA

- 4. The most common causes of injury on a construction site are _____**
 - A. Fires
 - B. Choking
 - C. Falls
 - D. Faulty equipment

- 5. Inspections of scaffolds must be conducted?**
 - A. By a competent person
 - B. Before each work shift
 - C. After scaffold is erected or modified
 - D. All of the above

- 6. A floor hole wider than _____ must be protected.**
 - A. 12 inches
 - B. 24 inches
 - C. 2 inches
 - D. 19 inches

- 7. A fall arrest system is required when a worker is operating at a height of?**
 - A. 3 feet or more
 - B. 6 feet or more
 - C. 10 feet or more
 - D. None of the above

- 8. At what height do open-sided floors in construction require guardrails?**
 - A. 1 foot
 - B. 2 feet
 - C. 4 feet
 - D. 6 feet

Name: _____

Date: _____

Fall Prevention Post Test

9. If an employee falls into their fall protection equipment what should happen to the equipment.

- A. Inspect it and return to service if it is in good condition
- B. Take it out of service immediately
- C. If the employee was not injured cut it up and throw it away
- D. Save the equipment and only use it when you think someone might fall. It worked the first time so it should work the second time

10. An anchorage point for a Fall RESTRAINT system must be capable of supporting?

- A. 5,000 pounds
- B. 1,500 pounds
- C. 12,000 pounds
- D. 3,000 pounds

11. When fall arrest equipment is used, employers must assure that _____.

- A. All equipment is properly inspected before each use
- B. Users have calculated total fall distance
- C. A rescue plan is in place to rescue a fallen employee
- D. All of the above

12. What items and/or elements and/or approaches can be legally and safely used to help prevent falls during roof construction activities:

- A. Guardrails
- B. Covering holes and openings with sheathing
- C. Ensuring workers are properly and adequately trained
- D. All of the above

13. If you are going to step onto a platform or roof, the top of the ladder should extend at least _____ feet above the point where the ladder touches the upper landing surface.

- A. 2
- B. 3
- C. 4
- D. 5

14. A type 1A ladder is rated for _____ use.

- A. 200 pounds, light duty/household
- B. 225 pounds, medium duty/commercial
- C. 250 pounds, heavy duty/industrial
- D. 300 pounds, extra heavy duty/professional

15. When should ladders be inspected?

- A. Each day before use
- B. At least once a week
- C. At least once a month
- D. At least once a year

Fall Prevention Pre/Post Test Answer Key

Pre Test Answer Key

1. (C) Falls
2. (A) You
3. (D) 300 pounds, extra heavy duty/professional
4. (B) 3
5. (B) First-aid can be applied if necessary
6. (B) Take it out of service immediately
7. (A) 5,000 pounds
8. (C) 2 inches
9. (D) All of the above
10. (B) 6 feet or more
11. (B) The employer
12. (A) Each day before use
13. (D) 6 feet
14. (D) All of the above
15. (D) All of the above

Post Test Answer Key

1. (B) The employer
2. (B) First-aid can be applied if necessary
3. (A) You
4. (C) Falls
5. (D) All of the above
6. (C) 2 inches
7. (B) 6 feet or more
8. (D) 6 feet
9. (B) Take it out of service immediately
10. (A) 5,000 pounds
11. (D) All of the above
12. (D) All of the above
13. (B) 3 feet
14. (D) 300 pounds, extra heavy duty/professional
15. (A) Each day before use